Mesa College Comprehensive Master Plan

SCH No. 2025120225

Draft Program Environmental Impact Report Appendices

September 2026 | 01737.00004.003

Lead Agency:

San Diego Community College District
1450 Frazee Road, Suite 500
San Diego, CA 92108

Prepared by:

HELIX Environmental Planning, Inc.
7578 El Cajon Boulevard
La Mesa, CA 91942

Appendix A

Notice of Preparation

San Diego Community College District

City College · Mesa College · Miramar College · College of Continuing Education

Operations, Enterprise Services, and Facilities
Executive Operations Officer
District Architect
Construction Management
Real Property
619-388-6546

December 5, 2025

Subject: Notice of Preparation of a Draft Program Environmental Impact Report

To: State Clearinghouse, Responsible and Trustee Agencies, Interested Individuals and Organizations

Lead Agency: San Diego Community College District

Project Title: San Diego Mesa College Comprehensive Master Plan

NOTICE IS HEREBY GIVEN that the San Diego Community College District (District) will prepare a Program Environmental Impact Report (PEIR) for the San Diego Mesa College (Mesa College or campus) Comprehensive Master Plan (CMP or project). The purpose of this notice is to (1) serve as a Notice of Preparation (NOP) of the PEIR pursuant to the California Environmental Quality Act (CEQA) Guidelines Section 15082; and (2) advise and solicit comments and suggestions regarding the scope and content of the PEIR to be prepared for the project.

NOTICE OF PREPARATION: The District, as the lead agency under CEQA, is soliciting public and agency input on the scope and content of the PEIR to be prepared for the project. The District requests that responsible and trustee agencies respond in a manner consistent with CEQA Guidelines Section 15082(b). Pursuant to California Public Resources Code Section 21080.4, responsible and trustee agencies must submit any comments in response to this notice no later than 30 days after receipt. The public review period will start on Friday, December 5, 2025, and will close on Monday, January 5, 2026 at 5:00 p.m. A copy of the NOP can be viewed electronically on the District's website under the heading "Environmental Notices" at: https://www.sdccd.edu/departments/operations/construction/index.aspx, as well as at the District Planning, Design, and Construction office at 1450 Frazee Road, Suite 500, San Diego, California 92108.

WRITTEN COMMENTS: We ask that any person wishing to comment on the NOP provide written comments by the end of the public review period at **5:00 p.m., Monday January 5, 2026**. Electronic comments are preferred and can be sent via email to **SDCCDMeasureHH@sdccd.edu** with **"NOP Comments for Mesa College CMP"** in the subject line. Comments may also be submitted by mail to the following address, provided they are postmarked no later than the close of the public review period:

San Diego Community College District
1450 Frazee Road, Suite 500
San Diego, California 92108

PROJECT LOCATION: The project area or CMP area refers collectively to all improvement areas across the approximately 106-acre Mesa College campus located in the Clairemont Mesa community planning area of the City of San Diego, San Diego County, California. The campus currently consists of approximately 50 permanent buildings totaling approximately 1.3 million gross square feet. It is generally surrounded by a mix of single-family and multi-family residential uses and on two sides by the Tecolote Canyon nature preserve. The campus has two entry points: the main entry on the east, accessible via Mesa College Drive, and the secondary entry on the west, at the intersection of Marlesta Drive and Chasewood Way. Figure 1, *Regional Location*, shows the location of the campus within San Diego County. Figure 2, *Campus Boundary*, provides an aerial photograph of the campus and shows its boundaries.

PROJECT BACKGROUND: San Diego Mesa College is a comprehensive community college administered by the District, offering more than 195 associate degree and certificate programs across its seven schools. The CMP is the combined educational and facilities master plan for Mesa College developed with input from various campus and community groups. Based on its guiding goals and principles as well as anticipated student growth, the CMP describes a series of site improvement and facility projects for the campus. The designs and concepts presented in the CMP are conceptual and intended to serve as a framework for the future detailed design of campus improvements as funding becomes available. On November 5, 2024, San Diego voters approved Measure HH, authorizing the District to issue $3.5 billion in bonds for District facility upgrades. Based on the campus facility needs and potential improvements described in the master plan for each District campus, certain projects have been prioritized to move forward with initial funding from Measure HH bond sales.

PROPOSED PROJECT: Based on current campus challenges and anticipated growth, the CMP recommends a series of physical improvements across the Mesa College campus. The projects described below include approximately 625,000 gross square feet of new campus building space. The projects would generally demolish existing aging facilities on the campus and replace them with more modern facilities that accommodate existing programming. As the CMP is conceptual in nature, the exact architectural programming and design of each project would be developed during project implementation in coordination with user groups. Specific projects identified for development under the CMP include:

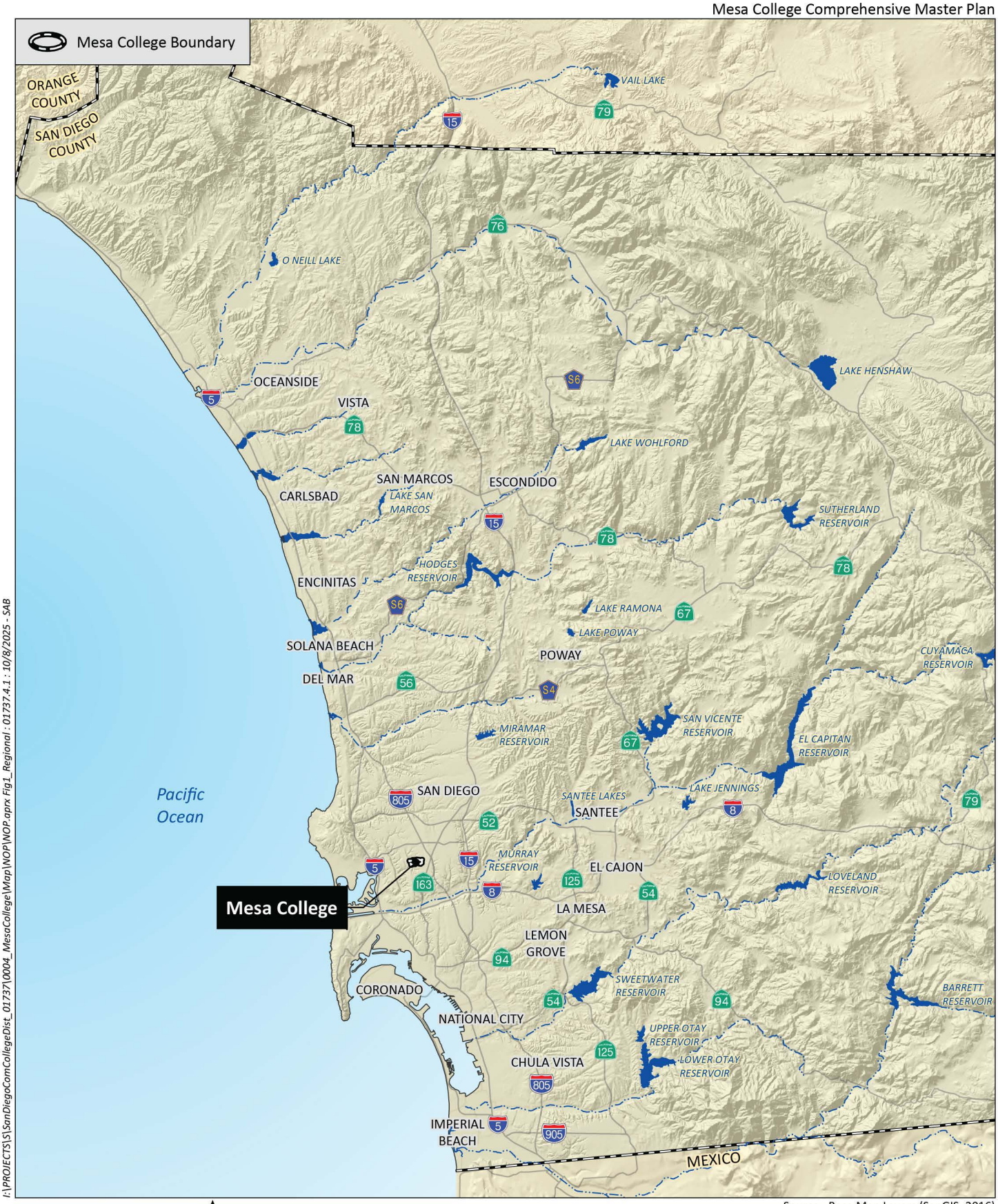
- Athletics Complex (replace and reconfigure instructional spaces, gym, pool complex, volleyball courts, softball field, baseball field, javelin and hammer throw areas, field house, and practice fields)
- Performing Arts and Administration Center and Parking Structure
- English/English Language Acquisition (ELAC)/Student Resource Center replacement building
- Conference Center
- On-Campus Housing
- High School relocation
- Facilities Services relocation to dedicated area with loading and storage space
- New Welcome Center near eastern entrance
- Child Development Center relocation and expansion
- New Community Clinic
- West Entrance reconfiguration (Genesee Avenue and Marlesta Drive)

Campus-wide improvements related to utility infrastructure and circulation are also part of the CMP and could be implemented in coordination with the projects listed above or undertaken as campus-wide efforts. Interior renovations and minor construction could also occur throughout existing campus buildings. The Athletics Complex and Performing Arts and Administration Center and Parking Structure projects are anticipated to be designed and constructed in the near term. No specific timing or phasing is identified for the remaining projects or campus-wide improvements.

