

ASCENT

Engineering and Technology Building Project EIR Addendum

California State Polytechnic University, Humboldt



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

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Environmental Impact Report Addendum
to the
Engineering and Technology Building Project

Prepared for:

California State Polytechnic University, Humboldt

1 Harpst Street
Arcata, CA 95521
707.826.3011

Contact: Deirdre Clem
Project & Space Analyst

Prepared by:

Ascent Environmental, Inc.
455 Capitol Mall, Suite 300
Sacramento, CA 95814
Contact: Marianne Lowenthal

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LIST OF ABBREVIATIONS

A&R	Academics & Research
AQMD	Air Quality Management District
BEF	Buildings, Energy & Fuels
BMPs	Best Management Practices
Cal Poly Humboldt	California State Polytechnic University at Humboldt
Campus Master Plan	Campus Master Plan Update
CAP	Climate Action Plan
CARB	California Air Resources Board
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CO ₂	carbon dioxide
CSO	Carbon Sequestration & Offset
CSU	California State University
dBA	decibels
EGUs	electric generating units
EHS	Environmental Health and Safety Department
EIR	Environmental Impact Report
EO	Executive Order
EVs	electric vehicles
FHSZ	Fire Hazard Severity Zone
FTES	full-time-equivalent students
GHG	greenhouse gas
gsf	gross square feet
GWP	global warming potential
HRI	heat rate improvement

IES	Illuminating Engineering Society of North America
IPCC	Intergovernmental Panel on Climate Change
LCFS	Low Carbon Fuel Standard
LED	light-emitting diode
LEED	Leadership in Energy and Environmental Design
mpg	miles per gallon
MPOs	metropolitan planning organizations
MTCO _{2e}	metric tons of carbon dioxide equivalent
NCAB	North Coast Air Basin
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
OPR	Governor's Office of Planning and Research
PM ₁₀	particulate matter less than 10 micrometers in diameter
RES	Resilience
RP	Recommended Practices
SCS	Sustainable Communities Strategy
sf	square-foot
SLF	Sacred Lands File
SRA	State Responsibility Area
SWP	Solid Waste & Purchasing
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TDM	Transportation Demand Management
TRA	Transportation
ZEVs	zero-emission vehicles
ZNE	zero net energy

1 INTRODUCTION

This document constitutes Addendum #5 to the Final Environmental Impact Report (EIR) for the California State Polytechnic University at Humboldt (Cal Poly Humboldt) Campus Master Plan Update (Campus Master Plan) (State Clearinghouse #2004052085), certified by the California State University (CSU) Board of Trustees in November 2004. The Campus Master Plan addresses all aspects of future physical development and land use on the campus to accommodate a 40-year enrollment increase to 12,000 full-time-equivalent students (FTES) from the prior ceiling of 8,000 FTES.

This EIR Addendum has been prepared to address minor project changes associated with the Engineering and Technology Building as currently proposed, as well as changed circumstances and new information since the certification of the Master Plan EIR. This section of the EIR Addendum describes the purpose of the addendum, an overview of the Master Plan EIR, and an updated description of the project (including a discussion of changes to the project compared to what was evaluated in the Master Plan EIR).

1.1 PURPOSE OF AN EIR ADDENDUM

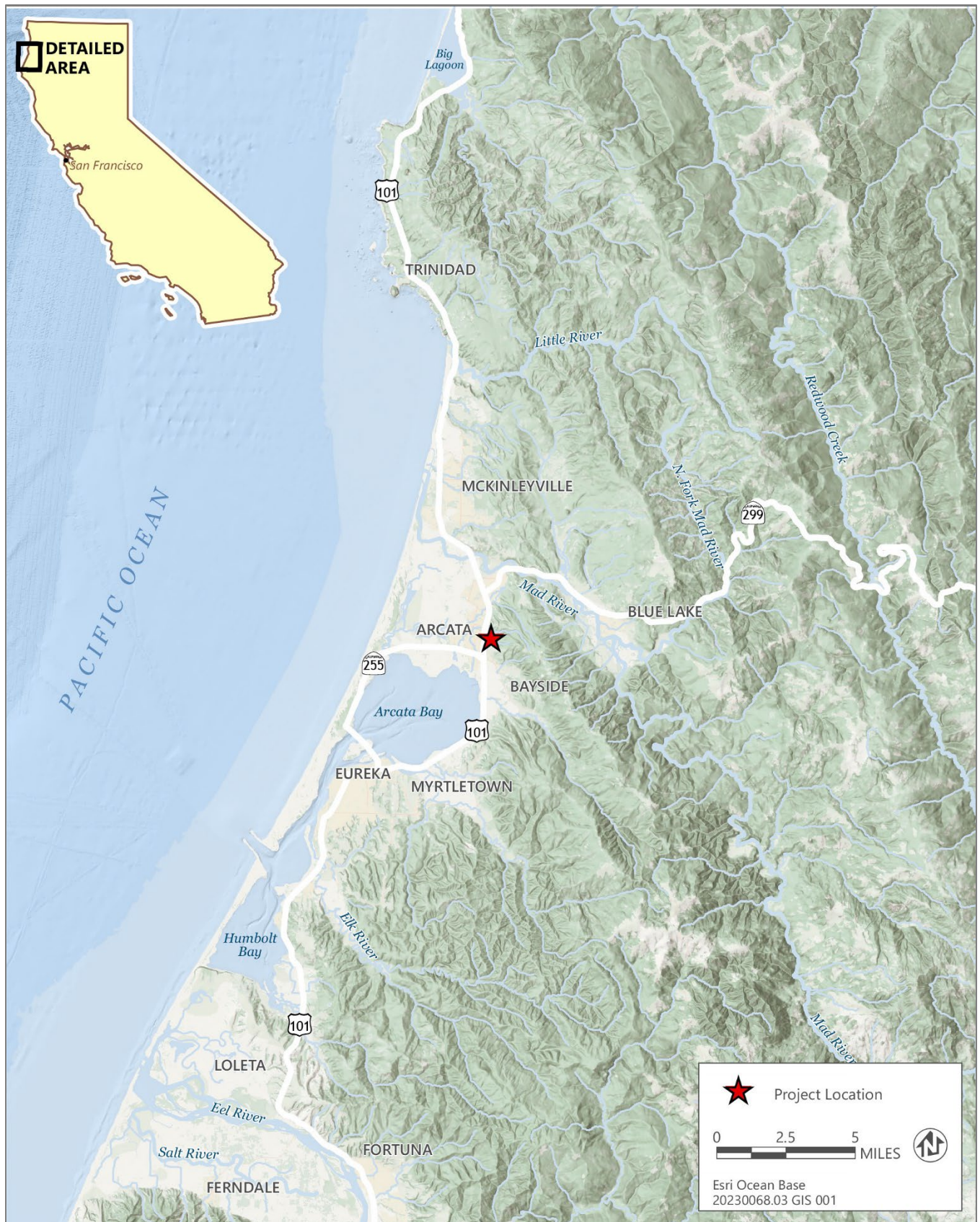
Once an EIR or other California Environmental Quality Act (CEQA) document has been prepared and certified/adopted for a project, no additional environmental review is necessary unless certain conditions are met, at which point subsequent review under CEQA may be necessary. Sections 15162-15164 of the CEQA Guidelines define the standards for determining the appropriate level of subsequent environmental review and Section 15164 addresses the specific circumstances requiring the preparation of an addendum to an EIR. If new significant impacts or a substantial increase in the severity of impacts would result, then preparation and circulation of a Subsequent or Supplemental EIR for additional public review is required. However, when it can be determined that neither the proposed changes to the project, changed circumstances, or new information result in the identification of new significant impacts, or the substantial increase in the severity of significant impacts identified in the certified EIR, an addendum to the EIR may be prepared. Public review of an addendum is not required under CEQA.

An addendum to the certified Master Plan EIR has been determined to be the appropriate environmental documentation for the project. A building containing laboratory space was previously contemplated for a portion of the project site in the Campus Master Plan and Master Plan EIR. This Addendum to the Master Plan EIR was prepared pursuant to CEQA Guidelines Section 15164 to address minor project changes, changed circumstances, and new information since certification of the Master Plan EIR.

1.2 PROJECT LOCATION

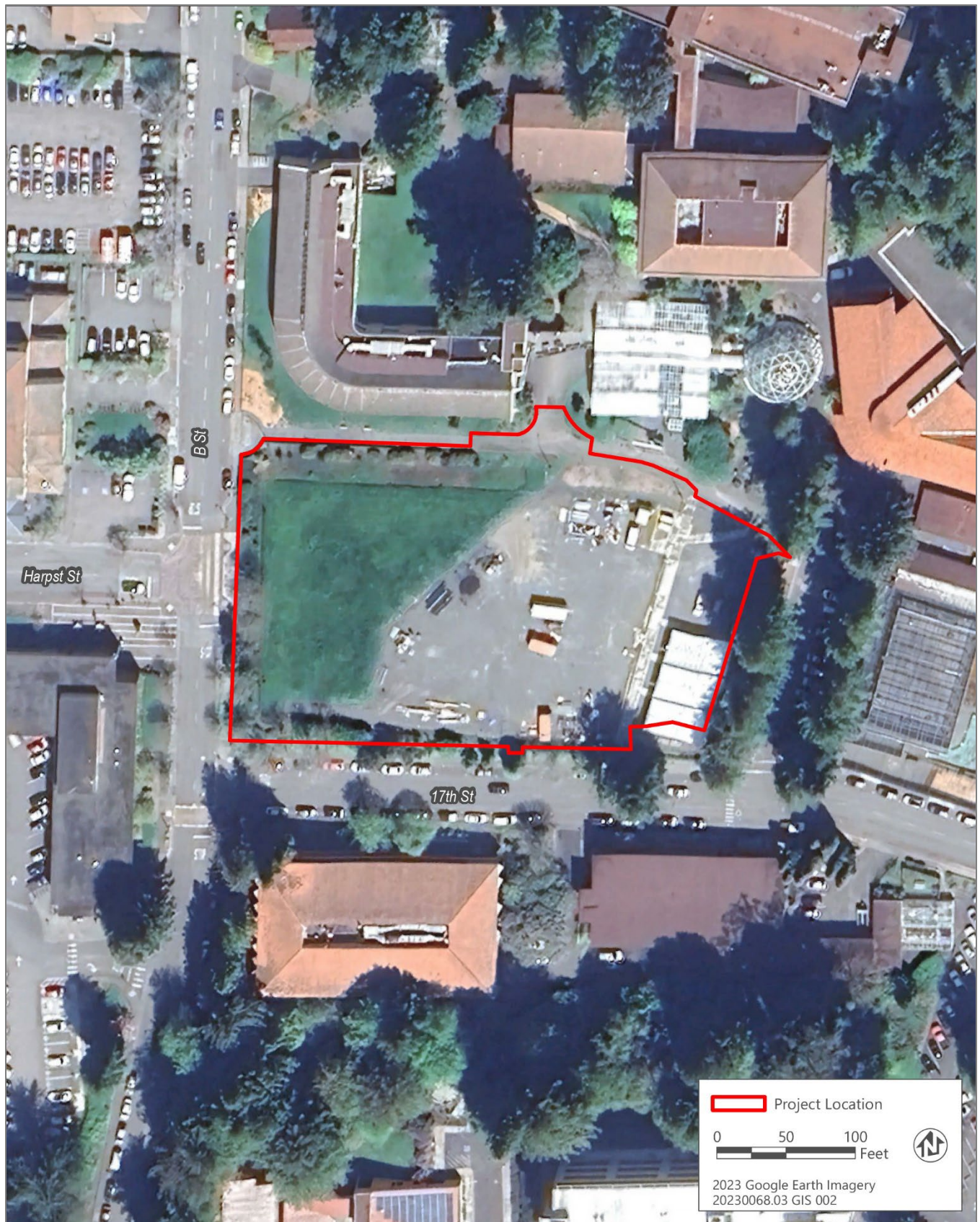
The Cal Poly campus is located within the City of Arcata in Humboldt County, California, as shown in Figure 1-1. Within the campus, the project site currently serves as the Campus Events Field and is approximately 1.8 acres in size (Figure 1-2). The project site is located at the eastern terminus of Harpst Street, which is one of four primary access points for the campus, and is generally bounded by the Alistair McCrone Hall to the north, Wildlife Lane the east, 17th Street to the south, and B Street to the west.

The Campus Events Field is located within the Science Quadrangle of the campus and is largely developed with trees and open space landscape (see Figure 1-3 and 1-4). The eastern portion of the Campus Events Field has been temporarily graveled and currently serves as a staging/laydown area for on-campus construction activities. The project site is bordered by large trees and vegetation along the eastern, western, southern, and half of the northern edges. The Alistair McCrone Building (formerly named the Science D building) and Dennis K. Walker Greenhouse are located directly north of the project site; the Mary Warren House is located to the East; the forestry and Natural Resources buildings are located to the south; and Harry Griffith Hall and the Student and Business Services are located to the east.



Source: Adapted by Ascent in 2023.

Figure 1-1 Regional Location



Source: Adapted by Ascent in 2023.

Figure 1-2 Project Location

California State Polytechnic University, Humboldt
Engineering and Technology Building Project EIR Addendum

1.3 OVERVIEW OF THE CAMPUS MASTER PLAN AND EIR

Cal Poly Humboldt's Campus Master Plan addresses the functional organization of the campus to accommodate enrollment up to 12,000 FTES within 144 acres east of State Route 101. The Campus Master Plan is intended to guide the physical development of the Cal Poly Humboldt campus through 2044 to accommodate the evolving needs of the university's future student and faculty housing, dining, and parking. In total, the Campus Master Plan includes approximately 756,000 gross square feet (gsf) of new construction for academic and support facilities, and the removal of approximately 460,000 gsf of buildings. The Master Plan EIR is considered a program-level EIR and a project-level EIR, and it evaluated (where possible) projects at enough detail to permit project-specific evaluation of potential environment impacts.

Within the adopted Campus Master Plan and as evaluated in the Master Plan EIR (see Figure 1-3a and 1-3b), three laboratory buildings were contemplated for development. The modified project, as further described below under Section 1.5, "Project Description," contemplates combining the function of two of the three laboratory buildings onto the Campus Events Field: Phase I, Building F and Phase II, Building M in the Campus Master Plan. Note that these buildings have been identified as Buildings 5a and 5b in the current campus map as shown in Figure 1-4, but are referred to as Phase I, Building F and Phase II, Building M consistent with the Master Plan EIR.

Building F was described in the Campus Master Plan as a 34,000-square-foot (sf), four-story building on 0.7 acre. Building M was described in the Campus Master Plan as a 58,000-sf, four-story building on approximately 0.8 acre. Building F was proposed to be located within the Campus Events Field, adjacent to the staff parking lot, within the southern portion of the campus, and Building M was proposed to be located south of Building F at the corner of 17th Street and Union Street, where the Forestry Building is currently located (Humboldt State University 2004).

As noted above, since certification of the Master Plan EIR and with continued campus planning efforts, Cal Poly Humboldt is proposing modification of the previously contemplated development, to combine the square footages of Buildings F and M in a single building. This would consolidate the space requirements for both laboratory buildings and enable efficiencies in design and operations of Cal Poly Humboldt's academic programming. While the footprint of Building F alone is smaller than the currently proposed building, the gross square footage of the project (58,000 gsf) is less than the sum of the previously proposed Buildings F and M, which totaled 92,000 gsf. The combined acreage of Buildings F and M was originally envisioned to be 1.5 acres, whereas the proposed project would occupy 1.8 acres. Due to modifications to the footprint (an increase of 0.3 acres) and total square footage (a decrease of 34,000 sf) of the Engineering and Technology Building, an addendum to the Master Plan EIR is considered appropriate to address the modifications to the previously envisioned development.

1.4 PROJECT OBJECTIVES

The objectives of the Engineering and Technology Building Project are to:

- ▶ develop flexible and adaptable laboratories/infrastructure to provide interdisciplinary and hands-on learning, while placing engineering and technology on display;
- ▶ expand student engagement and community project spaces;
- ▶ site campus facilities adjacent to the campus core and adjacent to similar programming;
- ▶ advance campus-wide environmental sustainability; and
- ▶ develop campus buildings that are consistent with the Pacific Northwest region's architectural style.

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

1. Siemens Hall	33. Natural History Museum (off-campus)	73. Wagner House
2A. Art A	34. Wildlife Game Pens	74. Ceramics Lab
2B. Art B	35. Fish Hatchery	75. Sculpture Lab
3A. Science A	36. Mary Warren House	76. Water Tower
3B. Science B	37. Baiocchi House	77. <i>Student Center South</i>
3C. Science C	38. Walter Warren House	77A. <i>Student Activities</i>
3D. Science D	39. Toddler Center	77B. <i>Student Activities</i>
3E. Dennis K. Walker Greenhouse	40. Natural Resources	77C. <i>Student Activities</i>
4. Harry Griffith Hall	40A. Schatz Energy Research Center	79. <i>Educational Services Building</i>
4A. <i>Classroom Building</i>	41. Library	79B. <i>West Campus Parking Structure</i>
5. Forestry	41A. <i>Library Addition</i>	82. <i>Parking Kiosk</i>
5A. <i>Laboratory Building</i>	41B. <i>Library Addition</i>	88. Building 88
5B. <i>Science Laboratory Building</i>	42. Student Health Center	89. Behavioral and Social Sciences
6. Founders Hall	45. University Center	91. Hagopian House
7. Jenkins Hall	46. Facilities Management	93. Brero House
7A. <i>Jenkins Hall – Visual Art Renovation and Addition</i>	48. Hazardous Waste Handling Facility	94. Jensen House
7B. <i>Jenkins Hall – Visual Art Renovation and Addition</i>	50. <i>Student Housing</i>	96. Shipping and Receiving
8A. Music A	50A-D. College Creek Apartments	97. Buck House
8B. Music B	50E. College Creek Community Center	100. Student and Business Services
10. Theatre Arts	50F. College Creek Field Locker Room	100A. <i>Classroom Building</i>
11. Wildlife and Fisheries	51. Cypress Residence Hall	100B. <i>Classroom Building</i>
12. Observatory (off-campus)	52. Bret Harte House	105. Boat Facility
13. Feuerwerker House	53. Warren House	108. Housing Cogeneration Unit
14A. Nelson Hall West	54. Telonicher House	109. Fern Hall
14B. Nelson Hall East	55. Balabanis House	110. Willow Hall
15. Figueiredo Building	56. Hadley House	111. Laurel Hall
16. First Street Gallery (off-campus)	57. <i>Granite Student Housing</i>	112. Creekside Lounge
17. Marine Wildlife Care Center	57A. <i>North Campus Parking Structure</i>	113. Juniper Hall
18. Brookins House	58. Switchgear Building	149. Wireless Communication Facility
20. <i>South Campus Parking Structure</i>	60. Redwood Residence Hall	160. Campus Entrance Gate
23. Gist Hall	60A. <i>Sunset Residence Hall Replacement</i>	162. Campus Apartments
23A. <i>Gist Hall – Theatre Arts Replacement and Addition</i>	61. Sunset Residence Hall	163. Boating Instructional Safety Center (off-campus)
24A. Forbes Gymnasium	61A. <i>Redwood Residence Hall Replacement</i>	170. Trinity Annex
24C. Student Recreation Center	61B. <i>Redwood Residence Hall Replacement</i>	175. <i>Corporation Yard</i>
24D. Recreation & Wellness Center	62. Jolly Giant Commons	
24E. Cogeneration Unit	63. Pepperwood Residence Hall	
24F. Kinesiology and Athletics	64. Tan Oak Residence Hall	
25. <i>East Campus Parking Structure</i>	65. Maple Residence Hall	
26. Van Matre Hall	66. Madrone Residence Hall	
27. Telonicher Marine Laboratory (off-campus)	67. Hemlock Residence Hall	
28. Housing Operations Building	68. Chinquapin Residence Hall	
29. Experimental Greenhouse	69. Alder Residence Hall	
31. Swetman Child Development Lab	70. Cedar Residence Hall	
	71. Little Apartments	

LEGEND:
Existing Facility / Proposed
Facility

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

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Source: Cal Poly Humboldt.