POTENTIAL ENVIRONMENTAL EFFECTS: In compliance with CEQA Guidelines Sections 15060(d) and 15082, the District will not be preparing an initial study and will begin work directly on the Draft PEIR. CEQA Guidelines Section 15168 states that a PEIR may be prepared on a series of actions that can be characterized as one large project and are related either (1) geographically; (2) as logical parts in the chain of contemplated actions; (3) in connection with issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program; or (4) as individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects that can be mitigated in similar ways. The PEIR provides an opportunity to consider together the impacts of campuswide development under the CMP and will be prepared in accordance with the requirements of the CEQA Statutes and Guidelines, as amended. Pursuant to CEQA Guidelines Section 15146, the degree of specificity in the PEIR will correspond to the degree of specificity involved in the CMP and known project designs. The PEIR will focus on the environmental effects that can be expected to occur from implementation of the CMP, including defined near-term projects, but will not be as detailed regarding the long-term development or construction projects that may follow. However, the PEIR is intended to streamline environmental review for future projects, including updates to the CMP that may be necessary to ensure consistency with the scope and purpose of the CMP.

The District's preliminary review indicates that the project would not result in potentially significant impacts to the environmental effects of: Agriculture and Forestry Resources and Mineral Resources. The District will focus the PEIR on potentially significant effects of the project while briefly explaining the reasons that other effects will not be potentially significant. The District anticipates that the project could result in potentially significant impacts for the following impact areas: Aesthetics, Air Quality, Biological Resources, Cultural Resources, Energy, Geology and Soils, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Noise, Population and Housing, Public Services, Recreation, Transportation, Tribal Cultural Resources, Utilities and Service Systems, and Wildfire.

The Draft PEIR will address the short- and long-term direct, indirect, and cumulative effects of the project on the environment. Where feasible, mitigation measures will be proposed for impacts that are determined to be potentially significant. In addition, in accordance with CEQA Guidelines Section 15126, the PEIR will describe a range of reasonable alternatives to the project that would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project.



I:\PROJECTS\S\SanDiegoComCollegeDist_01737\0004_MesaCollege\Map\NOP\NOP.aprx Fig1_Regional : 01737.4.1 : 10/8/2025 - SAB

0 8 Miles

Source: Base Map Layers (SanGIS, 2016)

HELIX Environmental Planning

Regional Location

Figure 1



I:\PROJECTS\S\SanDiegoComCollegeDist_01737\0004_MesaCollege\Map\NOP\NOP.aprx Fig2_Aerial : 01737.4.1 : 10/8/2025 - SAB

0 700 Feet

Source: Aerial (Maxar 2025)

HELIX Environmental Planning

Campus Boundary

Figure 2

NATIVE AMERICAN HERITAGE COMMISSION

CHAIRPERSON
Reginald Pagaling
Chumash

VICE-CHAIRPERSON
Buffy McQuillen
Yokayo Pomo, Yuki, Nomlaki

SECRETARY
Isaac Bojorquez
Ohlone-Costanoan

PARLIAMENTARIAN
Wayne Nelson
Luiseño

COMMISSIONER
Sara Dutschke
Miwok

COMMISSIONER
Stanley Rodriguez
Kumeyaay

COMMISSIONER
Bennae Calac
Pauma-Yuima Band of Luiseño Indians

COMMISSIONER
Vacant

COMMISSIONER
Vacant

EXECUTIVE SECRETARY
Andrew Alejandre
Paskenta Band of Nomlaki Indians

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov

December 8, 2025

Sam Garcia-Gutierrez
San Diego Community College District
1450 Frazee Road
Suite 500
San Diego CA 92108

Re: 2025120225 San Diego Mesa College Comprehensive Master Plan Project, San Diego County

Dear Mr. Garcia-Gutierrez:

The Native American Heritage Commission (NAHC) has received the Notice of Preparation (NOP), Draft Environmental Impact Report (DEIR) or Early Consultation for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code §21000 et seq.), specifically Public Resources Code §21084.1, states that a project that may cause a substantial adverse change in the significance of a historical resource, is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.1; Cal. Code Regs., tit.14, §15064.5 (b) (CEQA Guidelines §15064.5 (b)). If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) shall be prepared. (Pub. Resources Code §21080 (d); Cal. Code Regs., tit. 14, § 5064 subd.(a)(1) (CEQA Guidelines §15064 (a)(1)). In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources within the area of potential effect (APE).

CEQA was amended significantly in 2014. Assembly Bill 52 (Gatto, Chapter 532, Statutes of 2014) (AB 52) amended CEQA to create a separate category of cultural resources, "tribal cultural resources" (Pub. Resources Code §21074) and provides that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. (Pub. Resources Code §21084.2). Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. (Pub. Resources Code §21084.3 (a)). **AB 52 applies to any project for which a notice of preparation, a notice of negative declaration, or a mitigated negative declaration is filed on or after July 1, 2015.** If your project involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) (SB 18). **Both SB 18 and AB 52 have tribal consultation requirements**. If your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966 (154 U.S.C. 300101, 36 C.F.R. §800 et seq.) may also apply.

The NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. Below is a brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments.

Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.

AB 52

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

1. Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project: Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a lead agency shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:

- **a.** A brief description of the project.
- **b.** The lead agency contact information.
- **c.** Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code §21080.3.1 (d)).
- **d.** A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code §21073).

2. Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report: A lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code §21080.3.1, subds. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or Environmental Impact Report. (Pub. Resources Code §21080.3.1(b)).

- **a.** For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code §65352.4 (SB 18). (Pub. Resources Code §21080.3.1 (b)).

3. Mandatory Topics of Consultation If Requested by a Tribe: The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:

- **a.** Alternatives to the project**.**
- **b.** Recommended mitigation measures**.**
- **c.** Significant effects**.** (Pub. Resources Code §21080.3.2 (a)).

4. Discretionary Topics of Consultation: The following topics are discretionary topics of consultation:

- **a.** Type of environmental review necessary.
- **b.** Significance of the tribal cultural resources.
- **c.** Significance of the project's impacts on tribal cultural resources.
- **d.** If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code §21080.3.2 (a)).

5. Confidentiality of Information Submitted by a Tribe During the Environmental Review Process: With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code §6254 (r) and §6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code §21082.3 (c)(1)).

6. Discussion of Impacts to Tribal Cultural Resources in the Environmental Document: If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:

- **a.** Whether the proposed project has a significant impact on an identified tribal cultural resource.
- **b.** Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code §21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code §21082.3 (b)).

7. Conclusion of Consultation: Consultation with a tribe shall be considered concluded when either of the following occurs:

a. The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or

b. A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code §21080.3.2 (b)).

8. Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document: Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code §21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code §21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code §21082.3 (a)).

9. Required Consideration of Feasible Mitigation: If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code §21084.3 (b). (Pub. Resources Code §21082.3 (e)).

10. Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:

a. Avoidance and preservation of the resources in place, including, but not limited to:

i. Planning and construction to avoid the resources and protect the cultural and natural context.

ii. Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.

b. Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:

i. Protecting the cultural character and integrity of the resource.

ii. Protecting the traditional use of the resource.

iii. Protecting the confidentiality of the resource.

c. Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.

d. Protecting the resource. (Pub. Resource Code §21084.3 (b)).

e. Please note that a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code §815.3 (c)).

f. Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code §5097.991).

11. Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource: An Environmental Impact Report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:

a. The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code §21080.3.1 and §21080.3.2 and concluded pursuant to Public Resources Code §21080.3.2.

b. The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.

c. The lead agency provided notice of the project to the tribe in compliance with Public Resources Code §21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code §21082.3 (d)).

The NAHC's PowerPoint presentation titled, "Tribal Consultation Under AB 52: Requirements and Best Practices" may be found online at: http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf

SB 18

SB 18 applies to local governments and requires local governments to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code §65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf.

Some of SB 18's provisions include:

1. Tribal Consultation: If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.** (Gov. Code §65352.3 (a)(2)).
2. No Statutory Time Limit on SB 18 Tribal Consultation. There is no statutory time limit on SB 18 tribal consultation.
3. Confidentiality: Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code §65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code §5097.9 and §5097.993 that are within the city's or county's jurisdiction. (Gov. Code §65352.3 (b)).
4. Conclusion of SB 18 Tribal Consultation: Consultation should be concluded at the point in which:
    a. The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
    b. Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: http://nahc.ca.gov/resources/forms/.

NAHC Recommendations for Cultural Resources Assessments

To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

1. Contact the appropriate regional California Historical Research Information System (CHRIS) Center (https://ohp.parks.ca.gov/?page_id=30331) for an archaeological records search. The records search will determine:
    a. If part or all of the APE has been previously surveyed for cultural resources.
    b. If any known cultural resources have already been recorded on or adjacent to the APE.
    c. If the probability is low, moderate, or high that cultural resources are located in the APE.
    d. If a survey is required to determine whether previously unrecorded cultural resources are present.

2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
    a. The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.

b. The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

3. Contact the NAHC for:

a. A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.

b. A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.

4. Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.

a. Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, §15064.5(f) (CEQA Guidelines §15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.

b. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.

c. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code §7050.5, Public Resources Code §5097.98, and Cal. Code Regs., tit. 14, §15064.5, subdivisions (d) and (e) (CEQA Guidelines §15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

If you have any questions or need additional information, please contact me at my email address: Andrew.Green@NAHC.ca.gov.

Sincerely,

Andrew Green

Andrew Green
Cultural Resources Analyst

cc: State Clearinghouse

California Department of Transportation

DISTRICT 11
4050 TAYLOR STREET, MS-240
SAN DIEGO, CA 92110
(619) 985-1587 | FAX (619) 688-4299 TTY 711
www.dot.ca.gov

December 30, 2025

11-SD-163
PM 6.503
San Diego Mesa College Comprehensive Master Plan
NOP/SCH#2025120225

Mr. Sam Garcia-Gutierrez
Facilities Contractor
San Diego Community College District
1450 Frazee Road, Suite 500
San Diego, CA 92108

Dear Mr. Garcia:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the Notice of Preparation of a Draft EIR (NOP) for the San Diego Mesa College Comprehensive Master Plan located near State Route 163 (SR-163). The mission of Caltrans is to provide a safe and reliable transportation network that serves all people and respects the environment. The Local Development Review (LDR) Program reviews land use projects and plans to ensure consistency with our mission and state planning priorities.