Figure 1-3 Campus Master Plan Legend (Adopted)

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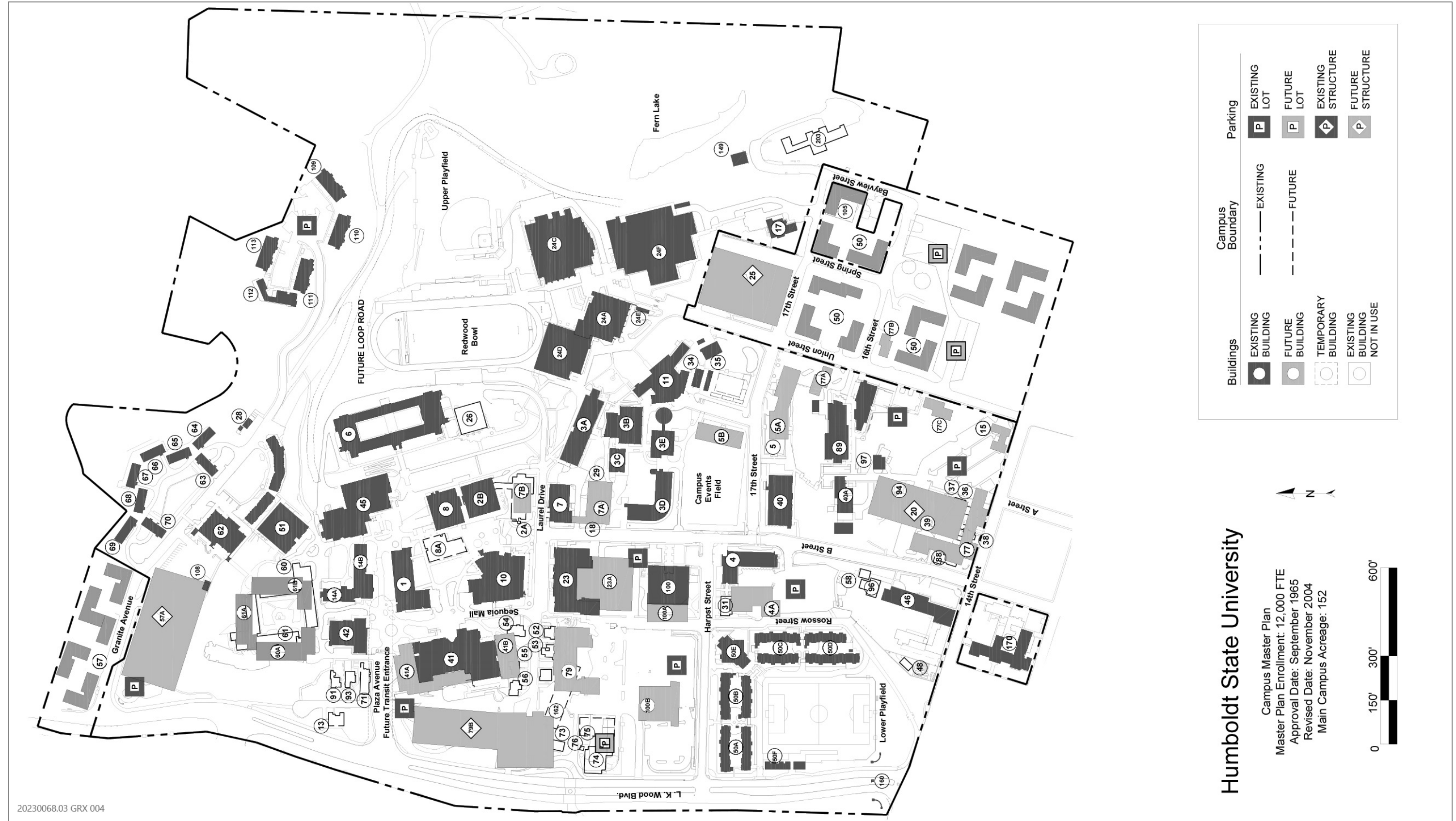


Figure 1-4 Campus Master Plan (Adopted)

1.5 PROJECT DESCRIPTION

The project, as currently proposed, would involve the construction and operation of a new Engineering and Technology Building on the existing Campus Events Field for use beginning in Spring of 2026. The building would be three stories in height (approximately 45 feet high) and would be generally oriented east to west, consisting of a timber-framed structure with reinforced concrete shear walls. The building would provide a 48-seat classroom, 44 offices for faculty and staff, up to 15 teaching laboratories, a machine shop, a wood shop, collaboration space for students and faculty, and associated storage space. The site plan for the modified project is depicted in Figure 1-5. Figure 1-6 provides a rendering of the Engineering and Technology building. As the project site would include an additional 1.1 acres and develop the remainder of the Campus Events Field, the Campus Master Plan would also be amended as part of the project and as shown in Figures 1-7a and 1-7b.

The modified project site slopes from the high side on the east end down to B Street on the west end. The primary entrance to the first story would be located on B Street. The total square footage of the building would be 72,783, gross sf, consisting of a 15,656-sf first floor, a 28,423-sf second floor, and a 28,704-sf third floor. The differences in area of the building floors reflects the previously-mentioned sloped character of the site that allows for less area on the first floor compared to the second and third floor.

The modified project would provide accessible paths of travel to key building entries from sidewalks located along the surrounding roads, as well as from the pedestrian walk on the north. The main entrance would be located on B-Street. A secondary main entrance would be located on the north side of the building, which would provide an accessible connection to Alistair McCrone Hall. Parking would be provided on campus at the Parking Lot located on Harpst Street, one block west of the project site, and would include accessible stalls and an accessible path of travel. New, uncovered, bike parking would be installed near the northeastern side of the building. To maintain adequate roadway widths for emergency vehicle access, the fire lane on the northern edge of the project site would be widened from 12 feet to 20 feet, consistent with current Local Fire Authority and the California Fire Code regulations.

Lighting would be installed around the building to illuminate the site and as a safety consideration. Lighting along the fire lane, along perimeter walkways, emergency vehicle access roads, existing roadways at B Street and 17th Street, and entry points to the building would be mounted on 20-foot poles, reaching a maximum height of 23 feet. Walkways would be illuminated with 42-inch bollard lights, and wall packs would be installed on building walls. Fixtures closer to the building would include light columns that would be no taller than 10 feet. The building would be lined with wall-mounted fixtures, as well as tape lighting along building facades and beneath benches. Bulbs would consist primarily of direct/indirect linear LEDs, with the exception of on-ground luminaires that would provide wide beam distribution.

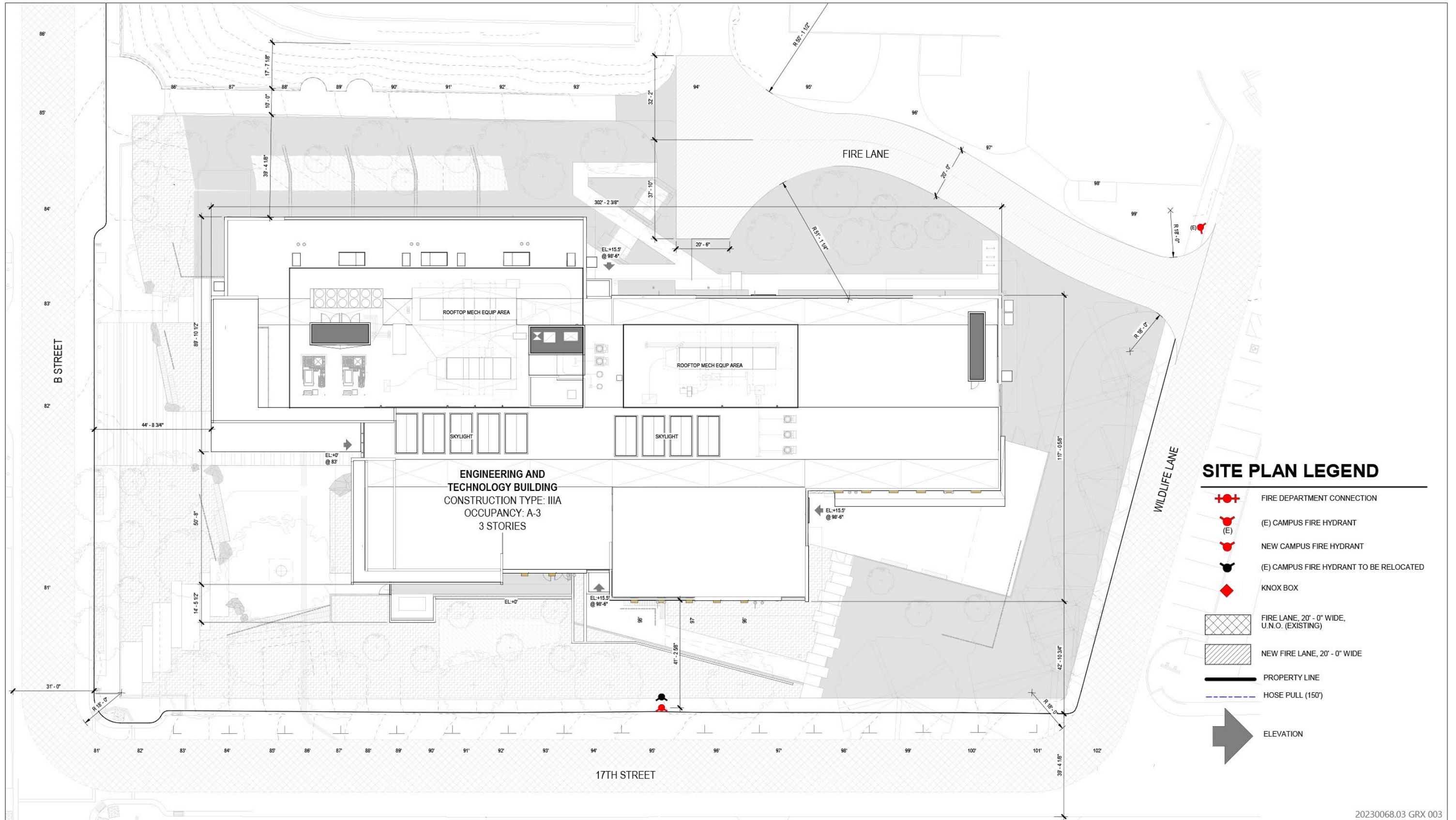
The building would comply with the CSU Sustainability Policy, Cal Poly Humboldt Campus Master Plan design guidelines, and currently adopted California Building Code Title 24 energy efficiency measures.

1.5.1 Academic Programming

As noted above, the building would provide necessary space for Environmental Resources Engineering, Mechanical Engineering, Environmental Sciences, and Technology departments within Cal Poly Humboldt's CRNS. The shared resources within the new building would expand the open study space on campus. The 48-seat classroom, three computational methods teaching laboratories, and adjacent event storage space would be used by various disciplines and programs across the campus. The building would also contain a machine shop, wood shop, student project storage, fabrication space with outdoor work space, and the necessary storage and managing office.

A total of 44 faculty offices dedicated to the Engineering and Technology faculty, as well as the CRNS Dean's Suite, would be provided within the building. Department offices would provide office space for faculty, staff, and administration and would be located near shared resources including two conference rooms, a kitchenette, copy room, breakroom, and lactation room. A total of 44 faculty offices dedicated to the Engineering and Technology faculty, as well as the CRNS Dean's Suite, would be provided within the building.

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20230068.03 GRX 003

Source: Provided by Cal Poly Humboldt in 2023.

Figure 1-5 Conceptual Site Plan



Source: Provided by Cal Poly Humboldt in 2023.

Figure 1-6 Proposed Engineering and Technology Building Project Rendering

California State Polytechnic University, Humboldt

Campus Master Plan Enrollment: 12,000 FTE

Campus Master Plan approved by the Board of Trustees: May 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

LEGEND: Existing Facility / *Proposed Facility*

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

List Revised by Cal Poly Humboldt: December 20, 2023

001. Siemens Hall	040. Natural Resources	077B. Student Activities
002A. Art A	040A. Schatz Energy Research Center	077C. Student Activities
002B. Art B	041. Library	079. Educational Service Buildings
003A. Science A	041A. Library Addition	079B. West Campus Parking Structure
003B. Science B	041B. Library Addition	082. Parking Kiosk
003C. Science C	042. Student Health & Counseling	088. Marketing & Communications
003D. Alistair McCrone Hall	045. Gutswurak Student Activities Center	089. Behavioral & Social Sciences
003E. Dennis K Walker Greenhouse	046. Facilities Management	091. Hagopian House
004. Harry Griffith Hall	048. Hazardous Waste Handling Facility	093. Brero House
004A. Classroom Building	049. Redwood Bowl	094. Jensen House
005. Forestry	049A. Redwood Bowl East Bleachers	096. Shipping & Receiving
006. Founders Hall	049B. Redwood Bowl West Bleachers	097. Buck House
007. Jenkins Hall	050. Student Housing	098. Upper Playing Field
007A. Jenkins Hall - Visual Art Renovation and Addition	050A. College Creek - Del Norte Residence Hall	100. Student & Business Services
007B. Jenkins Hall - Visual Art Renovation and Addition	050B. College Creek - Shasta Residence Hall	100A. Classroom Building
008A. Music A	050C. College Creek - Trinity Residence Hall	100B. Classroom Building
008B. Music B	050D. College Creek - Mendocino Residence Hall	102. College Creek Field
010. Theatre Arts	050E. College Creek Community Center	103. Campus Events Field
011. Wildlife & Fisheries	050F. College Creek Field Locker Room	105. Boat Facility
012. Observatory	051. Cypress Residence Hall	108. Housing Cogeneration Unit
013. Feuerwerker House	052. Bret Harte House	109. Creekview - Fern Residence Hall
014A. Nelson Hall West	053. Warren House	110. Creekview - Willow Residence Hall
014B. Nelson Hall East	054. Telonicher House	111. Creekview - Laurel Residence Hall
015. Figueiredo Building	055. Balabanis House	112. Creekview - Creekside Lounge
017. Marine Wildlife Care Center	056. Hadley House	113. Creekview - Juniper Residence Hall
018. Brookins House	058. Switchgear Building	114. Engineering & Technology
020. South Campus Parking Structure	060. Redwood Residence Hall	149. Wireless Communication Facility
023. Gist Hall	060A. Sunset Residence Hall Replacement	160. Entrance Gates
023A. Gist Hall - Theatre Arts Replacement and Addition	061. Sunset Residence Hall	162. Campus Apartments
024A. Forbes Gymnasium	061A. Redwood Residence Hall Replacement	163. Humboldt Bay Aquatic Center
024C. Student Recreation Center	061B. Redwood Residence Hall Replacement	170. Trinity Annex
024D. Recreation & Wellness Center	062. Jolly Giant Commons	175. Corporation Yard
024E. Cogeneration Unit	063. Pepperwood Residence Hall	176. Campus Store Arcata
024F. Kinesiology & Athletics	064. Tan Oak Residence Hall	177. Stewart Building
25. East Campus Parking Structure	065. Maple Residence Hall	178A. 2905 St. Louis Rd Student Housing I
26. Van Matre Hall	066. Madrone Residence Hall	178B. 2905 St. Louis Rd Student Housing II
27. Telonicher Marine Lab	067. Hemlock Residence Hall	206. Schatz Forestry Research Station
28. Housing Operations Building	068. Chinquapin Residence Hall	207. KHSU Kneeland Transmitter Site
29. Experimental Greenhouse	069. Alder Residence Hall	208. Third Street Property
031. Swetman Child Development Lab	070. Cedar Residence Hall	209. Campus Store Eureka
033. Wells Fargo Building	071. Little Apartments	210. Comfort Inn Housing
034. Wildlife Game Pens	073. Wagner House	300. Redwood Sciences Lab
035. Fish Hatchery	074. Ceramics Lab	302. Turner House
036. Mary Warren House	075. Sculpture Lab	303. Union Street Duplex Residence
037. Baiocchi House	076. Water Tower	304. 71 14th Street Residence
038. Walter Warren House	077. Student Center South	305. 570 Granite Avenue
039. Toddler Center	077A. Student Activities	

20230068.03 GRX 007

Source: Image produced and provided by Swinerton Builders + AC Martin Architects in 2023.

Figure 1-7 Campus Master Plan (Modified)

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1.5.2 Utilities

The modified project would connect to existing campus infrastructure, and would not require improvements outside of the immediate project area. The domestic and industrial water supply pipelines would be connected to the water main located in 17th Street and would rely upon heat pumps to produce hot water. Potable water would be provided throughout the building, including to the restrooms, drinking fountains, and to the hot water system. Cold water utilities serving laboratory spaces would be separated from the domestic water supply. Sanitary sewer lines would be connected from the 8-inch pipeline located in B Street to the west of the project site. The storm drain system would collect drainage into pipes and feed into the overall campus system at two connection points: one along the edge of B Street and the other along the northern edge of the project site.

Medium voltage service would be provided from the existing campus 12-kilovolt loop, connecting to the site via a manhole located near the southwestern corner of the project site in 17th Street. Natural gas utility services would not be provided to the building; however, natural gas tanks would support laboratory needs as appropriate. As necessary, laboratory spaces would be provided with pure water, compressed air, and vacuum pump systems.

1.5.3 Project Construction

Construction of the modified project would begin with site preparation, which would include site mobilization and demolition of the existing graveled areas of the site, followed by clearing and grubbing, site grading, and extension of utilities to the site. As part of site preparation, trees along the southern and western perimeters of the site would be removed, and a fence would be installed along the eastern edge of the site to protect the existing trees along Wildlife Way. After site preparation is completed, the Engineering and Technology building would be constructed in a single phase. Project laydown would be located on 17th street between B Street and Wildlife Lane. Addition laydown and construction worker parking would be located in lot G13 at the corner of 17th street and Union.