Safety is one of Caltrans' strategic goals. Caltrans strives to make the year 2050 the first year without a single death or serious injury on California's roads. We are striving for more equitable outcomes for the transportation network's diverse users. To achieve these ambitious goals, we will pursue meaningful collaboration with our partners. We encourage the implementation of new technologies, innovations, and best practices that will enhance the safety on the transportation network. These pursuits are both ambitious and urgent, and their accomplishment involves a focused departure from the status quo as we continue to institutionalize safety in all our work.

We look forward to working with the San Diego Community College District in areas where the San Diego Community College District and Caltrans have joint jurisdiction to improve the transportation network and connections between various modes of travel, with the goal of improving the experience of those who use the transportation system.

Caltrans has the following comments:

Traffic Impact Study

- If a Vehicle Miles of Travel (VMT) based Traffic Impact Study (TIS) and/or Local Mobility Analysis is completed, please provide a copy for this project. Please use the Governor's Office of Planning and Research Guidance to identify VMT related impacts.[1]

- The TIS may also need to identify the proposed project's near-term and long-term safety or operational issues, on or adjacent any existing or proposed State facilities.

- For the San Diego Mesa College Comprehensive Master Plan Notice of Preparation of a DEIR please reference the Caltrans "Local Development Review (LDR) Safety Review Practitioner's Guidance" https://dot.ca.gov/-/media/dot-media/programs/safety-programs/documents/202402-ldr-safety-review-practitioners-guidance-a11y.pdf to determine if the project meets both of the screening criteria. If both screening criteria are not met, then a safety review will be needed.

ISOAP

Mitigation measures for proposed intersection modifications are subject to the Caltrans Intersection Safety and Operational Assessment Policy (ISOAP). Alternative intersection design(s) will need to be considered in accordance with the ISOAP policy. Please refer to the policy for more information and requirements (https://dot.ca.gov/programs/traffic-operations/isoap).

Vehicle Miles Traveled (VMT)

We encourage the San Diego Community College District to utilize strategies that will help the City of San Diego achieve conformance with State GHG emission and VMT reduction goals. Potential measures to reduce VMT include, but are not limited to:

- Improve or increase access to transit.
- Increase access to common goods and services, such as groceries, schools, and daycare.
- Incorporate affordable housing into the project.
- Establish or expand the neighborhood electric vehicle network.
- Orient the project toward transit, bicycle, and pedestrian facilities.

[1] California Governor's Office of Planning and Research (OPR) 2018. "Technical Advisory on Evaluating Transportation Impacts in CEQA." https://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf

- Enhance pedestrian and bicycle networks or improve existing transit services.
- Implement traffic calming measures and strategies.
- Provide on-site bicycle parking.
- Limit or reduce parking supply.
- Implement or provide access to a commute reduction program.
- Offer car-sharing, bike sharing, and ride-sharing programs.
- Providing transit passes.
- Shifting single occupancy vehicle trips to carpooling or vanpooling, for example providing ride-matching services.
- Providing telework options.
- Providing incentives or subsidies that encourage the use of alternative transportation modes other than single-occupancy vehicle.
- Providing on-site amenities at places of work, such as priority parking for carpools and vanpools, secure bike parking, and showers and locker rooms.
- Designating employee transportation coordinators at employment sites.
- Providing a guaranteed ride home service to users of non-auto travel modes.

Complete Streets and Mobility Network
Caltrans views all transportation improvements as opportunities to improve safety, access and mobility for all travelers in California and recognizes bicycle, pedestrian and transit modes as integral elements of the transportation network. Caltrans supports improved transit accommodation through the provision of Park and Ride facilities, improved bicycle and pedestrian access and safety improvements, signal prioritization for transit, bus on shoulders, ramp improvements, or other enhancements that promote a complete and integrated transportation network. Early coordination with Caltrans, in locations that may affect both Caltrans and the San Diego Community College District, is encouraged.

To reduce greenhouse gas emissions and achieve California's Climate Change target, Caltrans is implementing Complete Streets and Climate Change policies into State Highway Operations and Protection Program (SHOPP) projects to meet multi-modal mobility needs. Caltrans looks forward to working with the San Diego Community College District to evaluate potential Complete Streets projects.

Bicycle, pedestrian, and public transit access during construction is important. Mitigation to maintain bicycle, pedestrian, and public transit access during construction is in accordance with Caltrans' goals and policies.

Land Use and Smart Growth
Caltrans recognizes there is a strong link between transportation and land use. Development can have a significant impact on traffic and congestion on State transportation facilities. In particular, the pattern of land use can affect both local vehicle miles traveled and the number of trips. Caltrans supports collaboration with local agencies to work towards a safe, functional, interconnected, multi-modal transportation network integrated through applicable "smart growth" type land use planning and policies.

The San Diego Community College District should continue to coordinate with Caltrans to implement necessary improvements at intersections and interchanges where the agencies have joint jurisdiction.

Hauling
Caltrans has discretionary authority with respect to highways under its jurisdiction and may, upon application and if good cause appears, issue a special permit to operate or move a vehicle or combination of vehicles or special mobile equipment of a size or weight of vehicle or load exceeding the maximum limitations specified in the California Vehicle Code. The Caltrans Transportation Permits Issuance Branch is responsible for the issuance of these special transportation permits for oversize/overweight vehicles on the State Highway network. Additional information is provided online at: https://dot.ca.gov/programs/traffic-operations/transportation-permits.

Environmental
Caltrans welcomes the opportunity to be a Responsible Agency under the California Environmental Quality Act (CEQA), as we have some discretionary authority of a portion of the project that is in Caltrans' Right of Way (R/W) through the form of an encroachment permit process. We look forward to the coordination of our efforts to ensure that Caltrans can adopt the alternative and/or mitigation measure for our R/W. We would appreciate meeting with you to discuss the elements of the Environmental Document that Caltrans will use for our subsequent environmental compliance.

An encroachment permit will be required for any work within the Caltrans' R/W prior to construction. As part of the encroachment permit process, the applicant must provide approved final environmental documents for this project, corresponding technical studies, and necessary regulatory and resource agency permits. Specifically, CEQA determination or exemption. The supporting documents must address all environmental impacts within the Caltrans' R/W and address any impacts from avoidance and/or mitigation measures.

We recommend that this project specifically identifies and assesses potential impacts caused by the project or impacts from mitigation efforts that occur within Caltrans' R/W that includes impacts to the natural environment, infrastructure including but not limited to highways, roadways, structures, intelligent transportation systems elements, on-ramps and off-ramps, and appurtenant features including but not limited to fencing, lighting, signage, drainage, guardrail, slopes and landscaping. Caltrans is interested in any additional mitigation measures identified for the project's draft Environmental Document.

Mitigation
Caltrans endeavors that any direct and cumulative impacts to the State Highway network be eliminated or reduced to a level of insignificance pursuant to the CEQA and National Environmental Policy Act (NEPA) standards.

Mitigation measures to State facilities should be included in TIS/TIA. Mitigation identified in the traffic study, subsequent environmental documents, and mitigation monitoring reports, should be coordinated with Caltrans to identify and implement the appropriate mitigation. This includes the actual implementation and collection of any "fair share" monies, as well as the appropriate timing of the mitigation. Mitigation improvements should be compatible with Caltrans concepts.

Right-of-Way
Per Business and Profession Code 8771, perpetuation of survey monuments by a licensed land surveyor is required, if they are being destroyed by any construction.

Any work performed within Caltrans' R/W will require discretionary review and approval by Caltrans and an encroachment permit will be required for any work within the Caltrans' R/W prior to construction.

Additional information regarding encroachment permits may be obtained by visiting the website at https://dot.ca.gov/programs/traffic-operations/ep. Projects with the following:

- require a Caltrans Encroachment Permit
- have completed the Caltrans Local Development Review (LDR) process
- have an approved environmental document

need to have documents submitted for Quality Management Assessment Process (QMAP) process via email to D11.QMAP.Permits@dot.ca.gov. Early coordination with Caltrans is strongly advised for all encroachment permits.

If you have any questions or concerns, please contact Charlie Lecourtois, LDR Coordinator, at (619) 985-4766 or by e-mail sent to charlie.lecourtois@dot.ca.gov.

Sincerely,

Kimberly D. Dodson

KIMBERLY D. DODSON, GISP
Branch Chief
Local Development Review

Appendix B

Air Quality and Greenhouse Gas Emissions Technical Report

Mesa College Comprehensive Master Plan

Air Quality and Greenhouse Gas Emissions Technical Report

August 2026 | 01737.00004.003

Prepared for:

San Diego Community College District
1450 Frazee Road, Suite 500
San Diego, CA 92108

Prepared by:

HELIX Environmental Planning, Inc.
7578 El Cajon Boulevard
La Mesa, CA 91942

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TABLE OF CONTENTS

Section **Page**

EXECUTIVE SUMMARY ES-1

1.0 INTRODUCTION 1

1.1 Project Location 1
1.2 Project Description 1
1.2.1 Near-Term Projects 2
1.3 Construction Best Management Practices 3

2.0 EXISTING CONDITIONS 4

2.1 Surrounding Land Uses 4
2.2 Climate and Meteorology 4
2.3 Sensitive Receptors 5
2.4 Existing Regional Air Quality 5
2.4.1 Attainment Designations 5
2.4.2 Monitored Air Quality 5
2.5 Existing On-Campus Air Quality 6
2.6 Climate Change Overview 7
2.7 Greenhouse Gases of Primary Concern 8
2.7.1 Global Warming Potential 9
2.8 Greenhouse Gas Inventories 10
2.8.1 Worldwide and National Greenhouse Gas Inventory 10
2.8.2 State Greenhouse Gas Inventory 10
2.8.3 Existing Campus Greenhouse Gas Emissions 11

3.0 REGULATORY SETTING 11

3.1 Air Quality 11
3.1.1 Air Pollutants of Concern 12
3.1.2 Federal 14
3.1.3 State 16
3.1.4 Regional 17
3.1.5 District 19
3.1.6 Local (Non-Regulatory) 20
3.2 Greenhouse Gases 20
3.2.1 Federal 20
3.2.2 State 21
3.2.3 Regional 30
3.2.4 District 30
3.2.5 Local (Non-Regulatory) 32

4.0 METHODOLOGY AND SIGNIFICANCE CRITERIA 33

4.1 Methodology 33
4.1.1 Construction Emissions 33

TABLE OF CONTENTS (cont.)