Project construction would begin in May 2024, completed over an approximately 24-month period, and ready for occupancy in Summer 2026. During construction, up to 70 construction workers would be on site daily. Construction would generally occur Monday through Friday between the hours of 7:30 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 would occur on Sundays or holidays.

Construction Waste Management. The project would generate construction debris during on-site clearing and demolition activities. In accordance with Section 5.408 of CALGreen, the project would implement a construction waste management plan for recycling and/or salvaging for reuse of at least 65 percent of nonhazardous construction/demolition debris. Additionally, the project would be required to meet Leadership in Energy and Environmental Design (LEED) v4 requirements for waste reduction during construction.

Construction Traffic Control. As part of the project, Cal Poly Humboldt would prepare a construction traffic control plan that illustrates the location of the proposed work area; identifies the location of areas where the public right-of-way would be closed or obstructed, and the placement of traffic control devices necessary to perform the work; shows the proposed phases of traffic control; and identifies the periods when the traffic control would be in effect and, although not expected, the periods when work would prohibit access to private property from a public right-of-way. The traffic control plan would also provide information on access for emergency vehicles to prevent interference with emergency response.

1.5.4 Summary of Project Modifications

The following list summarizes the proposed changes to Buildings F and M, as identified in the Campus Master Plan, for inclusion of the Engineering and Technology Building to the approved Campus Master Plan:

- ▶ Provide a single, consolidated building for engineering and laboratory space to meet academic programming needs instead of two separate laboratory buildings (Buildings F and M);
- ▶ Increase in the overall area of development for engineering and laboratory space from 1.8 acres to 1.5;
- ▶ Reduction in the total square footage (~34,000 sf) of development of engineering and laboratory space; and
- ▶ A decrease in height of proposed on-site structures from 4 stories to 3 stories.

1.6 PROJECT APPROVALS

This section describes discretionary actions required for project approval by state and regional agencies. Discretionary approval includes, but is not limited to, approval of the schematic designs for the project by the CSU Board of Trustees, as summarized in Table 1-1. Other approvals could also be necessary, as noted below.

Table 1-1 Project Approvals

Authorizing Jurisdiction or Agency	Action
CSU Board of Trustees	
Schematic Plans for the Project and other related actions and approvals, as necessary	Approval
Division of the State Architect	
Accessibility Compliance	Approval
State Fire Marshal	
Facility Fire and Life Safety Compliance	Approval
Regional Water Quality Control Board	
National Pollutant Discharge Elimination System Permit (NPDES) – Stormwater Pollution Prevention Plan (SWPPP) and Notice of Intent (NOI) to Comply with NPDES Construction Permit	Approval/Enforcement

2 ENVIRONMENTAL ANALYSIS

As indicated in Section 1.1, "Introduction," an addendum to the certified Master Plan EIR has been determined to be the appropriate environmental documentation for the modified project. Laboratory space was contemplated for the project site, and more generally within campus, in the Campus Master Plan and Master Plan EIR. This addendum to the Master Plan EIR was prepared pursuant to State CEQA Guidelines Section 15164 to address minor project changes, changed circumstances, and new information that have been identified since the EIR was certified.

This chapter evaluates the environmental implications of the minor project changes, changed circumstances, and new information. As demonstrated in each resource topic discussion in Sections 2.1 through 2.20, this chapter concludes that the project changes, changed circumstances, and new information would not result in new significant impacts or substantial increases in the severity of impacts previously identified in the Master Plan EIR. Overall, the modified project is within the scope of the project covered by the Master Plan EIR. A subsequent or supplemental EIR is not required.

Each environmental resource area analyzed in the Master Plan EIR is discussed in further detail below.

2.1 AESTHETICS

The Master Plan EIR analyzed aesthetics in Chapter 3.0. The Master Plan EIR concluded that the Campus Master Plan would have a less-than-significant impact on scenic vistas, scenic resources within a state scenic highway, visual character and quality, and lighting and glare with adherence, as described in Sections 1.6 and 1.7 of the Master Plan EIR, to the development requirements described in *Submittal Requirements and Procedure Guide for CSU Capital Projects* (pages 1-11 through 1-13 of the Master Plan EIR), as well as incorporation of the related mitigative elements of the Campus Master Plan—measures incorporated into the design and construction methods of Campus Master Plan projects to prevent and control potential environmental impacts (Humboldt State University 2004). The following mitigative elements were incorporated into the Campus Master Plan to reduce the impact on aesthetics:

1. New sources of light will be designed to protect nighttime views, including the night sky. This design goal will be satisfied using a variety of means as applicable, including fixture types, cut off angles, shields, lamp arm extensions, and pole heights. Specific design preferences include not directing light upward or to other properties, avoiding brightly illuminated vertical where feasible, such as walls and lamp poles, and not directing indoor lighting toward skylights. The most recent Recommended Practices (RPs) of the Illuminating Engineering Society of North America (IES) should be used for lighting levels and quality of light.
2. The removal of trees and tall brush that provide visual screening during construction will be avoided or lessened where feasible, and removed screening will be reestablished after construction where feasible. Landscaped areas should enhance the natural beauty of the site while accommodating the uses and functions of the facility.
3. Creating visual barriers inadvertently in the placement of structures and fencing will be avoided.
4. Buildings will be designed in an attractive and suitable architecture, and parking structures will be designed to lessen their appearance as stark parking structures and to appear more as architecturally suitable buildings. (Humboldt State University 2004)

This analysis evaluates potential impacts on scenic vistas, scenic resources within a state scenic highway, visual character and quality, and light and glare, based on the most recent update to Appendix G of the State CEQA Guidelines.

2.1.1 Scenic Vistas

As discussed in the Master Plan EIR, the campus is not located within a scenic vista. No scenic vistas have been identified at or near the project site, and the project would not significantly affect long-range public views as the project site is not visible from outside the central portion of the Cal Poly Humboldt campus. Due to varying topography and levels of development, intermittent views of the hills east of US 101 are visible to motorists driving through Arcata on US 101. Generally, the landscape on campus would be considered an undulating mix of urban and rural uses. Visual quality ranges from moderately high to low depending on one's location and the particular scene. Views of the campus are blocked from many locations in the City Arcata by topography, buildings, and mature trees. The Master Plan EIR found that development of new structures on the campus under the Campus Master Plan would have a minor visual impact due to the varied topography and obstructed views of the campus (Humboldt State University 2004).

Although the proposed Engineering and Technology building would represent the combination of two previously proposed buildings onto the Campus Events Field, the gross square footage of these buildings would decrease compared to the previously anticipated development from the Campus Master Plan (92,000 gsf combined as previously proposed versus 58,000 gsf as modified). In addition, the modified project would represent a decrease in the number of building floors (from four to three stories) and a decrease in the height of on-site buildings from (from 60 to 45 feet). As proposed, this height and number of stories would still be consistent with surrounding campus development.

Although the area that the building would occupy would be greater (1.8 acres compared to the combined 1.5 acres of Buildings F and M), it would be developed at a density comparable to adjacent campus academic facilities and would be consistent with the overall campus aesthetic. Views from nearby vantage points would experience minor changes in aesthetic conditions during construction activities; however, as discussed in the Master Plan EIR, construction activities are not expected to adversely affect the scenic resources identified in the Arcata General Plan. Overall, the project would be designed in a manner consistent with the current Campus Design Guidelines pertaining to architectural features, building form, and colors and would be consistent with nearby campus development and generally with the previously contemplated development under the Campus Master Plan. Therefore, the modified project would not result in more severe impacts than were identified in the programmatic analysis provided in the Master Plan EIR. No substantial change from the previous conclusions in the Master Plan EIR would occur.

2.1.2 Scenic Resources within a Scenic Highway

As discussed in the Master Plan EIR, there are no state-designated scenic highways in the vicinity of the project site, and the site is not located in a scenic resource area. While US 101, located approximately 0.2-mile west of the project site, is not a state-designated scenic highway, it is currently identified as an eligible scenic highway by the California State Scenic Highway System Map (Caltrans 2023), and has not received an official designation as a state scenic highway. The Master Plan EIR states that construction projects on campus under the Campus Master Plan would not be expected to adversely affect campus views from the segments of coastal and noncoastal scenic highways identified in the City of Arcata General Plan. The impact on scenic resources within a scenic highway was found to be less than significant (Humboldt State University 2004).

The project site is not visible from US 101 because it sits at a much higher elevation than the roadway and is otherwise obscured due to the presence of existing vegetation and structures. Therefore, the modified project would not result in more severe impacts than were identified in the programmatic analysis provided in the Master Plan EIR. No substantial change from the previous conclusions in the Master Plan EIR would occur.

2.1.3 Visual Character and Quality

As discussed in the Master Plan EIR, construction activities lasting from several months to up to 2–3 years would be conducted at various locations on the project site. Development under the Campus Master Plan would expose neighboring land uses to views of construction equipment, incomplete structures, stockpiled cut material, and areas in landscaping transition, resulting in impacts on views from surrounding uses. However, these impacts would be temporary and would occur incrementally over the 30- to 40-year implementation phase of the Campus Master Plan. As part of the Master Plan EIR, it was assumed that all construction equipment and debris would be removed, and, where appropriate, revegetation and landscaping would follow. Any security lighting would be oriented inwards to a development site and shielded to protect nighttime views (Humboldt State University 2004).

With respect to the project, construction would be completed over a 22-month period within a single phase and in a manner consistent with the assumptions made in the Master Plan EIR. Further, upon completion, the building would be approximately 45 feet in height and three floors tall, which would be consistent with surrounding campus development. Further, the aesthetic design of the proposed building would comply with current Campus Design Guidelines provided in the Campus Master Plan. Additionally, existing landscaping and trees along the periphery of the site would be maintained to the extent feasible and enhanced to provide additional screening of the proposed development. Because the project design would be consistent with the current Campus Design Guidelines and Cal Poly Humboldt Campus Building Standards, substantial adverse changes in the visual character and quality of Cal Poly Humboldt are not anticipated beyond those already identified in the Campus Master Plan. Therefore, the modified project would not result in more severe impacts than were identified in the programmatic analysis provided in the Master Plan EIR. No substantial change from the previous conclusions in the Master Plan EIR would occur.

2.1.4 Light and Glare

As discussed in the Master Plan EIR, adequate design of night lighting would be necessary to avoid the potential for adverse light and glare impacts associated with outdoor lighting. As noted above, the Campus Master Plan includes lighting design guidelines that are implemented as appropriate with any development under the Campus Master Plan and are intended to facilitate safe nighttime use of the campus while limiting associated impacts on adjacent, non-University property. Specific features of these design guidelines include low energy light sources integrated with glare shields where possible and outdoor light fixtures with a minimum illumination level of one foot-candle. With incorporation of these guidelines, impacts were determined to be less than significant in the Master Plan EIR.

As described above in Section 1.5, “Project Description,” lighting installed as part of the modified project would be located around the building and along the fire lane, walkway perimeters, and building entry points to illuminate the site and to create safe conditions for students and staff. Lighting would include pole-mounted fixtures reaching 23-foot-tall, 10-foot high bollard lights, wall-mounted fixtures, and tape lighting along building facades and beneath benches. While this lighting would include elevated lights to facilitate safe nighttime use of the site, the modified Engineering and Technology building would comply with the most current California Building Energy Efficiency Standards (Title 24 of the CCR) at the time of construction, which require the use of light-emitting diode (LED) fixtures with lighting controls. Moreover, and consistent with the Campus Master Plan design guidelines described above, lighting fixtures would be shielded and deliberately located to reduce the potential for spillover light onto adjacent properties. Additionally, the project site would be screened from offsite views due to the existing topography, as it sits on a relatively higher elevation than the surrounding area. Furthermore, the presence of buildings and vegetation that exist within campus, including areas surrounding the project site, would minimize the visibility of lighting features associated with the modified project. With regards to glare, the modified Engineering and Technology building would be constructed as a timber framed structure with reinforced concrete shear walls that would not contain reflective surfaces that could create a new substantial source of glare. Therefore, the modified project, consistent with the findings of the Master Plan EIR, would result in less-than-significant impacts to light and glare. Therefore, the modified project would not result in more severe impacts than were identified in the programmatic analysis provided in the Master Plan EIR. No substantial change from the previous conclusions in the Master Plan EIR would occur.

2.2 AGRICULTURE AND FORESTRY RESOURCES

As described in Chapter 4.0, “Agricultural Resources,” of the Master Plan EIR, soils potentially supportive of farmlands do not exist on the project site (Humboldt State University 2004). Therefore, the site does not contain any designated farmland, agricultural zoning, or Williamson Act contracts. In addition, the site was cleared and converted to residential uses before the campus was created, so there has been no timber production there for many decades. Therefore, no impact on agriculture or forestry resources would occur under either the Campus Master Plan (page 4-1) or the modified project. The modified project would not result in more severe impacts than were identified in the programmatic analysis provided in the Master Plan EIR, and no substantial change from the previous conclusions in the Master Plan EIR would occur.

2.3 AIR QUALITY

Potential impacts related to air quality that would result from the construction and operation of new development envisioned under the Campus Master Plan are analyzed in Chapter 5.0 of the Master Plan EIR. The Humboldt County portion of the North Coast Air Basin (NCAB), in which the project site is located, is in attainment of (or was unclassified for) all state and federal ambient air quality standards with the exception of the state standard for particulate matter less than 10 micrometers in diameter (PM₁₀) (Cal Poly Humboldt 2022). Despite the nonattainment designation for PM₁₀, air quality in the air basin was generally regarded as good (Humboldt State University 2004). The Master Plan EIR estimated that PM₁₀ emissions associated with construction activities under the Campus Master Plan—specifically emissions from engine combustion products, dust from earthwork and building demolition and deconstruction, and emissions from the application of architectural coatings and asphalt—would total approximately 5 tons per year, or approximately 3 percent of the estimated PM₁₀ emissions in Humboldt County in 2003 of 0.48 ton per day. As a result, impacts associated with construction of new uses under the Campus Master Plan was determined to be less than significant. The Master Plan EIR also states that the project includes the following elements that would reduce air quality impacts associated with Campus Master Plan implementation (pages 1-14 and 1-15 of the Master Plan EIR) (Humboldt State University 2004), including the requirement that the university must comply with the air pollution control regulations of North Coast Unified Air Quality Management District (AQMD):

1. **Compliance with All Air Pollution Control Regulations.** It is legally required that the project remain at all times in compliance with AQMD, federal, and state-delegated regulations. Regulations affecting the project will include but not be limited to: AQMD Regulation 1, Rules 200, 400(a), 420, and 430; Regulation 2; and the federally delegated National Emissions Standards for Hazardous Air Pollutants. Two specific project requirements are included below to address common construction situations.
2. **Hazardous Air Pollutants.** Unless appropriate surveys have been completed or other documentation is sufficient, it will be assumed that the existing buildings and equipment could include asbestos-containing materials or lead-based paint. As a precaution against the inadvertent release of asbestos fibers or lead dust into the air, building materials and equipment that will be disturbed in ways that would release asbestos fibers or lead dust, if present, will be surveyed for the presence of asbestos and lead. If such materials are identified, proper removal and handling, or other suitable management technique, will be required to ensure that asbestos fibers or lead dust are not released.
3. **Fugitive Dust Emissions.** In manners consistent with AQMD Rule 430, fugitive dust emissions will be controlled to prevent unnecessary amounts of particulate matter to become airborne. Rule 430 is stated as follows:

Regulation 1

Air Quality Control Rules

North Coast Unified Air Quality Management District

Rule 430 - Fugitive Dust Emissions

- (a) The handling, transporting, or open storage of materials in such a manner which allows or may allow unnecessary amounts of particulate matter to become airborne, shall not be permitted.

- (b) Reasonable precautions shall be taken to prevent particulate matter from becoming airborne, including, but not limited to, the following provisions:
- (1) Covering open bodied trucks when used for transporting materials likely to give rise to airborne dust.
 - (2) Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials. Containment methods can be employed during sandblasting and other similar operations.
 - (3) Conduct agricultural practices in such a manner as to minimize the creation of airborne dust.
 - (4) The use of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land.
 - (5) The application of asphalt, oil, water or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which can give rise to airborne dusts.
 - (6) The paving of roadways and their maintenance in a clean condition.
 - (7) The prompt removal of earth or other material from paved streets onto which earth or other material has been transported by trucking or earth moving equipment, erosion by water, or other means.

With respect to operational air quality emissions associated with implementation of the Campus Master Plan, PM₁₀ emissions associated with operation of new uses within the campus, including the increase in vehicular traffic related to the increase in enrollment, would represent a small and less than significant contribution to PM₁₀ emissions in the region (Humboldt State University 2004). The Master Plan EIR identifies the following aspects of the campus (in and of itself) and the Campus Master Plan, which are considered consistent with particulate control strategies of the AQMD:

- ▶ Cal Poly Humboldt subsidizes the student cost of riding public buses.
- ▶ The proposed intermodal transit mall would facilitate carpooling; mass transit use; and the use of bicycles, skateboards, and rollerblades.
- ▶ The proposed parking structures would relieve congestion associated with parking on campus.
- ▶ There is no waste burning on campus and no fireplaces in student housing (Humboldt State University 2004).

Compared to the anticipated development under the Campus Master Plan, the modified project would represent full development of the existing Campus Events Field and the consolidation of academic programming needs from the previously anticipated Buildings F and M, which had a combined anticipated square footage of 92,000 gsf. As a result, the project, which would be 70,200 gsf in size, would represent a decrease in overall square footage compared to were evaluated in the Master Plan EIR. Additionally, the combination of Buildings F and M would result in lesser acreage of disturbance during construction. Due to the reduction in overall square footage and degree of construction, emissions associated with construction of the project would be less than significant, consistent with the conclusions of the Master Plan EIR. No substantial change from the previous conclusions in the Master Plan EIR would occur and the elements of the Campus Master Plan pertaining to air quality emissions would still apply to the project.

Similarly, the operation of on-site uses as part of the project would generate emissions of criteria air pollutants and ozone precursors as a result of commuting, use of electricity to power lights and appliances, heating and cooling, and the use of landscaping equipment. Based on the overall scale of development compared to the previously anticipated scale of Buildings F and M under the Campus Master Plan, on-site activities would be similar in scale to, if not incrementally less than, what was envisioned under the 2004 Campus Master Plan. In addition, development and operation of the project would comply with the CSU Sustainability Policy, which was first adopted in 2014 and subsequently updated in 2019, 2020, and 2022. The CSU Sustainability Policy requires consideration of building operation, including water conservation and waste management strategies to reduce utility demands and zero natural gas use. Additionally, the project would centrally locate academic facilities to the core of

campus and would further encourage alternate means of transportation, such as biking and walking, due to the close proximity of the project to the rest of the Cal Poly Humboldt campus, proximity to existing transit routes, and inclusion of bicycle facilities. Therefore, operation of the modified project would not result in more severe impacts than were identified in the programmatic analysis provided in the Master Plan EIR. No substantial change from the previous conclusions in the Master Plan EIR would occur.