4.1.2 Operational Emissions 35
4.2 Guidelines for the Determination of Significance 37
4.2.1 Air Quality 37
4.2.2 Greenhouse Gases 38

5.0 AIR QUALITY IMPACT ANALYSIS 39

5.1 Issue 1: Conflict with Air Quality Plans 39
5.1.1 Impacts 39
5.1.2 Significance of Impacts 40
5.2 Issue 2: Cumulatively Considerable Net Increase of Nonattainment Criteria Pollutants 41
5.2.1 Impacts 41
5.2.2 Significance of Impacts 44
5.3 Issue 3: Impacts to Sensitive Receptors 44
5.3.1 Impacts 44
5.3.2 Significance of Impacts 46
5.4 Issue 4: Other Emissions (Such as Those Leading to Odors) 47
5.4.1 Impacts 47
5.4.2 Significance of Impacts 47

6.0 GREENHOUSE GAS IMPACT ANALYSIS 48

6.1 Issue 1: Greenhouse Gas Emissions 48
6.1.1 Impacts 48
6.1.2 Significance of Impacts 54
6.2 Issue 2: Conflict With Applicable Plans Adopted for the Purpose of Reducing Greenhouse Gas Emissions 54
6.2.1 Impacts 54
6.2.2 Significance of Impacts 59

7.0 LIST OF PREPARERS 59

8.0 REFERENCES 60

LIST OF APPENDICES

A Existing Campus CalEEMod Output
B Near-Term Construction CalEEMod Output
C CMP Full Buildout CalEEMod Output

TABLE OF CONTENTS (cont.)

LIST OF FIGURES

No.	Title	Follows Page
1	Regional Location	2
2	Aerial Photograph	2
3	Comprehensive Master Plan Facility Overview	2

LIST OF TABLES

No.	Title	Page
1	Air Quality Monitoring Data	6
2	Existing Daily Operational Emissions	7
3	Global Warming Potentials and Atmospheric Lifetimes	9
4	California Greenhouse Gas Emissions by Sector	10
5	Existing Operational GHG Emissions	11
6	Common Sources and Human Health Effects of Criteria Air Pollutants	13
7	Ambient Air Quality Standards	14
8	San Diego Air Basin Attainment Status	16
9	Screening-Level Thresholds for Air Quality Impact Analysis	38
10	Net Daily Operational Emissions at Buildout	42
11	Maximum Daily Construction Emissions	43
12	Operational GHG Emissions	48
13	Scoping Plan Consistency Analysis	50
14	Near-Term Construction GHG Emissions by Year	53

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ACRONYMS AND ABBREVIATIONS

°F	degrees Fahrenheit
µg/m^3	micrograms per cubic meter
AAM	annual arithmetic mean
AB	Assembly Bill
ADT	average daily trips
AR4	IPCC's Fourth Assessment Report
AR5	IPCC's Fifth Assessment Report
AR6	IPCC's Sixth Assessment Report
Attainment Plan	2020 Plan for Attaining the National Ambient Air Quality Standards for Ozone in San Diego County
BMP	best management practice
C_2F_6	hexafluoroethane
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CAFE	Corporate Average Fuel Economy
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CALGreen	California Green Building Standards Code
CalRecycle	California Department of Resources Recycling and Recovery
CAP	Climate Action Plan
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CAS	California Approved Samplers
CCR	California Code of Regulations
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CF_4	tetrafluoromethane
CFC	chlorofluorocarbon
CH_4	methane
City	City of San Diego
CMP	Comprehensive Master Plan
CNRA	California Natural Resources Agency
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
County	County of San Diego
District	San Diego Community College District
DPM	diesel particulate matter

ACRONYMS AND ABBREVIATIONS (cont.)

EO	Executive Order
EV	electric vehicle
g/L	grams per liter
GHG	greenhouse gas
GSF	gross square foot/feet
GWP	global warming potential
HFC	hydrofluorocarbon
HRA	Health Risk Assessment
I-	Interstate
IPCC	Intergovernmental Panel on Climate Change
LCFS	Low Carbon Fuel Standard
LEED	Leadership in Energy and Environmental Design
LEED-NC	Leadership in Energy and Environmental Design for New Construction
LLG	Linscott, Law & Greenspan Engineers
mg/m^3	milligrams per cubic meter
MMT	million metric tons
mph	miles per hour
MPO	metropolitan planning organization
MT	metric ton
MTS	Metropolitan Transit System
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NASA	National Aeronautics and Space Administration
NHTSA	National Highway Traffic Safety Administration
NO_2	nitrogen dioxide
NO_X	nitrogen oxides
NOAA	National Oceanic and Atmospheric Administration
O_3	ozone
OEHHA	Office of Environmental Health Hazard Assessment
Pb	lead
PFCs	perfluorocarbons
PM	particulate matter
PM_{10}	particulate matter 10 microns or less in diameter
$PM_{2.5}$	particulate matter 2.5 microns or less in diameter
ppm	parts per million

ACRONYMS AND ABBREVIATIONS (cont.)