2.4 BIOLOGICAL RESOURCES

Potential impacts from implementation of the Campus Master Plan on biological resources were analyzed in Chapter 6.0 of the Master Plan EIR. The Master Plan EIR identified two potential construction impacts related to biological resources. The first, soil erosion and the release of turbid water, which could adversely affect aquatic species, would be addressed by the erosion control mitigative element of the Campus Master Plan (Humboldt State University 2004):

Proper management of disturbed and exposed soils and implementation of effective Best Management Practices (BMPs) for erosion and sedimentation control will be implemented to prevent significant erosion during rains. Erosion control requirements will be included in the construction plans and specifications. The construction contractor will be required to comply with these plans for protecting exposed soils from runoff-producing rain and for the proper disposal of excess soils. For construction projects covering an acre or more, these types of controls will be addressed in a Stormwater Pollution Prevention Plan required by the Regional Water Quality Control Board. Erosion control requirements will be specific to each project and location, ensuring adequate protection for Jolly Giant Creek and other drainages. As appropriate, a project must have a suitable buffer between construction operations and Jolly Giant Creek and, as feasible, any wetland areas. A buffer of approximately ten feet will be established between earthworks and established riparian vegetation. Silt fencing will line the buffer edge. Equipment will remain on existing roadways or previously graded ground as much as feasible.

The Master Plan EIR concluded that this impact was less than significant, so no mitigation was required (Humboldt State University 2004). As analyzed in the Master Plan EIR, construction of the Engineering and Technology Building and the resulting ground disturbance would result in soil erosion and the release of turbid water, which could adversely affect aquatic species. Mitigative elements addressing erosion control would apply to this project and reduce impacts to less than significant, and no additional mitigative measures are needed. The second construction impact related to biological resources in the Master Plan EIR addresses the potential impact on wetlands in Jolly Giant Creek and Fern Lake from constructing the Access Road and forest amphitheater. As the project site is not located near either feature and does not contain wetlands, this impact does not apply to the modified project and is not addressed further.

The Master Plan EIR also identified Impact 6-2, involving the permanent loss of mature second-growth redwood forest habitats and a potential impact on associated wildlife species, as well as potential impacts on Jolly Giant Creek and associated aquatic wildlife. The Master Plan EIR concluded that this impact was significant (page 6-5). To address this impact, the Master Plan EIR identified Mitigation Measure 6-2, which requires agency consultation (and possibly various permits), wildlife surveys, possible tree avoidance to avoid disturbing an osprey nest, and replanting and revegetation.

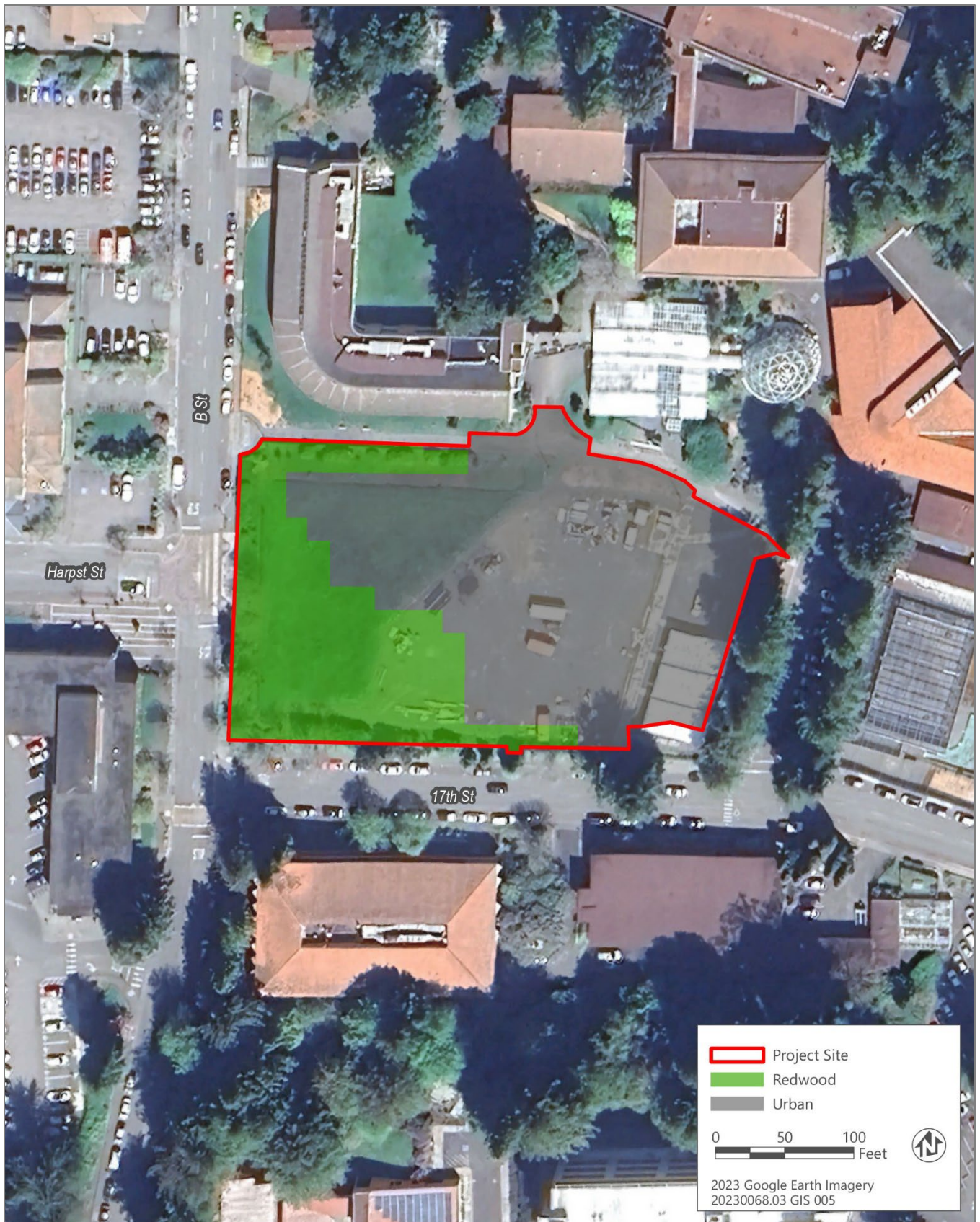
The analysis below updates and refines the analysis of the Master Plan EIR, using 2023 results of California Natural Diversity Database and California Native Plant Society Rare Plant Inventory records searches of the Arcata South, Arcata North, Tyee City, Blue Lake, Eureka, Fields Landing, McWhinney Creek, Iaqu Buttes, and Korbel U.S. Geological Survey 7.5-minute quadrangles (CNDDDB 2023; CNPS 2023), as well as reported observations of special-status bird species on eBird (eBird 2023). Publicly available USFS landcover data shows redwood and urban habitat occurring within the project site (Figure 2-1), although a review of aerial data confirms that the area of temporary use is larger than depicted by USFS data. At present, most of the project site is a gravelled lot that is being used as a staging/laydown area for on-campus construction activities. Modular buildings are located on the eastern portion of the project site with paved sidewalks, and a small grassy area to the west of the gravel lot. The developed areas, including the gravel lot, grassy area, and modular buildings, are surrounded by a chain link fence, which is then

surrounded by a thin strip of landscaped vegetation including a mix of ornamental and native trees, shrubs, and forbs. The areas incorrectly mapped as redwood include the lot, grassy area, and landscaped perimeter. The eastern edge of the project area, mapped as urban habitat, is flanked by a row of redwood trees. The project site is surrounded by two busy streets to the south and west, with parking areas and busy sidewalks leading to other campus facilities to the north and east. Overall, the project site and surrounding areas receive a high amount of human traffic and disturbance.

The 38 special status plant species known to occur in the nine-quadrangle search area have no potential to occur on the project site because they are restricted to particular soil types (e.g., serpentine or heavy clay) or other habitat types (e.g., coastal dune, coastal scrub, marshes, meadows and seeps, prairie, or riparian) that are not present and the disturbed condition of the site make it generally unsuitable for most special-status plant species. The CNDDDB nine-quadrangle search generated records of 35 special-status wildlife species. Thirty-four of these species were eliminated from further evaluation in this document because they are extremely sensitive to human disturbance and therefore unlikely to occupy the project site, or because they are restricted to particular habitat types (e.g., canyons, grasslands, streams and rivers, marshland, riparian woodland and old growth forest) that are not present on the project site or. One California fully protected species, white-tailed kite (*Elanus leucurus*), may use trees on the perimeter of and adjacent to the project site for nesting habitat. White-tailed kite was not analyzed in the Master Plan EIR. A nesting site for white-tailed kite was observed in the vicinity of McDaniel Slough in 2019 (CNDDDB 2023), after adoption of the Campus Master Plan. Numerous 2023 observations of white-tailed kite on Cal Poly Humboldt campus indicate that they may nest nearby (eBird 2023).

White-tailed kites nest near the top of trees and forage in a variety of open areas. Nests may be placed on isolated trees or on the edge of or within a forest (Cornell University 2023). Tall trees surrounding the developed lot may provide nesting habitat for white-tailed kite. Ground-disturbance, tree removal, and other construction activities on the project site could result in noise and direct disturbance to white-tailed kites nesting on the project site or in adjacent areas. Disturbance to nesting birds could result in nest abandonment by the adults and mortality of chicks and eggs. However, white-tailed kite is protected under Section 3503 of the Fish Game Code and the Migratory Bird Treaty Act (16 U.S.C. 703-712), which prohibit the take of white-tailed kite and the destruction of any nest or eggs. White-tailed kite would be avoided through compliance with these laws protecting nesting birds, which would entail conducting preconstruction surveys to identify active nests, and subsequent physical or seasonal avoidance if found. Therefore, there would be no new significant impacts to special status wildlife species.

Due to the high levels of disturbance associated with being used as a staging/laydown area for on-campus construction activities and the small size of the project site, it is unlikely to be used as a regular foraging site by white-tailed kite. In addition, there are a variety of open grassland and agricultural areas within three miles of the project site that are larger in size and less frequented by human disturbance that would provide higher value foraging habitat for these species should they be nesting nearby. Therefore, construction of the Engineering and Technology Building would not significantly reduce foraging habitat for white-tailed kite.



Source: Data downloaded from USFS in 2018; adapted by Ascent in 2023.

Figure 2-1 Land Cover

In addition, because the modified project would disturb at least 1 acre of land, the project would require coverage under the Construction Stormwater General Permit SWRCB Water Quality Order No. 2009-0009-DWQ, NPDES General Permit No. CAS000002. Compliance with the NPDES General Permit requires applicants to submit a notice of intent to SWRCB and to prepare a SWPPP. The SWPPP identifies BMPs that must be implemented to reduce construction effects on receiving water quality. The BMPs identified are directed at implementing both sediment and erosion control measures and other measures to control potential chemical contaminants. The permit also requires dischargers to consider the use of postconstruction permanent BMPs that remain in service to protect water quality throughout the life of the project. All NPDES permits also have inspection, monitoring, and reporting requirements. With adherence to applicable regulations, development of a SWPPP, and implementation of best management practices, the modified project would result in less than significant impacts related to contamination to nearby creeks.

No special status plant species are expected to occur on the site due to a lack of suitable habitat. Compliance with Section 3503.5 of the Fish Game Code and the Migratory Bird Treaty Act will prevent project-related impacts to white-tailed kite and there would be no new significant impacts to special status wildlife species. Therefore, the modified project would not result in more severe impacts than were identified in the programmatic analysis provided in the Master Plan EIR. No substantial change from the previous conclusions in the Master Plan EIR would occur.

2.5 CULTURAL RESOURCES

The impacts on cultural resources associated with implementation of the Campus Master Plan were analyzed in Chapter 7.0 of the Master Plan EIR. As described in the Master Plan EIR, no features in the project area are listed in the California Register of Historical Resources or in the National Register of Historic Places, and no records of previously recorded historic resources in the project area are possessed by the California Historical Resources Information System. In addition, no archaeological sites were found during an archaeological survey conducted on land adjacent to the east edge of campus. As a result of the extensively developed condition of the campus, it is probable that any trace of two historic resources—the Preston School and the Jolly Giant Mill—if any existed at this site, has likely already been eliminated. The record search identified four campus buildings—Founders Hall, Nelson Hall, Gist Hall, and Jenkins Hall—listed on the California Historic Property Inventory. Also identified was the former Trinity Hospital, now known as the University Annex, a privately owned parcel used by Cal Poly Humboldt and considered a potential expansion site for the campus. A Sacred Lands File search did not indicate the presence of Native American cultural resources within the project site. The three tribal organizations in Wiyot territory—Table Bluff Reservation, Blue Lake Rancheria, and Bear River Band of Rohnerville Rancheria—were contacted to request information. No Native American archaeological or cultural sites were identified. One of the mitigative elements of the Campus Master Plan addresses how to respond if cultural resources are discovered accidentally during construction. As described on page 1-15 of the Master Plan EIR (Humboldt State University 2004):

Cultural Resources Accidental Discovery:

The purpose of this provision is to avoid creating a significant impact in the event of accidental discovery of previously unidentified and unknown cultural resources or human remains during construction. During earthwork activities in the areas of development, construction personnel shall be notified of, and required to monitor for, signs of potential undiscovered paleontological, archaeological, ethnic, or religious resources. Particular attention should be paid to construction activities identified to be near the site of the former Jolly Giant Mill (1874) or the Preston School District.

In the event undiscovered paleontological, archaeological, ethnic, or religious resources are encountered during construction, ground-disturbing work will be halted in that area until a qualified cultural resources specialist evaluates the situation and recommends an appropriate course of action. Examples of prehistoric resources include obsidian or chert flakes and/or tools, projectile points, heat-affected rock, locally darkened midden, groundstone artifacts, deposits of shell, dietary bone, and human burials. Historic resources include stone foundations or walls, structures and remains with square nails, and refuse deposits, found often in old wells and privies. If human remains are discovered, the County Coroner must be contacted. Required procedures to be followed in the event of accidental discovery of cultural materials or human remains are

described in sections 15064.5(e) and 15064.5(f) of the State CEQA Guidelines (California Code of Regulations, Title 14, Sec 15000–15387).

The potential for accidental damage to unknown cultural resources during construction of new land uses throughout the campus would be addressed through compliance with and implementation of the mitigative element of the Campus Master Plan described above. The Master Plan EIR concluded that implementation of the Campus Master Plan would affect potentially historical resources—in particular, Gist and Jenkins Halls and the University Annex, resulting in a significant impact (page 7-5 of the Master Plan EIR). The Master Plan EIR concluded that implementation of Mitigation Measures 7-1a through 7-1e, would reduce this impact but that the impact was significant and unavoidable (Humboldt State University 2004).

Because of the time elapsed between the Master Plan EIR’s analysis and current conditions, a desktop review was conducted by Ascent. The desktop review consisted of a records search of the California Historical Resources Information System conducted at the Northwest Information Center, a review of the Native American Heritage Commission’s Sacred Lands File (SLF), and aerial images and topographic maps review (NETR 2023).

The result of the records search revealed that no cultural resources have been documented within the project site. Although no documented archaeological sites or human remains have been previously recorded, it is possible that ground disturbing activities could result in accidental discovery of cultural resources. However, the Master Plan EIR included best management practices in the event of an accidental discovery, as described above and which would be applicable to future development of the project site.

A review of historic aerials (1956 to 2020) and topographic maps (1933 to 2021) was also conducted and indicate that the project site was largely developed (NETR 2023). The topographic maps revealed built environment features between 1933 and 1948 were identified within the project site, and by 1953 these built environment features were demolished. The aerial images between 1956 to 2020 revealed the project site have been landscaped and undeveloped. Today, the project site is made up of open land (primarily annual grassland and graveled) and used as an event field and temporary staging area by Cal Poly Humboldt. Because the site has been disturbed many times over the past century, accidental discovery of unknown archeological resources is not expected. However, if an archeological resource is discovered during trenching or other earth-moving activities, the requirements set forth under Sections 15064.5(e) and 15064.5(f) of the State CEQA Guidelines, described above, would ensure that handling and treatment of these resources would not cause a significant adverse effect on an archaeological resource. Therefore, the modified project would not result in more severe impacts than were identified in the programmatic analysis provided in the Master Plan EIR. No substantial change from the previous conclusions in the Master Plan EIR would occur.

2.6 ENERGY

The potential impact of the Campus Master Plan related to the consumption of energy was analyzed in Chapter 12.0, “Mineral and Energy Resources,” of the Master Plan EIR. As stated in the Master Plan EIR, the energy consumption anticipated for construction of the Campus Master Plan projects was expected to be typical of ordinary construction, and the energy required to operate the campus is similar to that required to operate ordinary commercial uses. Overnight lighting is minimal, and no high energy-consuming processing facilities are included as part of the Campus Master Plan. In addition, CSU project development standards are strongly oriented toward energy conservation. Therefore, the Master Plan EIR concluded that this impact was less than significant (pages 12-1 and 12-2).

In 2018, Appendix G of the State CEQA Guidelines was modified to further disclose and consider the energy implications of a project. CEQA requires mitigation measures to reduce “wasteful, inefficient, and unnecessary energy usage” (CEQA Section 21100[b][3]). Neither the law nor the State CEQA Guidelines establish criteria that define wasteful, inefficient, or unnecessary use. Compliance with the California Energy Code would result in energy-efficient buildings. However, compliance with the California Energy Code does not address all potential energy impacts during construction and operation of the project.

Energy would be required to construct, operate, and maintain construction equipment and to produce and transport construction materials associated with construction of the project. The project would be constructed over an approximately 2-year period starting in early 2024 and finishing in 2026 with occupancy occurring in the same year. The one-time energy expenditure required to construct the physical buildings 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 supplying materials.

The operation of the proposed buildings and facilities would result in the consumption of transportation-related fuel and electricity for lighting, space heating, water heating, and other electrical uses. No natural gas would be consumed, and all power needs would be met through electrical connections. Indirect energy use would include wastewater treatment; water pumping, treatment, and distribution; and solid waste removal. Cal Poly Humboldt, as part of the CSU system, aims to exceed the energy efficiency and sustainability requirements of both the CALGreen and the California Energy Code. The development would achieve Leadership in Energy and Environmental Design (LEED) Silver for Building Design.

Overall, 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; however, the project would not consume natural gas and would promote energy conservation through the use of high efficiency fixtures. All project design features would meet or exceed CALGreen 2022 and Title 24 standards, where relevant, such as high-efficiency lighting and appliances in buildings and mandatory EV parking spaces.

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. Project energy consumption for building operation and transportation would support these goals due to the effects of existing State laws and requirements and project design that promotes energy conservation. For example, the modified project would comply with the minimum energy performance standards of the California Building Code, which decrease per capita energy consumption. The modified project (i.e., combination of the previously anticipated Buildings F and M into a single Engineering and Tech building) would also support per capita energy consumption decreases through its uses of grid electricity, which is required by State legislation (e.g., SB 100) to source at least 60 percent of its supplies from renewable energy sources by 2030 and 100 percent carbon-free sources by 2045. Transportation-related uses of energy would also be increasingly efficient during implementation of the modified project, for example due to the State's Advanced Clean Car Standards requiring vehicles sold in the State to be increasingly fuel efficient and use fuel sources other than gasoline and diesel (e.g., electricity). 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.

As described above a detailed analysis of construction and operational energy demands was not provided in the Master Plan EIR. However, numerous regulations have been implemented since the adoption of the Master Plan EIR which set rigorous standards for energy efficiency as well as sustainability-focused electricity generation. Along with the numerous Federal and State regulations, the CSU CAP mandates that CSU-affiliated projects be consistent with the goals and policies within the CAP to meet GHG reduction goals. Additionally, there have been significant technological advancements since the adoption of the Master Plan EIR such as vehicle fuel efficiency, renewable energy generation, and building-design efficiencies—all of which increase overall project energy efficiencies. For these reasons, it is likely that the project is much more energy-efficient in all areas than was originally envisioned and analyzed in the Master Plan EIR. Therefore, no new or more severe impacts related to energy would occur with implementation of the project and the usage of energy for construction and operation of the project would not be considered wasteful, inefficient, or unnecessary. Therefore, the modified project would not result in more severe impacts than were identified in the programmatic analysis provided in the Master Plan EIR. No substantial change from the previous conclusions in the Master Plan EIR would occur.

2.7 GEOLOGY AND SOILS

2.7.1 Soils and Geologic Hazards

Potential impacts of the Campus Master Plan related to geology and soils were analyzed in Chapter 8.0 of the Master Plan EIR. According to the Alquist-Priolo Earthquake Fault Zoning Map, no active faults are located under or adjacent to the campus, although the Fickle Hill Fault is in the vicinity. The area is prone to potentially prolonged and strong seismic ground shaking and moderate slope stability. Although faults in the region may induce strong ground shaking in the Arcata area, they are not adequately close to the campus to require more than standard earthquake engineering design. Soils on campus have been characterized as having a low expansion index and do not exhibit expansive qualities. Soils and geologic units on campus, in general, do not exhibit instability. Some slopes on the campus have exhibited instability and required corrective action or were being considered for corrective action. No septic tanks are proposed as part of implementation of the Campus Master Plan. The Master Plan EIR states that potential impacts related to soil erosion from construction and subsequent discharge to a water body and related to exposure of campus facilities to geologic hazards, including ground shaking and soil instability, which could cause major damage to facilities, would be addressed by the following mitigative elements of the Campus Master Plan (Humboldt State University 2004):

1. **Geologic Hazards.** Standard engineering design will lessen the probability that the new tower and building will be damaged by geologic hazards. All significant structures and improvements on the campus will be designed and constructed in accordance with the CSU Seismic Safety Standards and the California Building Codes, including the preparation of site-specific geotechnical and engineering reports.
2. **Erosion Control.** Proper management of disturbed and exposed soils and implementation of effective Best Management Practices (BMPs) for erosion and sedimentation control will be implemented to prevent significant erosion during rains. Erosion control requirements will be included in the construction plans and specifications. The construction contractor will be required to comply with these plans for protecting exposed soils from runoff-producing rain and for the proper disposal of excess soils. For construction projects covering an acre or more, these types of controls will be addressed in a Stormwater Pollution Prevention Plan required by the Regional Water Quality Control Board. Erosion control requirements will be specific to each project and location, ensuring adequate protection for Jolly Giant Creek and other drainages. As appropriate, a project must have a suitable buffer between construction operations and Jolly Giant Creek and, as feasible, any wetland areas. A buffer of approximately ten feet will be established between earthworks and established riparian vegetation. Silt fencing will line the buffer edge. Equipment will remain on existing roadways or previously graded ground as much as feasible.

The Master Plan EIR on page 8-3 concluded that geology and soils impacts associated with implementation of the Campus Master Plan would be less than significant (Humboldt State University 2004).

The modified project would involve the construction and operation of the Engineering and Technology Building on the existing Campus Events Field. As discussed in the Master Plan EIR and noted above, campus is not located within an Alquist-Priolo Earthquake Fault Zone, and no mapped active or potentially active fault traces are known to traverse or project toward the project site. Construction and operation of new buildings and infrastructure would meet current building standards, including the 2022 (or as updated) Building Energy Efficiency Standards, and would not exacerbate earthquake potential in the project vicinity. Additionally, as a construction project that would disturb at least 1 acre of land, the modified project would require coverage under the Construction Stormwater General Permit State Water Resources Control Board (SWRCB) Water Quality Order No. 2009-0009-DWQ, National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS000002 (as shown in Table 1-1 above). Compliance with the NPDES General Permit requires applicants to submit a notice of intent to SWRCB and to prepare a stormwater pollution prevention plan (SWPPP). The SWPPP identifies best management practices (BMPs) that must be implemented to reduce construction effects on receiving water quality. The BMPs identified are directed at implementing both sediment and erosion control measures and other measures to control potential chemical

contaminants. The permit also requires dischargers to consider the use of postconstruction permanent BMPs that remain in service to protect water quality throughout the life of the project. All NPDES permits also have inspection, monitoring, and reporting requirements. Therefore, all geology- and soils-related impacts of the modified project would be less than significant. Therefore, the modified project would not result in more severe impacts than were identified in the programmatic analysis provided in the Master Plan EIR. No substantial change from the previous conclusions in the Master Plan EIR would occur.

2.7.2 Paleontological Resources

Potential impacts associated with implementation of the Campus Master Plan to paleontological resources were analyzed in Chapter 7.0, "Cultural Resources," of the Master Plan EIR. The Master Plan EIR indicates that the potential for paleontological resources to occur within the campus is limited and that the opportunity to disturb paleontological resources that have not been disturbed by previous construction activities is minimal. For these reasons, the Master Plan EIR concluded that the impact on paleontological resources would be less than significant (Humboldt State University 2004).

The modified project would involve the construction and operation of a new Engineering and Technology Building on the existing Campus Events Field, a 1.8-acre area that has been subject to prior disturbance. Based on a review of generalized rock types provided by the California Department of Conservation, the campus is underlain by marine and nonmarine sedimentary rocks, from the Pleistocene era (i.e., over than 10,000 old formations that may contain paleontological resources) (California Department of Conservation 2023). Because the site has been disturbed many times over the past century, accidental discovery of unknown paleontological resources is not expected. However, due to the presence of rock formations within the Cal Poly Humboldt campus that may be greater than 10,000 years old, the potential for a paleontological resource to be uncovered during earth-moving activities cannot be precluded. Consistent with the conclusions of the Master Plan EIR, if a paleontological resource is discovered during project construction at the project site, the requirements set forth under Sections 15064.5(e) and 15064.5(f) of the State CEQA Guidelines and described above under Section 2.5, "Cultural Resources," would ensure that handling and treatment of these resources would not result in a significant adverse effect on a paleontological resource. Therefore, the modified project would not result in more severe impacts than were identified in the programmatic analysis provided in the Master Plan EIR. No substantial change from the previous conclusions in the Master Plan EIR would occur.

2.8 GREENHOUSE GAS EMISSIONS

Since certification of the Master Plan EIR, increased awareness of greenhouse gas (GHG) emissions and their role in global climate change has resulted in promulgation of laws and regulations designed to curb emissions and reduce the inherently cumulative effect of GHG emissions. At the time the Master Plan EIR was prepared and certified, the State CEQA Guidelines did not identify GHG emissions and climate change as a resource area in Appendix G. Thus, the Master Plan EIR did not provide an environmental or regulatory setting to characterize climate change impacts, nor did the Master Plan EIR evaluate the Campus Master Plan's contribution of GHG emissions to anthropogenic climate change. However, in 2009, the Governor's Office of Planning and Research (OPR) amended Appendix G of the State CEQA Guidelines to include project-level analysis of GHG emissions.

This section presents a summary of the current state of climate change science and GHG emissions sources in California, applicable regulations, and the Cal Poly Humboldt GHG Inventory; discussion of potential GHG emissions that would occur as a result of the project and their potential contribution to global climate change. For the purposes of this analysis, GHG emissions are measured as metric tons of carbon dioxide equivalent (MTCO_{2e}). The atmospheric impact of a GHG is based on the global warming potential (GWP) of that gas. GWP is a measure of the heat-trapping ability of one unit of a gas over a certain timeframe relative to one unit of carbon dioxide (CO₂). The GWP of CO₂ is one. Consistent with the methodology used by CARB in estimating statewide GHG emissions, this analysis uses GWP values from the Fourth Assessment Report Values by the Intergovernmental Panel on Climate Change (IPCC).

2.8.1 Regulatory Setting

FEDERAL

Affordable Clean Energy Rule

In June 2019, EPA, under authority of the Clean Air Act Section 111(d), issued the Affordable Clean Energy rule which provides guidance to States on establishing emissions performance standards for coal-fired electric generating units (EGUs). Under this rule, States are required to submit plans to EPA that demonstrate the use of specifically listed retrofit technologies and operating practices to achieve CO₂ emission reductions through heat rate improvement (HRI). HRI is a measurement of power plant efficiency that EPA determined as part of this rulemaking to be the best system of emission reductions for CO₂ generated from coal-fired EGUs (EPA 2019).

Federal Energy Policy and Conservation Act

Congress enacted the Federal Energy Policy and Conservation Act in 1975 which established fuel economy standards for on-road motor vehicles in the United States. Pursuant to the act, the National Highway Traffic Safety Administration is responsible for establishing additional vehicle standards. In 2010, fuel economy standards were set at 27.5 miles per gallon (mpg) for new passenger cars and 23.5 mpg for new light trucks. Fuel economy is determined based on each manufacturer's average fuel economy for the fleet of vehicles available for sale in the United States.

Massachusetts vs. EPA

On April 2, 2007, in *Massachusetts v. EPA*, the Supreme Court directed the EPA Administrator to determine whether GHG emissions from new motor vehicles cause or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. In making these decisions, the EPA Administrator is required to follow the language of Section 202(a) of the federal Clean Air Act. On December 7, 2009, the Administrator signed a final rule with two distinct findings regarding GHGs under Section 202(a) of the Clean Air Act:

- ▶ The Administrator found that elevated concentrations of GHGs—CO₂, CH₄, N₂O, HFCs, PFCs, and SF₆—in the atmosphere threaten the public health and welfare of current and future generations. This is referred to as the “endangerment finding.”
- ▶ The Administrator further found the combined emissions of GHGs—CO₂, CH₄, N₂O, and HFCs—from new motor vehicles and new motor vehicle engines contribute to the GHG air pollution that endangers public health and welfare. This is referred to as the “cause or contribute finding.”
- ▶ These two findings were necessary to establish the foundation for regulation of GHGs from new motor vehicles as air pollutants under the Clean Air Act.

Clean Power Plan and New Source Performance Standards for Electric Generating Units

On October 23, 2015, EPA published a final rule (effective December 22, 2015) establishing the Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units (80 FR 64510-64660), also known as the Clean Power Plan. These guidelines prescribe how states must develop plans to reduce GHG emissions from existing fossil-fuel-fired electric generating units. The guidelines establish CO₂ emission performance rates representing the best system of emission reduction for two subcategories of existing fossil-fuel fired electric generating units: (1) fossil-fuel-fired electric utility steam-generating units, and (2) stationary combustion turbines. Concurrently, the EPA published a final rule (effective October 23, 2015) establishing Standards of Performance for Greenhouse Gas Emissions from New, Modified, and Reconstructed Stationary Sources: Electric Utility Generating Units (80 FR 64661-65120). The rule prescribes CO₂ emission standards for newly constructed, modified, and reconstructed affected fossil-fuel-fired electric utility generating units. The U.S. Supreme Court stayed implementation of the Clean Power Plan pending resolution of several lawsuits. Additionally, in March 2017, President Trump directed the EPA Administrator to review the Clean Power Plan in order to determine whether it is consistent with current executive policies concerning GHG emissions, climate change and energy.

On March 17, 2021, in accordance with Executive Order 13990 “Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis,” EPA asked the D.C. Circuit to vacate and remand the “significant contribution” final rule of the New Source Performance Standards. The rule was promulgated without public notice or opportunity to comment. On April 5, 2021, the D.C. Circuit vacated and remanded the January 2021 final rule (EPA 2022).

STATE

Executive Order S-3-05

In 2005, Executive Order (EO) S-3-05 was signed into law and proclaims that California is vulnerable to the impacts of climate change. It declares that increased temperatures could reduce the Sierra Nevada snowpack, further exacerbate California’s air quality problems, and potentially cause a rise in sea levels. To combat those concerns, the EO established total GHG emission targets for the State. Specifically, Statewide emissions are to be reduced to 2000 levels by 2010, 1990 levels by 2020, and 80 percent below 1990 levels by 2050.

Statewide Emissions Targets

Assembly Bill 32

In September 2006, the California Global Warming Solutions Act of 2006, AB 32, was signed into law. AB 32 establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and a cap on Statewide GHG emissions. AB 32 requires that Statewide GHG emissions be reduced to 1990 levels by 2020. AB 32 also requires that “(a) the Statewide greenhouse gas emissions limit shall remain in effect unless otherwise amended or repealed. (b) It is the intent of the Legislature that the Statewide greenhouse gas emissions limit continue in existence and be used to maintain and continue reductions in emissions of greenhouse gases beyond 2020. (c) The State board [California Air Resources Board (CARB)] shall make recommendations to the Governor and the Legislature on how to continue reductions of greenhouse gas emissions beyond 2020” (California Health and Safety Code, Division 25.5, Part 3, Section 38551).

Senate Bill 32 and Assembly Bill 197 of 2016

In August 2016, SB 32 and AB 197 were signed into law and serve to extend California’s GHG reduction programs beyond 2020. SB 32 amended the Health and Safety Code to include Section 38566, which contains language to authorize CARB to achieve a Statewide GHG emission reduction of at least 40 percent below 1990 levels by no later than December 31, 2030. SB 32 codified the targets established by EO B-30-15 for 2030, which set the next interim step in the State’s continued efforts to pursue the long-term target expressed in EOs S-3-05 and B-30-15 of 80 percent below 1990 emissions levels by 2050.

Assembly Bill 1279

On September 16, 2022, the State legislature passed AB 1279 which codified stringent emissions targets for the State of achieving carbon neutrality and an 85 percent reduction in 1990 emissions level by 2045 (this superseded the previous GHG emissions reduction target set forth by EO S-3-05).

Senate Bill 375 of 2008

In September 2008, SB 375 was signed into law and aligns regional transportation planning efforts, regional GHG emission reduction targets, and land use and housing allocation. SB 375 requires metropolitan planning organizations (MPOs) to adopt a Sustainable Communities Strategy (SCS) or Alternative Planning Strategy, showing prescribed land use allocation in each MPO’s Regional Transportation Plan. CARB, in consultation with the MPOs, is to provide each affected region with reduction targets for GHGs emitted by passenger cars and light trucks for 2020 and 2035.

Advanced Clean Cars Program

In January 2012, CARB approved the Advanced Clean Cars program, which combines the control of GHG emissions and criteria air pollutants, as well as requirements for greater numbers of zero-emission vehicles (ZEVs), into a single package of regulatory standards for vehicle model years 2017– 2025. The new regulations strengthened the GHG

standards for 2017 models and beyond. In addition, the program's zero-emission vehicle (ZEV) regulation requires battery, fuel cell, and plug-in hybrid electric vehicles (EVs) to account for up to 15 percent of California's new vehicle sales by 2025. In August 2022, CARB adopted the ACC II program, which sets sales requirements for ZEVs to ultimately reach the goal of 100 percent ZEV sales in the State by 2035.

California Renewables Portfolio Standard

SB X1-2 of 2011 requires all California utilities to generate 33 percent of their electricity from renewables by 2020. SB 100 of 2018 sets a three-stage compliance period requiring all California utilities, including independently owned utilities, energy service providers, and community choice aggregators, to generate 52 percent of their electricity from renewables by December 31, 2027; 60 percent by December 31, 2030; and 100 percent carbon-free electricity by December 31, 2045.

Building Energy Efficiency Standards

Title 24, Part 6

The energy consumption of new residential and nonresidential buildings in California is regulated by the State's Title 24, Part 6, Building Energy Efficiency Standards (California Energy Code). The California Energy Commission (CEC) updates the California Energy Code every 3 years with more stringent design requirements for reduced energy consumption, which results in the generation of fewer GHG emissions. The current California Energy Code will require builders to use more energy-efficient building technologies for compliance with increased restrictions on allowable energy use. The core focus of the building standards has been efficiency, but the 2019 Energy Code ventured into onsite generation by requiring PV on new homes, providing significant GHG savings. The most recent is the 2022 California Energy Code which advances the onsite energy generation progress started in the 2019 California Energy Code by encouraging electric heat pump technology and use, establishing electric-ready requirements when natural gas is installed, expanding solar PV system and battery storage standards, and strengthening ventilation standards to improve indoor air quality. The CEC estimates that the 2022 California Energy Code will save consumers \$1.5 billion and reduce GHGs by 10 MMTCO_{2e} over the next 30 years (CEC 2021).

Title 24, Part 11

The California Green Building Standards Code, referred to as CALGreen, was added to Title 24 as Part 11, first in 2009 as a voluntary code, which then became mandatory effective January 1, 2011 (as part of the 2010 California Building Standards Code). The current version is the 2022 CALGreen Code, which took effect on January 1, 2023. As compared to the 2019 CALGreen Code, the 2022 CALGreen Code strengthened sections pertaining to EV and bicycle parking, water efficiency and conservation, and material conservation and resource efficiency, among other sections of the CALGreen Code. The CALGreen Code sets design requirements equivalent to or more stringent than those of the California Energy Code for energy efficiency, water efficiency, waste diversion, and indoor air quality. These codes are adopted by local agencies that enforce building codes and used as guidelines by State agencies for meeting the requirements of EO B-18-12.

Low Carbon Fuel Standard

In January 2007, EO S-1-07 established a Low Carbon Fuel Standard (LCFS). The EO calls for a Statewide goal to be established to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020 and for an LCFS for transportation fuels to be established for California. The LCFS applies to all refiners, blenders, producers, or importers (providers) of transportation fuels in California, including fuels used by off-road construction equipment (Wade, pers. comm., 2017). The LCFS is measured on the total fuel cycle and may be met through market-based methods. For example, providers exceeding the performance required by an LCFS receive credits that may be applied to future obligations or traded to providers not meeting the LCFS.

In Jun 2007, CARB adopted the LCFS as a Discrete Early Action item under AB 32 pursuant to Health and Safety Code Section 38560.5, and in April 2009, CARB approved the new rules and carbon intensity reference values with new regulatory requirements taking effect in January 2011. The standards require providers of transportation fuels to report on the mix of fuels they provide and demonstrate they meet the LCFS intensity standards annually. This is

accomplished by ensuring that the number of “credits” earned by providing fuels with a lower carbon intensity than the established baseline (or obtained from another party) is equal to or greater than the “deficits” earned from selling higher-intensity fuels. After some disputes in the courts, CARB readopted the LCFS regulation in September 2015, and the LCFS went into effect on January 1, 2016.

Statewide GHG Emission Targets and Climate Change Scoping Plan

Reducing GHG emissions in California has been the focus of the State government for approximately two decades. GHG emission targets established by the State legislature include reducing Statewide GHG emissions to 1990 levels by 2020 (AB 32 of 2006) and reducing them to 40 percent below 1990 levels by 2030 (SB 32 of 2016). EO S-3-05 calls for Statewide GHG emissions to be reduced to 80 percent below 1990 levels by 2050. This target was superseded by AB 1279 which codifies a goal for carbon neutrality and reduce emissions by 85 percent below 1990 levels by 2045.

California’s 2017 Climate Change Scoping Plan (2017 Scoping Plan), prepared by CARB, outlined the main strategies California will implement to achieve the legislated GHG emission target for 2030 and “substantially advance toward our 2050 climate goals” and mandated by SB 32 (CARB 2017). It identified the reductions needed by each GHG emission sector (e.g., transportation, industry, electricity generation, agriculture, commercial and residential, pollutants with high global warming potential, and recycling and waste).

On September 16, 2022, the State legislature passed AB 1279 which codified stringent emissions targets for the State of achieving carbon neutrality and an 85 percent reduction in 1990 emissions level by 2045. CARB released the Final 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan) on November 16, 2022, as also directed by AB 1279 (CARB 2022). The 2022 Scoping Plan traces the pathway for the State to achieve its carbon neutrality and an 85 percent reduction in 1990 emissions goal by 2045 using a combined top down, bottoms up approach using various scenarios. CARB adopted the 2022 Scoping Plan on December 16, 2022.

CARB and other State agencies also released the January 2019 Draft California 2030 Natural and Working Lands Climate Change Implementation Plan consistent with the carbon neutrality goal of EO B-55-18 (California Environmental Protection Agency et al. 2019).

Executive Order B-48-18: Zero-Emission Vehicles

In January 2018, EO B-48-18 was signed into law and requires all State entities to work with the private sector to have at least 5 million ZEVs on the road by 2030, as well as install 200 hydrogen fueling stations and 250,000 electric vehicle charging stations by 2025. It specifies that 10,000 of the electric vehicle charging stations should be direct current fast chargers. This EO also requires all State entities to continue to partner with local and regional governments to streamline the installation of ZEV infrastructure. The Governor’s Office of Business and Economic Development is required to publish a *Plug-in Charging Station Design Guidebook* and update the *Hydrogen Station Permitting Guidebook* (Eckerle and Jones 2020) to aid in these efforts. All State entities are required to participate in updating the *2016 Zero-Emissions Vehicle Action Plan* (CARB 2016) to help expand private investment in ZEV infrastructure with a focus on serving low-income and disadvantaged communities. Additionally, all State entities are to support and recommend policies and actions to expand ZEV infrastructure at residential land uses, through the LCFS program, and to recommend how to ensure affordability and accessibility for all drivers.

California State University

California State University Sustainability Policy

In the Spring of 2022, The CSU Board of Trustees adopted an update to the CSU system-wide Sustainability Policy, which was first adopted in 2014 with subsequent updates in 2019 and 2020. The current update became effective March 23, 2022. The policy aims to reduce the environmental impact of construction and operation of buildings and to integrate sustainability across the curriculum. The CSU Sustainability Policy established the following goals related to GHG emissions:

- ▶ procure 60 percent of energy supply from renewable sources by 2030;
- ▶ reduce GHG emissions 80 percent below 1990 levels by 2040;

- ▶ increase on-site energy generation from 32 to 80 megawatts by 2030;
- ▶ reduce per-capita landfill waste by 50 percent by 2030 and 80 percent by 2040;
- ▶ reduce water use by 10 percent by 2030;
- ▶ promote use of alternative fuels and transportation programs;
- ▶ procure goods that are recycled, recyclable, or reusable; and
- ▶ integrate sustainability across the curriculum.

CSU Executive Order 987

EO 987 is the CSU Policy Statement on Energy Conservation, Sustainable Building Practices, and Physical Plant Management. CSUN operates under this EO, which sets minimum efficiency standards for new construction and renovations, and establishes operating practices intended to ensure CSU buildings are used in the most energy efficient and sustainable manner possible while still meeting the programmatic needs of the University.

Cal Poly Humboldt Climate Action Plan 2.0

The Cal Poly Humboldt Climate Action Plan (CAP) 2.0 intends to build upon the first CAP released by Cal Poly Humboldt in 2017, which targeted the reduction of greenhouse gas emissions to 1990 levels by 2020, and to become carbon neutral by 2045. Cal Poly Humboldt was successful in achieving the 2020 goal. The CAP 2.0 outlines strategies to achieve carbon neutrality by 2045, as well as to incorporate sustainability and climate action into the campus' research and academic operations through a variety of actions and strategies related to Buildings, Energy & Fuels (BEF); Transportation (TRA), Solid Waste & Purchasing (SWP); Carbon Sequestration & Offset (CSO); Academics & Research (A&R); and Resilience (RES). The goals and strategies of the CAP 2.0 that are relevant to GHG reductions for all sectors are as follows:

BEF GOAL 1: All buildings owned/operated by Cal Poly Humboldt will generate zero direct emissions by 2045.

- ▶ Strategy 1.1: By 2025, 50% of new major renovations of state buildings will be zero net energy (ZNE). By 2030, 50% of buildings will be retrofitted to ZNE and all new construction will be ZNE.
- ▶ Strategy 1.2: Adopt whole-building performance targets for campus buildings to further energy and water efficiency.
- ▶ Strategy 1.3: Reduce natural gas consumption below 2018-19 levels by 50% by 2030, by 75% by 2040, and by 100% by 2045.
- ▶ Strategy 1.4: Increase installation of solar photovoltaic energy systems on campus infrastructure to a minimum of 2.5 MW by 2025.

BEF GOAL 2: Build resilience into campus buildings and infrastructure to adapt to, and continue to provide functionality during, climate change impacts.

- ▶ Strategy 2.1: Ensure critical loads maintain power during power shut-off events utilizing low-carbon technologies.

BEF GOAL 3: Zero emissions fleet by 2045.

- ▶ Strategy 3.1: Adopt and implement a long-range plan for transitioning fleet and grounds equipment to zero emissions.

TRA GOAL 1: Reduce commute emissions 50% below 2015 levels by 2030, and to zero by 2045.

- ▶ Strategy 1.1: Develop and implement a Transportation Demand Management (TDM) Plan.
- ▶ Strategy 1.2: Adjust parking policies, programs and infrastructure to reduce number of personal, non-zero emission vehicles on campus.
- ▶ Strategy 1.3: Improve walkability and bikeability of campus and area surrounding campus.
- ▶ Strategy 1.4: Support and expand alternative transportation programs.

- ▶ Strategy 1.5 Support improvement of public transit services to the campus.
- ▶ Strategy 1.6: Adopt additional provisions to reduce employee trips to/from campus.

TRA GOAL 2: Reduce business air travel emissions by 50% of 2015 levels by 2030 Strategy.

- ▶ Strategy 2.1: Educate air travelers on their impact while enhancing alternatives to air travel.

SWP GOAL 1: Cal Poly Humboldt is a zero waste campus by 2045.

- ▶ Strategy 1.1: Develop and implement a Zero Waste Action Plan to achieve 50% below 2015 levels by 2030 and 80% below 2015 levels by 2040 for residential and commercial waste (measured in pounds per person per day, or PPD).
- ▶ Strategy 1.2: Reduce waste associated with campus resident move-out by 25% below 2019 levels by 2025.

SWP GOAL 2: Reduce non-hazardous construction and demolition waste going to the landfill.

- ▶ Strategy 2.1: Divert a minimum of 65% of non-hazardous construction and demolition waste; by 2030 increase diversion rate to 75%.

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.

- ▶ Strategy 3.1: Implement policies and procedures to maximize the use of suppliers and vendors with sustainable practices in campus contracting activities.

SWP GOAL 4: Reduce the embodied carbon of specified construction materials by 50% of 2022 levels by 2030.

- ▶ Strategy 4.1: Reduce Scope 4 emissions by only purchasing specified building materials with a global warming potential below the industry average.

CSO GOAL 1: By 2045, any remaining GHG emissions are mitigated through sequestration and carbon offset programs or purchases

- ▶ Strategy 1.1: Identify and manage for carbon sequestration on Humboldt managed properties.
- ▶ Strategy 1.2: Offset 25% of emissions from business air travel by 2025, and 100% of remaining emissions from air travel by 2045.
- ▶ Strategy 1.3: Offset 10% of emissions from commute by 2025, and 100% of remaining emissions from commute by 2045.
- ▶ Strategy 1.4: Develop community based small-scale carbon offset projects.
- ▶ Strategy 1.5: Develop a carbon reduction fund for purchasing carbon offsets through the traditional voluntary market and for funding small scale carbon projects.
- ▶ Objective 1.6: Integrate carbon sequestration into campus decision-making.

A&R GOAL 1: Further integrate sustainability into the curriculum.

- ▶ Strategy 1.1: Increase the percentage of courses with sustainability content to 25% by 2025 and to 40% by 2030. Increase the percentage of academic departments with sustainability course offerings to 85% by 2025 and to 90% by 2030.

A&R GOAL 2: Foster cross-disciplinary research and creative activities in sustainability

- ▶ Strategy 2.1: Increase the percentage of researchers that are engaged in sustainability research to 50% by 2025 and to 60% by 2030.
- ▶ Strategy 2.2: Support the increase and enhancement of creative activities in sustainability.

A&R GOAL 3: Firmly and publicly establish Cal Poly Humboldt as a hub for sustainability innovation, curriculum and research.

- ▶ Strategy 3.1: Support the establishment of a sustainability center by 2025

RES GOAL 1: Develop a campus and community that can withstand and thrive through climate change-driven disruptions.

- ▶ Strategy 1: Plan now for a future constrained by climate change impacts.
- ▶ Strategy 2: Educate the campus community about climate change vulnerabilities and adaptation strategies.
- ▶ Strategy 3: Reduce food and housing insecurity.
- ▶ Strategy 4: Improve ecosystem management to increase biodiversity, remove invasive species, and foster pollinator health.
- ▶ Strategy 5: Improve storm, wastewater and irrigation management.
- ▶ Strategy 6: Improve indoor and outdoor air quality.
- ▶ Strategy 7: Strengthen campus emergency operations and response.

2.8.2 Impact Analysis

THRESHOLDS OF SIGNIFICANCE

The issue of global climate change is inherently a cumulative issue because the GHG emissions of individual projects cannot be shown to have any material effect on global climate. Thus, the project's impact on climate change is addressed only as a cumulative impact.

State CEQA Guidelines Section 15064 and relevant checklist questions contained in Appendix G recommend that a lead agency consider a project's consistency with relevant, adopted plans and discuss any inconsistencies with applicable regional plans, including plans to reduce GHG emissions. Under Appendix G of the State CEQA Guidelines, implementing the project would result in a cumulatively considerable contribution to climate change if it would:

- ▶ generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, or
- ▶ conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs.

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 the 2045 carbon neutrality goal identified in EO B-55-15. 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, statewide targets, and the Cal Poly Humboldt Climate Action Plan 2.0.

IMPACT ANALYSIS

Generation of Greenhouse Gas Emissions

The project would generate GHG emissions during both construction and operation. Construction-related activities would generate GHG emissions from the use of heavy-duty off-road equipment, materials transport, and worker commute trips. Construction of the project would differ from the Campus Master Plan in that the proposed structure would represent a combination of previously proposed Buildings F and M in one site and within one building, thereby resulting in fewer GHG emissions due to the lesser scale of construction. Operation of the project would result in mobile-source GHG emissions associated with vehicle trips to and from the project site, area-source emissions from

the operation of landscape maintenance equipment, energy-source emissions from the utilization of electricity, water-related energy consumption associated with water use and the conveyance and treatment of wastewater, and waste-generated emissions from the transport and disposal of solid waste. In accordance with the CSU Sustainability Policy, the project would not include infrastructure to support on-site natural gas. As stated above, GHG emissions resulting from implementation of the Campus Master Plan were not analyzed in the Master Plan EIR and, therefore, no mitigation measures were identified in the Master Plan EIR. However, the project would be subject to the most recent federal, state, local, and CSU policies (see above) that dictate the inclusion of various project design features which reduce potential GHG emissions. These methods include encouraging alternate means of transportation, such as biking and walking, CALGreen-compliant building design features, renewable energy, and all-electric building design. Further, and as noted previously, the overall square footage of the proposed structure would be less than the previously envisioned square footage for Buildings F and M and can reasonably be inferred to result in fewer GHG emissions than the previously envisioned development. Therefore, the modified project would not result in more severe impacts than were identified in the programmatic analysis provided in the Master Plan EIR. No substantial change from the previous conclusions in the Master Plan EIR would occur.

Consistency with Applicable Plans for Reducing GHG Emissions

Consistency with Cal Poly Humboldt Climate Action Plan 2.0

As stated above, in the absence of adopted thresholds by NCUAQMD or Cal Poly Humboldt, the goals of the Cal Poly Humboldt Climate Action Plan 2.0 are used in place of numerical thresholds to qualitatively assess the project's consistency with the applicable plans and policies. Table 2-1 below provides a comparison between the applicable goals and guiding policies identified in the Cal Poly Humboldt Climate Action Plan 2.0 and the design features of the project.

Based on the comparison above, it can be determined that the project would be consistent with the goals of the Cal Poly Humboldt Climate Action Plan 2.0 and would therefore not impede its implementation.

Table 2-1 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 provide a state-of-the-art laboratory facility that would not include natural gas that would result in lesser emissions compared to existing uses and the previously envisioned development. The project would not impede the implementation of measures consistent with this goal.
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 current 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 incorporates multiple design features which encourage alternate means of transportation such as public transport, walking and biking. Due to its central location within campus, the on-site provision of bike parking and accessibility to transit would be consistent with commute emission reduction goals.
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. The project would not involve the demolition or removal of substantial on-site structures that could otherwise be disposed of at a landfill.
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. The project would achieve LEED Silver or better.
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	Consistent. The project would provide state-of-the-art academic and laboratory facilities within the central portion of campus.
A&R GOAL 2: Foster cross-disciplinary research and creative activities in sustainability	Consistent. The project would combine and share facilities in a collaborative and efficient manner so as to maximize the use of sustainability features of the proposed building.
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	N/A. The project would not impede the implementation of measures consistent with this goal.

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 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 many on-site GHG emissions reduction features

including campus electrification (the campus would not have a natural gas utility connection) and energy-efficient lighting and appliances which would comply with the most recent version of CALGreen. As a result, the project would contribute towards 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 across the curriculum. This includes the goals of reducing systemwide facility carbon emissions to 40 percent below 1990 levels consistent with 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 (see Section 2.8.1, "Regulatory Setting," for details). Additionally, the project would not involve the use of natural gas on-site. Regarding water usage, the project would be required to include highly efficient, water-saving features such as the utilization of recycled wastewater for landscaping purposes and high-efficiency watering features. Lastly, the project would divert waste from the landfill through various on-campus waste reduction strategies. 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 be consistent with the Cal Poly Humboldt Climate Action Plan 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. Thus, the project would not conflict with an applicable plan adopted for the purpose of reducing the emissions of GHGs, and no significant impact would occur. Therefore, the modified project would not result in more severe impacts than were identified in the programmatic analysis provided in the Master Plan EIR. No substantial change from the previous conclusions in the Master Plan EIR would occur.

2.9 HAZARDS AND HAZARDOUS MATERIALS

Impacts associated with implementation of the Campus Master Plan related to hazards and hazardous materials were analyzed in Chapter 9.0 of the Master Plan EIR. The Master Plan EIR states that existing operations on the campus, including operation of science laboratories and art studios, regularly involve the transport, use, and disposal of hazardous materials. These materials and the waste that is generated are managed by each of the departments and shop facilities with the assistance of Cal Poly Humboldt Environmental Health and Safety.

2.9.1 Transport, Use, Disposal, Upset, and Emission of Hazardous Materials

With respect to the handling of hazardous materials, the Master Plan EIR concludes that the potential for upset or accident conditions would not be substantial due to implementation of Cal Poly Humboldt's Hazardous Materials Business Plan and reliance on the Environmental Health and Safety Department (EHS) and the Arcata Fire Department for response to accidental release of hazardous materials.

Transportation of hazardous materials on area roadways is regulated by the California Highway Patrol and California Department of Transportation, whereas use of these materials is regulated by DTSC, as outlined in CCR Title 22. Cal Poly Humboldt would be required to use, store, and transport hazardous materials in compliance with local, State, and federal regulations during facility construction and operation. Any disposal of hazardous materials would occur in a manner consistent with applicable regulations and at an appropriate off-site disposal facility. Therefore, adverse impacts related to the handling of potentially hazardous materials as a result of the project are not anticipated (Humboldt State University 2004).

Currently on campus EHS, as part of Risk Management and Safety Services, works with the staff and faculty of Cal Poly Humboldt to provide a safe and healthful workplace. EHS develops and implements various programs aimed to minimize the risk of occupationally related injury or illness. This is accomplished through integrated steps of hazard identification, evaluation, and control, employee training and incident/accident investigation. In addition, EHS is a resource for information and technical guidance on occupational safety and environmental health information, work practices, and regulations. EHS supports a variety of programs including: hazardous waste management, medical waste management, Hazmat business plan chemical inventory, and emergency response to hazardous materials releases. In addition, training classes are provided for employees and, at a minimum, include hazardous and medical waste management, bloodborne pathogens control, hazard communication, best chemical inventory management practices, emergency response to chemical releases and general lab safety. The division also acts as the liaison with various regulatory agencies to insure campus wide compliance with federal, state and local environmental health regulations. Moreover, to promote compliance, EHS conducts routine inspections and notifies departments of required corrections. Thus, while operation of laboratory facilities on campus may include the use of hazardous materials, such as gases and chemicals, implementation of these current programs would substantially minimize the risk of hazardous materials emissions during operation of the project.

There are currently four schools located within 0.25 mile of the campus: Arcata Elementary School, Arcata High School, Northern United Charter School, and Arcata Christian School. However, only Northern United Charter School and Arcata Christian School are located within 0.25 mile of the project site, with Northern United Charter School being located approximately 0.24 mile west of the project site and Arcata Christian School being located approximately 0.10 mile east of the project site. As stated above, hazardous materials generated by the modified project would be managed in accordance with campus programs administered through EHS that ensure proper collection, storage, and shipping of hazardous materials. Thus, there would not be a substantial risk of emissions of hazardous materials from campus, including within close proximity to schools.

The modified project includes space to accommodate two out of the three laboratories proposed as part of the Campus Master Plan, and a larger portion of the Campus Events Field than identified in the Master Plan EIR; however, the proposed Engineering and Technology Building would not result in a change to the type or general construction requirements compared to that identified in the Campus Master Plan. For the reasons discussed above, and consistent with the analysis presented in the Master Plan EIR, the existing programs administered by EHS would reduce the potential risk of emission of hazardous materials during construction and operation of the project to a less-than-significant level. Therefore, the modified project would not result in more severe impacts than were identified in the programmatic analysis provided in the Master Plan EIR. No substantial change from the previous conclusions in the Master Plan EIR would occur.

2.9.2 Hazardous Materials Sites

The Master Plan EIR concluded that the campus and project site are not located on a site included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and that no significant impacts would occur (Humboldt State University 2004). Due to the time elapsed from the Master Plan EIR and current conditions, an online records review was conducted on GeoTracker and EnviroStor, which provided no current or historical hazardous material information regarding the expanded project site (State Water Resources Control Board 2023; California Department of Toxic Substances Control 2023). Based on this information and consistent with the conclusions presented in the Master Plan EIR, the modified project would have a less-than-significant impact related to the creation of a significant hazard to the public or the environment associated with being located on a hazardous materials site.

2.9.3 Airport/Airstrip-Related Hazards

Because the project site is not located within 2 miles of an airport or within the boundaries of an airport land use plan, there would be no impacts related to aircraft safety. Therefore, the modified project would not result in more

severe impacts than were identified in the programmatic analysis provided in the Master Plan EIR. No substantial change from the previous conclusions in the Master Plan EIR would occur.

2.9.4 Emergency Response Plans

The Master Plan EIR found that implementation of the Campus Master Plan would not substantially interfere with the campus's adopted emergency response procedures due to existing on-campus programs. These programs include emergency response/evacuation plans and coordination efforts between the Campus Police Department and the campus Department of Environmental Health and Safety to provide training exercises on campus. As noted in the Master Plan EIR, as the campus is developed in accordance with the Campus Master Plan, campus evacuation plans would be updated and revised, as needed, to reflect the changing traffic and access patterns throughout campus and to maintain adequate emergency access (Humboldt State University 2004).

The modified project would provide accessible paths of travel to key building entries from sidewalks located along the surrounding roads, as well as from the pedestrian walk on the north. To maintain adequate roadway width for emergency vehicle access due to the addition of a permanent structure at the project site, the fire lane on the northern edge of the project site would be widened from 12 feet to 20 feet, consistent with current Local Fire Authority and the California Fire Code regulations. Furthermore, campus has adopted the Emergency Operations Plan & Guidelines (Humboldt State University 2018), which provides an overview of the roles and responsibilities of staff, faculty, students, and the community during disasters such as tsunamis, earthquakes, fire, and hazardous materials spills and/or releases. The Emergency Operations Plan & Guidelines would be updated, as necessary, to ensure safe access and egress from the project site to support continued implementation of established emergency response procedures. Therefore, the modified project would not result in more severe impacts than were identified in the programmatic analysis provided in the Master Plan EIR. No substantial change from the previous conclusions in the Master Plan EIR would occur.

2.9.5 Wildfire Risk

As noted in further detail below under Section 2.20, "Wildfire," the campus is situated between forestland on the east and urbanized areas on the west and south.

Since certification of the Master Plan EIR, the California Department of Forestry and Fire Protection prepared fire hazard severity zone maps in 2007. While the modified project and campus are not located within a State Responsibility Area (SRA) or on land classified as a very high Fire Hazard Severity Zone (FHSZ), the nearest point of land within an SRA is approximately 0.8-mile to the east where land is designated as high and moderate severity zones (CalFire 2007). CalFire is currently in the process of updating the FHSZ maps. Under the proposed updated FHSZ maps, the Cal Poly Humboldt campus would remain outside of an SRA or land classified as a very high FHSZ and would be approximately 0.8 miles from a moderate FHSZ (CalFire 2023).

The modified project would involve development on the Campus Events Field, a location that is currently surrounded by existing development uses. The project would not expose people or structures to increased risks related to wildland fires. Therefore, no impacts related to risk, loss, or injury involving wildfires would occur. Therefore, the modified project would not result in more severe impacts than were identified in the programmatic analysis provided in the Master Plan EIR. No substantial change from the previous conclusions in the Master Plan EIR would occur.

2.10 HYDROLOGY AND WATER QUALITY

Potential impacts of the Campus Master Plan related to hydrology and water quality were analyzed in Chapter 10.0 of the Master Plan EIR. As described below, implementing the Campus Master Plan was expected to have a limited potential for negative impacts on hydrology and water quality, and no significant effect on drainage was expected (Humboldt State University 2004).

2.10.1 Water Quality Standards and Waste Discharge Requirements

The Master Plan EIR found that implementation of the Campus Master Plan would result in a net increase in the amount of pervious surfaces of 33,000 square feet on the campus (i.e., a loss in paved surfaces). Replacing paved surface parking lots with parking structures would reduce the total surface area of impervious surface exposed to rainwater and consequently reduce the amount of automobile-related pollutants, such as gasoline, discharged by stormwater runoff into local and regional waterways. As described in Section 2.7, "Geology and Soils," above, the Campus Master Plan includes a mitigative element that addresses erosion control during construction on campus, including the requirement that the construction contractor comply with erosion control requirements to be included in construction plans and specifications. It also mentions the requirement that a SWPPP be prepared for all construction projects covering 1 acre or more. The Master Plan EIR states that implementation of the plan was not expected to violate any standards or waste discharge requirements. Therefore, the impact related to the Campus Master Plan's potential to violate any water quality standards or waste discharge requirements was found to be less than significant (Humboldt State University 2004).

The modified project involves the functional merging of two laboratories (Phase I, Building F and Phase II, Building M), which would result in a greater area of land paved within the existing Campus Events Field from 8,500 sf to nearly 29,000 sf. However, the modified project would reduce the overall area of develop land associated with these two buildings from 1.8 acres to 1.5 acres.

To ensure that the volume and rates of runoff do not increase as a result of project implementation, Cal Poly Humboldt would adhere to applicable NPDES requirements governing the retention of stormwater flows on-site. As described below in Section 2.19, "Utilities and Service Systems," Cal Poly Humboldt would include stormwater drainage improvements that would route site runoff to the existing campus storm drainage system. As stated above under Section 2.7, "Geology and Soils," as a construction project that would disturb at least 1 acre of land, the project would require coverage under the Construction Stormwater General Permit SWRCB Water Quality Order No. 2009-0009-DWQ, NPDES General Permit No. CAS000002. Compliance with the NPDES General Permit requires applicants to submit a notice of intent to SWRCB and to prepare a SWPPP. The SWPPP identifies BMPs that must be implemented to reduce construction effects on receiving water quality. The BMPs identified are directed at implementing both sediment and erosion control measures and other measures to control potential chemical contaminants. The permit also requires dischargers to consider the use of postconstruction permanent BMPs that remain in service to protect water quality throughout the life of the project. All NPDES permits also have inspection, monitoring, and reporting requirements. With adherence to applicable regulations, development of a SWPPP, and implementation of best management practices, the modified project would result in less than significant impacts related to violation of water quality standards or waste discharge requirements. Therefore, the modified project would not result in more severe impacts than were identified in the programmatic analysis provided in the Master Plan EIR. No substantial change from the previous conclusions in the Master Plan EIR would occur.

2.10.2 Groundwater

As described in the Master Plan EIR, all the water used on campus is delivered by the City of Arcata water system. The regional water supplier is the Humboldt Bay Municipal Water District, which supplies municipal water from collection wells in the Mad River between Arcata and Blue Lake. Other groundwater is not typically used to supply water on campus. The Master Plan EIR therefore found that there was no reason to expect that implementation of the Campus Master Plan would deplete groundwater. In addition, the Master Plan EIR states that the extent of permeable surfaces on campus would increase under the Campus Master Plan, which would improve groundwater recharge. Therefore, the impact related to groundwater supply and recharge was found to be less than significant (Humboldt State University 2004).

As mentioned above, the modified project involves merging of two out of the three proposed laboratories in the Campus Master Plan, which would result in paving of a larger proportion of the Campus Events Field that contemplated in the Master Plan EIR. In addition, the modified project includes expansion of the fire lane and installation of walkways surrounding the building. While the project site would cover the entire Campus Events Field,

this area represents a small portion of the overall campus (i.e., approximately 1.8 acres within the 144-acre campus) and therefore would not substantially decrease groundwater recharge within the campus overall. Furthermore, the modified project would reduce the overall area of developed land associated with these two buildings from 1.8 acres to 1.5 acres. In addition, the modified project is within the development potential evaluated in the Master Plan EIR and would therefore not increase the campus's water demand, and thereby groundwater production. Thus, the modified project would not substantially interfere with groundwater recharge or substantially increase groundwater production. Therefore, the modified project would not result in more severe impacts than were identified in the programmatic analysis provided in the Master Plan EIR. No substantial change from the previous conclusions in the Master Plan EIR would occur.

2.10.3 Drainage, Erosion, and Flooding

As described in the Master Plan EIR, the campus lies on the slopes of the coastal range, near the base of Fickle Hill, and is generally sloped toward the west. The degree of slope varies over the campus from steep slopes to nearly flat areas. The campus area has a mix of developed surfaces consisting of paved surfaces and buildings, as well as vegetated areas, ranging from natural redwood forest to lawns. All the surface water that accumulates on campus flows off-site in natural drainage features and in a stormwater collection system on campus that conveys stormwater to natural drainages or to the City of Arcata stormwater collection system. The Master Plan EIR notes that a recent infrastructure improvement project on campus made upgrades to the stormwater collection system to provide adequate drainage for the entire campus.

The entire campus is located outside the Federal Emergency Management Agency 500-year floodplain, in an area that contains a fully developed stormwater collection and conveyance system. In addition, the project site is outside of the Flood Hazard Area (FEMA 2017). As stated above, the Campus Master Plan includes a mitigative element to address erosion on campus during construction. The Master Plan EIR states that, overall, the general hydrologic properties of the campus are not expected to change substantially under the Campus Master Plan. Consequently, the opportunity for the Campus Master Plan to contribute to substantial erosion, siltation, or flooding on- or off-site was considered minimal. The Master Plan EIR concluded that this impact was less than significant (Humboldt State University 2004).

The modified project involves the functional merging of two laboratories (Phase 1, Building F and Phase II, Building M), which would result in a greater area of land paved within the existing Campus Events Field from 8,500 sf to 1.5 acres. However, the modified project would reduce the overall area of develop land associated with these two buildings from 1.8 acres to 1.5 acres. As discussed above, because the modified project would disturb more than 1 acre of land as a result of the expanded square footage, the modified project would also 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. As with the entirety of the Cal Poly Humboldt campus, the project site is not located within a 100-year flood zone hazard. The project site is located within the Cal Poly Humboldt campus and would connect to the fully developed stormwater collection and conveyance system. Therefore, the modified project would not result in more severe impacts than were identified in the programmatic analysis provided in the Master Plan EIR. No substantial change from the previous conclusions in the Master Plan EIR would occur.

2.10.4 Flood Hazards, Tsunami, and Seiche

As mentioned above, the campus is located outside the Federal Emergency Management Agency 500-year floodplain. Therefore, implementation of the Campus Master Plan would not place structures within a 100-year flood hazard area. The campus is located approximately 4 miles from the Pacific Ocean. The potential for mudflows or related natural disasters on campus would be low because the campus is not located in an area subject to such

events. Therefore, the Master Plan EIR concluded that the risk of loss, injury, or death involving flooding was less than significant (Humboldt State University 2004).

As noted above, the project site is not located within the current 100-year flood hazard zone (FEMA 2017). Additionally, the Cal Poly Humboldt campus is outside of the State's Tsunami Hazard Area (California Department of Conservation 2023) and is not located with proximity to a body of water that could present a risk of seiche. Thus, impacts related to flood hazards, tsunamis and seiche would remain less than significant and no new or more severe impacts would occur beyond those analyzed in the Master Plan EIR. Therefore, the modified project would not result in more severe impacts than were identified in the programmatic analysis provided in the Master Plan EIR. No substantial change from the previous conclusions in the Master Plan EIR would occur.

2.11 LAND USE AND PLANNING

The potential impacts of the Campus Master Plan related to land use and planning were analyzed in Chapter 11.0 of the Master Plan EIR. As discussed in the Master Plan EIR, the Campus Master Plan would continue the use of the entire campus as an educational institution with academic, research, administrative, student support, and student housing facilities, and all proposed facilities and improvements would be located on campus and therefore would not physically divide an established community. No natural community or habitat conservation plans are applicable to the campus. Therefore, the Master Plan EIR concluded that this impact was less than significant (Humboldt State University 2004).

The modified project would be constructed entirely on Cal Poly Humboldt property and therefore would be under the land use jurisdiction of the CSU Board of Trustees. There are no local ordinances or policies of the City of Arcata that would apply to projects on the Cal Poly Humboldt campus, as the City does not have jurisdiction over CSU lands. Nevertheless, the modified project does not propose a change in land use on the site and is consistent with the City of Arcata's Public Facilities zoning and General Plan land use designations of Public Facilities (City of Arcata 2008). Therefore, the modified project would not result in more severe impacts than were identified in the programmatic analysis provided in the Master Plan EIR. No substantial change from the previous conclusions in the Master Plan EIR would occur.

2.12 MINERAL RESOURCES

Potential impacts of the Campus Master Plan related to mineral resources were analyzed in Chapter 12.0, "Mineral and Energy Resources," of the Master Plan EIR. As discussed in the Master Plan EIR, the campus is not located on a locally important mineral resource recovery site. In addition, implementation of the Campus Master Plan would not result in loss of availability of a known mineral resource that would be of value to the region and the residents of the state. The campus is already developed, and the site is not available for extraction of mineral resources. Further development of the campus would not result in the additional loss of important mineral resource recovery. Therefore, the Master Plan EIR concluded on pages 12-1 and 12-2 that this impact was less than significant (Humboldt State University 2004).

While the modified project would increase the area occupied by the building previously proposed in the Campus Master Plan, it is not located on a locally or regionally important area known to contain mineral resources. Thus, the modified project would not result in a loss of availability of a known mineral resource that would be of value to the region and the residents of the state or result in the additional loss of important mineral resource recovery. Therefore, the modified project would not result in more severe impacts than were identified in the programmatic analysis provided in the Master Plan EIR. No substantial change from the previous conclusions in the Master Plan EIR would occur.

2.13 NOISE

The Master Plan EIR analyzed the noise impacts associated with the Campus Master Plan in Chapter 13.0. The Master Plan EIR evaluated short-term construction and long-term operational noise at nearby noise-sensitive receptors at a programmatic level. Because noise is a local issue, affecting the receptors closest to the noise-generating activities,

this analysis is based on the anticipated location of project construction, as well as the operation characteristics of the project and site-specific considerations (e.g., vegetation and topography).

Regarding short-term construction noise, the Master Plan EIR found that implementation of the Campus Master Plan has the potential to expose people off-site to objectionable sound if loud construction activities occur during sensitive nighttime hours. To address objectionable sound, the Campus Master Plan includes the following mitigative element (Humboldt State University 2004):

The Project Specifications will include the following requirements:

1. Construction activities that generate intrusive sound offsite will be limited from 7 a.m. to 7 p.m., Monday through Friday, and 9 a.m. to 7 p.m. on weekends,
2. Construction equipment will be maintained in proper condition to prevent excessive noise,
3. Backup beepers will be used only when necessary and will be no louder than necessary.

The Master Plan EIR concluded that with adherence to these requirements, the temporary elevation of ambient sound levels associated with construction activities under the Campus Master Plan would be less than significant on page 13-4 (Humboldt State University 2004).

The project would involve the construction and operation of an academic facility within the central portion of campus. The nearest sensitive receptors to the project site are located approximately 350 feet to the west at College Creek. As noted on page 13-3 of the Master Plan EIR noise levels at a distance of 100 feet are anticipated to be 74 decibels (dBA) (Humboldt State University 2004). Based on the distance between the project site (and without accounting for potential attenuation afforded by intervening structures like Griffith Hall), construction activities may result in exterior noise levels ranging between 64 and 68 dBA, which would be consistent with the findings of the 2004 Master Plan EIR. At present, nighttime construction of the project is not anticipated, however, if it were to occur and taking into account exterior-to-interior attenuation of noise, construction noise levels would likely not exceed 45 dBA within College Creek residences, and construction noise would not be significant. Nonetheless, construction of the project would adhere to the adoptive elements of the Campus Master Plan, and no new significant construction noise impacts would occur.

The Master Plan EIR also evaluated the long-term impact associated with the increase in operational traffic noise on local roadways. Traffic noise levels on a given roadway are directly related to the volume of vehicles that travel along that roadway. In other words, an increase in traffic volume results in an increase in traffic noise. The Master Plan EIR states that the increase in traffic on local roadways associated with the increase in campus enrollment, when conservatively overestimated, would increase noise levels by 2 A-weighted decibels, which would be barely perceptible. Therefore, the Master Plan EIR concluded that the long-term noise impact was less than significant on page 13-4 (Humboldt State University 2004). The project would involve the consolidation of previously envisioned uses (Buildings F and M) within a single structure and would not increase on-campus operations beyond that previously anticipated in the 2004 Master Plan EIR. As a result, the project would not result in an increase in daily vehicle trips or associated traffic noise compared to estimated levels from the Master Plan EIR. No new or more severe impacts with respect to noise would occur with project implementation. Therefore, the modified project would not result in more severe impacts than were identified in the programmatic analysis provided in the Master Plan EIR. No substantial change from the previous conclusions in the Master Plan EIR would occur.

2.14 POPULATION AND HOUSING

Potential population and housing impacts of the Campus Master Plan were analyzed in Chapter 14.0 of the Master Plan EIR. The Master Plan EIR found that out-of-area contractors and construction workers who are involved with construction on campus likely would reside in local hotels and motels during construction and would not affect housing availability and increase the need for additional housing in the area. The planning process for the Campus Master Plan identified the desire to increase the on-campus housing ratio as time progresses. The Campus Master Plan was designed to develop housing based on an escalating campus enrollment. Campus housing development

through acquisition would result in a higher density of housing than currently exists at the prospective acquisition locations. The acquisitions would occur over a timeframe that would result in little if any short-term displacement of even small numbers of residents. Therefore, the Master Plan EIR concluded that the Campus Master Plan's short-term impact on population and housing was less than significant (Humboldt State University 2004).

The modified project would result in the construction and operation of the new Engineering and Technology Building, the purpose of which was contemplated in the Campus Master Plan as Buildings F and M. Because the modified project would not constitute a new campus program or use type, it would not increase the potential for campus enrollment above that contemplated in the Campus Master Plan. With regard to the potential for temporary population increases during construction, the construction workforce of up to 20 on-site workers would be available within the County's current construction workforce of 2,700 people (EDD 2023) and would not require contracting with individuals outside of the immediate area. Because the modified project would not support an increase in campus enrollment above what was projected in the Campus Master Plan and Master Plan EIR, and would be developed using the local construction workforce, it would not result in an increase in the local population or necessitate development of new housing. Therefore, the modified project would not result in more severe impacts than were identified in the programmatic analysis provided in the Master Plan EIR. No substantial change from the previous conclusions in the Master Plan EIR would occur.

2.15 PUBLIC SERVICES

Potential impacts of the Campus Master Plan related to public services (fire protection service, police protection service, schools, parks) were analyzed in Chapter 15.0 of the Master Plan EIR. The increase in campus enrollment envisioned by the Campus Master Plan would increase demand on local public services, potentially requiring expanded staffing and facilities to maintain response times and service ratios. The Master Plan EIR describes Cal Poly Humboldt's Fire Safety Program, which funds fire protection upgrades on campus. The campus also has an arrangement to provide funding for fire services, and it is expected that funding would be available to allow the Arcata Fire Protection District to increase its staffing to address increased campus enrollment. Similarly, the increased enrollment would increase the number of necessary employees and support facilities at the campus police department. It is expected that campus police would be funded in accordance with CSU guidelines and practice; however, the availability of funds is subject to influence by state budget issues. In general, university students do not place a significant demand on primary school enrollment because most students are young, childless, single adults. Therefore, the considerable increase in Cal Poly Humboldt enrollment would not likely significantly increase the need for public education services. The Cal Poly Humboldt campus provides several acres of parks and recreation areas, playfields, communal areas, two gyms, an indoor swimming pool, bike and walking trails, and other recreational facilities. Together, they were considered adequate for the anticipated campus enrollment of 12,000 FTES. Therefore, implementing the Campus Master Plan was not expected to create a significant demand on local and regional parks. The Master Plan EIR concluded that the long-range planning presented by the Campus Master Plan, the normal practices included in campus development and cooperation with the City of Arcata, and the fact that the demand for public services would increase incrementally, along with campus enrollment, would result in a less-than-significant impact (Humboldt State University 2004).

As discussed above under Section 2.14, "Population and Housing," the modified project would not support an increase in campus enrollment beyond levels projected in the Campus Master Plan and would be developed using the local construction workforce. The project site is located within the Campus Events Field, which is intended for use as open space, communal space, and event space. While the modified project would occupy the entirety of the Campus Events Field, the project includes development of benches and walkways, which would function as communal areas. In addition, space, communal space, and event space would remain available on campus upon implementation of the modified project, including the Founders Hall courtyard, an Amphitheatre adjacent to Fern Lake, playfields, and forested areas. Therefore, conversion of the entire Campus Events Field, rather than a portion as previously proposed, would not substantially decrease communal areas, open space, and event space within the campus as a whole. Thus, there would not be a substantial increase in demand for public services beyond that contemplated in the Campus Master Plan and Master Plan EIR. Therefore, the modified project would not result in

more severe impacts than were identified in the programmatic analysis provided in the Master Plan EIR. No substantial change from the previous conclusions in the Master Plan EIR would occur.

2.16 RECREATION

Potential impacts of the Campus Master Plan related to recreation were analyzed in Chapter 16.0 of the Master Plan EIR. The Master Plan EIR found that interruptions in access to recreational facilities during renovations on campus would be temporary and would be sufficiently addressed by providing alternatives, such as an alternative route when construction of the proposed Access Road would require trail closures. It also found that the additional demand for recreational resources created by the increase in campus enrollment would be met by existing campus facilities, as well as additional indoor and outdoor athletic and recreational facilities elsewhere on campus developed under the Campus Master Plan. Implementation of the Campus Master Plan was not expected to increase the use of neighborhood or regional parks or other recreational facilities in the project area, require the construction or expansion of recreational facilities that might have an adverse effect on the environment, or otherwise adversely affect existing recreational opportunities. Thus, the Master Plan EIR concluded that the impact on recreational resources was less than significant (Humboldt State University 2004).

While the Campus Events Field may be considered a recreation resource during development of the Campus Master Plan, it has since been used to support temporary buildings and as laydown for other campus projects. As described above under Section 2.15, "Public Services," the Campus Events Field is intended for use as open space, communal space, and event space.

The modified project involves development of the Engineering and Technology Building, which would cover the entirety of the existing Campus Events Field. As described above under Section 2.15, "Public Services," while the modified project would occupy the entirety of the Campus Events Field, the project includes development of benches and walkways, which would function as communal areas. In addition, space, communal space, and event space would remain available on campus upon implementation of the modified project, including the Founders Hall courtyard, an Amphitheatre adjacent to Fern Lake, playfields, and forested areas. Other areas off campus, such as the Arcata Community Forest would also remain available for use by staff and students upon implementation of the modified project. Therefore, conversion of the entire Campus Events Field, rather than a portion as previously proposed, would not substantially decrease communal areas, open space, and event space within the campus as a whole. However, the design of the modified project would incorporate walkways and benches, which may present some beneficial effects on recreation resources within the campus. As discussed above under Section 2.14, "Population and Housing," the modified project would not support an increase in campus enrollment beyond levels indicated in the Campus Master Plan and would not permanently or substantially affect nearby population levels. Thus, there would not be a substantial increase in demand for recreation resources. Therefore, the modified project would not result in more severe impacts than were identified in the programmatic analysis provided in the Master Plan EIR. No substantial change from the previous conclusions in the Master Plan EIR would occur.

2.17 TRANSPORTATION

The Master Plan EIR analyzed the potential for new development under the Campus Master Plan to affect traffic, circulation, and parking in Chapter 17.0, "Transportation." Construction traffic associated with various projects of the Campus Master Plan could substantially affect normal vehicular, pedestrian, and bicycle traffic circulation if it is not properly controlled. This impact would occur largely from disruptions to the flow of traffic by the movement of equipment, materials, and personnel into and out of construction sites. Without adequate controls, construction traffic could result in unnecessary congestion, impairment of access, and hazards to vehicles, bicycles, and pedestrians. To address these disruptions and hazards, the Campus Master Plan includes the following mitigative element (Humboldt State University 2004):

The construction contractor will be required to submit a traffic control plan to the University for approval.

The approved plan must require that the contractor follow appropriate traffic safety guidelines, such as the

Caltrans "Manual of Traffic Safety Controls for Construction and Maintenance Work Zones," and that work be conducted such that:

1. Effects on local circulation, parking, and hazards are minimized,
2. Emergency vehicles can pass through the construction zone at all times, and
3. Clearly marked and signed indicators of pedestrian, bicycle, and vehicle traffic areas to be closed or restricted during construction are provided and that affected traffic is directed to alternate routes where appropriate.

The Master Plan EIR concluded on page 17-4 that traffic-related impacts related to disruptions and hazards would be less than significant with implementation of the above-listed traffic-related mitigative elements (Humboldt State University 2004). The Master Plan EIR indicated that construction traffic control plan, described above, would relieve congestion, impairment of access, and hazards to vehicles, bicycles, and pedestrian during construction and operation.

The Master Plan EIR also examined the impact of the Campus Master Plan on pedestrian safety, concluding that the impact was less than significant (Humboldt State University 2004).

The modified project would include the installation of pathways for walking and bicycle parking, consistent with Campus Design Guidelines. Thus, there would not be conflicts with programs, plans, or policies addressing transit, roadway, bicycle, and pedestrian facilities. In addition, to maintain adequate roadway widths for emergency vehicle access, the fire lane on the northern edge of the project site would be widened from 12 feet to 20 feet, consistent with current Local Fire Authority and the California Fire Code regulations. These modifications would ensure that adequate emergency access is available from the site and that roadway design would not present a hazardous condition.

SB 743 and related 2018 updates to the State CEQA Guidelines in Section 15064.3 specify that VMT, the amount and distance of automobile travel due to a project, is the most appropriate measure of transportation impacts. The CEQA Guidelines changes also indicate that a project's effect on automobile delay shall not constitute a significant environmental impact, except possibly when analyzing a transportation project (OPR 2018). The modified project includes development of the Engineering and Technology Building, which would consist of the functional uses of two out of three proposed laboratory buildings in the Campus Master Plan; thus, there would not be new campus development types proposed as part of the modified project. As discussed above under Section 2.14, the modified program would not result in an increase to campus population compared to that projected in the Master Plan EIR. Therefore, the modified project would not result in more severe impacts than were identified in the programmatic analysis provided in the Master Plan EIR. No substantial change from the previous conclusions in the Master Plan EIR would occur.

2.18 TRIBAL CULTURAL RESOURCES

AB 52 (Chapter 532, Statutes of 2014) established a formal consultation process for California Native American tribes as part of CEQA and equates significant impacts on tribal cultural resources with significant environmental impacts (CEQA Section 21084.2). AB 52 consultation requirements went into effect on July 1, 2015, for all projects that had not already published a Notice of Intent to Adopt a Negative Declaration or Mitigated Negative Declaration or published a Notice of Preparation of an Environmental Impact Report prior to that date (Section 11[c]). Specifically, AB 52 requires that "prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report for a project, the lead agency shall begin consultation" (21808.3.1[a]), and that "the lead agency may certify an environmental impact report or adopt a mitigated negative declaration for a project with a significant impact on an identified tribal cultural resource only if" consultation is formally concluded (21082.3[d]).

However, in the case of the modified project, the lead agency has prepared this addendum to the previously certified Master Plan EIR, in accordance with Section 15164 of the State CEQA Guidelines. An addendum was determined to be the most appropriate document because none of the conditions described in Section 15162, calling for preparation of

a subsequent EIR, have occurred. The addendum addresses minor technical changes or additions and confirms that the project is consistent with were previously analyzed in the Master Plan EIR. As such, the addendum will not result in an additional certification; therefore, the AB 52 procedures specified in CEQA Sections 21080.3.1(d) and 21080.3.2 do not apply, and no tribal consultation under AB 52 is required. Therefore, the modified project would not result in more severe impacts than were identified in the programmatic analysis provided in the Master Plan EIR. No substantial change from the previous conclusions in the Master Plan EIR would occur.

2.19 UTILITIES AND SERVICE SYSTEMS

2.19.1 Water Demand and Supply

The Master Plan EIR evaluated water supply and demand and concluded that existing and projected water supplies are sufficient to serve campus development up to 8,500 FTES (as assumed in the Arcata General Plan) but may not be sufficient to serve the 12,000 FTES ultimately anticipated under the Campus Master Plan. The Master Plan EIR concludes that there would not be a water supply impact for many years, if at all, and states that an evaluation of future water demand, which must consider possible water system improvements over the lengthy implementation phase of the Campus Master Plan, would be speculative (Humboldt State University 2004).

As discussed above, the modified project proposes development of the Engineering and Technology Building, which would consolidate two out of the three laboratories proposed for the campus as part of the Campus Master Plan. The modified project would not result in an increase in the local population or an increase in campus enrollment above what was projected in the Campus Master Plan and Master Plan EIR. Additionally, the modified project would connect to the existing campus infrastructure, receiving domestic, industrial, and potable water supplies from existing pipelines. As mentioned in the Master Plan EIR, any new connections to Arcata's water or sewer main would require coordination with Humboldt Bay Municipal Water District (HBMWD) to ensure that the connections are approved, properly implemented, and interruption of service is avoided or minimized to the greatest extent practicable. The Engineering and Technology Building would also be LEED certified, which would require the building to have water conservation measures. Therefore, the modified project is consistent with the amount of growth and utility demand analyzed in the Master Plan EIR, and with compliance of LEED certification water conservation measures, the modified project would continue to be sufficiently supported by the City. Impacts would remain less than significant for water demand and supply and no new or more severe impacts would occur with project implementation. Therefore, the modified project would not result in more severe impacts than were identified in the programmatic analysis provided in the Master Plan EIR. No substantial change from the previous conclusions in the Master Plan EIR would occur.

2.19.2 Wastewater

The Master Plan EIR evaluated wastewater generation and wastewater treatment capacity. The Master Plan EIR concluded that the increase in wastewater flows from Cal Poly Humboldt would not exceed the level anticipated in the General Plan and that adequate capacity exists at the City's wastewater treatment facility to serve buildout of the Campus Master Plan. It also states that Cal Poly Humboldt will keep the City informed regarding projected wastewater flows as time passes. The Master Plan EIR concluded that the impact related to wastewater was less than significant (Humboldt State University 2004).

The Engineering and Technology Building would connect to existing campus infrastructure and would have sanitary sewer lines connected from the 8-inch pipeline located in B Street to the project site. As discussed above, the modified project proposes development of the Engineering and Technology Building, which would comprise the function purpose of two out of the three laboratories proposed for the campus in the Campus Master Plan, and would not result in an increase in the local population or an increase in campus enrollment above what was projected in the Campus Master Plan and Master Plan EIR. Therefore, the modified project would be consistent with the amount of growth and utility demand analyzed within the Master Plan EIR. Impacts would remain less than significant for

wastewater and no new or more severe impacts would occur with project implementation. Therefore, the modified project would not result in more severe impacts than were identified in the programmatic analysis provided in the Master Plan EIR. No substantial change from the previous conclusions in the Master Plan EIR would occur.

2.19.3 Stormwater Drainage Facilities

Stormwater drainage facilities are discussed in Chapter 10.0 of the Master Plan EIR. As described in Section 2.10.3, "Drainage, Erosion, and Flooding," above, the Master Plan EIR concluded that the impact related to stormwater drainage facilities was less than significant (Humboldt State University 2004).

The Engineering and Technology Building would connect to existing campus infrastructure, with the storm drain system of the proposed building collecting drainage into pipes and fed into the overall campus system at two connection points: one along the edge of B Street and the other along the northern edge of the project site. As discussed above, the modified project proposes development of the Engineering and Technology Building, which would comprise the function purpose of two out of the three laboratories proposed for the campus in the Campus Master Plan, and would not result in an increase in the local population or an increase in campus enrollment above what was projected in the Campus Master Plan and Master Plan EIR. Therefore, the modified project would be consistent with the amount of growth and utility demand analyzed within the Master Plan EIR. Impacts would remain less than significant for stormwater drainage facilities and no new or more severe impacts would occur with project implementation. Therefore, the modified project would not result in more severe impacts than were identified in the programmatic analysis provided in the Master Plan EIR. No substantial change from the previous conclusions in the Master Plan EIR would occur.

2.19.4 Solid Waste

The Master Plan EIR concluded that the additional quantity of waste generated by the increase in FTES on campus would be small in relation to the Eureka Transfer Station capacity and that the additional waste was not expected to create a significant impact on the Dry Creek Landfill, which is contractually bound to accept solid waste generated in Humboldt County and which is not restricted to a maximum capacity. The Master Plan EIR concluded that the impact related to solid waste was less than significant (Humboldt State University 2004).

As discussed above, the modified project proposed development of the Engineering and Technology Building, which would comprise the function purpose of two out of the three laboratories proposed for the campus in the Campus Master Plan, and would not result in an increase in the local population or an increase in campus enrollment above what was projected in the Campus Master Plan and Master Plan EIR. Arcata Garbage would continue to serve Cal Poly Humboldt and the modified project by collecting solid waste and transporting waste to the Humboldt Waste Management Authority's Eureka transfer station. Any accumulation of hazardous chemical wastes associated with laboratory operations would be disposed of according to authorized waste handling procedures implemented by EHS. Demolition debris associated with the demolition of the existing graveled areas of the modified project would be brought to permitted disposal sites or to recycling and reuse centers, as analyzed within the Master Plan EIR. Therefore, the modified project would be consistent with the amount of growth and utility demand analyzed in the Master Plan EIR. Impacts would remain less than significant for solid waste and no new or more severe impacts would occur with project implementation. Therefore, the modified project would not result in more severe impacts than were identified in the programmatic analysis provided in the Master Plan EIR. No substantial change from the previous conclusions in the Master Plan EIR would occur.

2.20 WILDFIRE

Since the certification of the Master Plan EIR, the State CEQA Guidelines were updated to include a new section on wildfire. As described in Chapter 9.0, "Hazards and Hazardous Materials," of the Master Plan EIR, the campus is located adjacent to a redwood and fir forest, which has a moderate potential for wildland fire. Because the Campus Master Plan does not propose structures in the forest designed for occupancy, the Master Plan EIR concluded that wildfire impacts would be less than significant (Humboldt State University 2004).

Since certification of the Master Plan EIR, the California Department of Forestry and Fire Protection prepared fire hazard severity zone maps in 2007. While the modified project and campus are not located within an SRA or on land classified as a very high FHSZ, the nearest point of land within an SRA is approximately 0.8-mile to the east where land is designated as high and moderate severity zones (CalFire 2007). CalFire is currently in the process of updating the FHSZ maps. Under the proposed updated FHSZ maps, the Cal Poly Humboldt campus would remain outside of an SRA or land classified as a very high FHSZ and would be approximately 0.8 miles from a moderate FHSZ (CalFire 2023).

As discussed above in Section 2.9.4, "Wildfire Risk," the project site and surrounding land uses are not defined/designated as a High Fire Hazard Severity Zone and are not located within a State Responsibility Area (CAL FIRE 2022). Due to the site's location within the existing developed campus, the risk of wildfire is low. Therefore, the modified project would not result in more severe impacts than were identified in the programmatic analysis provided in the Master Plan EIR. No substantial change from the previous conclusions in the Master Plan EIR would occur.

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3.2 LIST OF PREPARERS

California State Polytechnic University, Humboldt (Lead Agency)

Michael Fisher Associate Vice President for Facilities Management
 Kassidy Banducci, LEED AP Director, Planning, Design & Construction
 Deirdre Clem Project Manager, Planning, Design & Construction

California State University, Office of the Chancellor

Anne Collins-Doehne Director, Land Use Planning & Environmental Review,
 Capital Planning, Design & Construction

Ascent Environmental (CEQA Compliance)

Chris Mundhenk Principal
 Marianne Lowenthal Project Manager
 Jacklyn Bottomley Environmental Planner
 Alta Cunningham Senior Cultural Resources Specialist
 Roberto Mora Cultural Resources Specialist
 Lisa Merry GIS Specialist
 Gayiety Lane Publishing Specialist
 Riley Smith Publishing Specialist

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