PRC	Public Resources Code
project	Mesa College Comprehensive Master Plan RAQS2022 Revision to the Regional Air Quality Strategy for San Diego County
ROG	reactive organic gas
RPS	Renewable Portfolio Standard
RTP	Regional Transportation Plan
SANDAG	San Diego Association of Governments
SB	Senate Bill
SCAQMD	South Coast Air Quality Management District
SCS	Sustainable Communities Strategy
SDAB	San Diego Air Basin
SDAPCD	San Diego County Air Pollution Control District
SF	square feet/foot
SF_6	hexafluoride
SIP	State Implementation Plan
SO_2	sulfur dioxide
SO_X	sulfur oxides
SR	State Route
SWRCB	State Water Resources Control Board
TAC	toxic air contaminant
T-BACT	Toxics-Best Available Control Technology
UNFCCC	United Nations Framework Convention on Climate Change
USEPA	U.S. Environmental Protection Agency
VOC	volatile organic compound
ZEV	zero-emission vehicle

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EXECUTIVE SUMMARY

This report presents an assessment of potential air quality and greenhouse gas (GHG) emissions impacts during the construction and operation of the San Diego Community College District (District) Mesa College Comprehensive Master Plan (CMP or project). The Mesa College campus is located within the City of San Diego (City) and consists of 50 permanent buildings, containing approximately 1.3 million gross square feet (GSF). The CMP recommends a series of physical improvements across the Mesa College campus. The projects would generally demolish existing aging facilities on the campus and replace them with more modern facilities that would accommodate existing programming. The Athletics Complex and Performing Arts and Administration Center and Parking Structure projects are anticipated to be designed and constructed in the near term and are discussed and analyzed in more detail in this report as more information is available.

The CMP, including the near-term projects, would result in emissions of air pollutants during the construction and operational phases of the project. Emissions of all criteria pollutants would be below the daily thresholds during both construction activities and operation of the project once built out. Impacts would be less than significant. Development of the project would not conflict with the San Diego County Air Pollution Control District's air quality plans for the region.

The project would not result in the exposure of sensitive receptors to substantial emissions of pollutants, toxic air contaminants, or odors. The project would not result in the addition of vehicle trips such that emissions of carbon monoxide (CO) would result in a CO hotspot. Construction activities and project operations would not expose substantial numbers of people to objectionable odors. Therefore, the project's impacts on air quality would be less than significant.

The CMP, including the near-term projects, would result in GHG emissions during both its construction and operational phases. The CMP, including the near-term projects, would be consistent with the California Air Resources Board's 2022 Scoping Plan for Achieving Carbon Neutrality and would not generate GHG emissions, either directly or indirectly, that may have a significant effect on the environment. In addition, the project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs, including the 2022 Scoping Plan for Achieving Carbon Neutrality or the California Community Colleges Sustainability and Climate Action goals. Impacts related to GHG emissions would be less than significant.

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1.0 INTRODUCTION

This report presents an assessment of potential air quality and greenhouse gas (GHG) emission impacts during the construction and operation of the San Diego Community College District (District) Mesa College Comprehensive Master Plan (CMP or project). This report has been prepared to support environmental review in accordance with the California Environmental Quality Act (CEQA; California Public Resources Code [PRC] Section 21000 et seq.) and CEQA Guidelines (California Code of Regulations [CCR], Title 14, Section 15000 et seq.).

1.1 PROJECT LOCATION

The District is a community college district serving the City of San Diego (City) in central San Diego County (County). The District includes three credit colleges (San Diego City College, Mesa College, and Miramar College) and the state's only free-standing noncredit college (San Diego College of Continuing Education).

Mesa College is centrally located within the District in the Clairemont Mesa community of the City, which is generally bordered by Interstate (I-) 5 on the west, I-805 on the east, State Route (SR) 52 on the north, and the community of Linda Vista on the south. Refer to Figure 1, *Regional Location*. Clairemont Mesa is a suburban community characterized by single-family homes generally confined to the mesas formed by surrounding canyons and hillsides. The Mesa College campus is located in the southeastern portion of the Clairemont Mesa community, on an approximately 106-acre mesa. It is generally surrounded by a mix of single-family and multi-family residential uses and on two sides by the Tecolote Canyon nature preserve. The campus is generally divided into upper, middle, and lower levels. Refer to Figure 2, *Aerial Photograph*.

The campus currently hosts approximately 50 permanent buildings, containing approximately 1.3 million gross square feet (GSF). Seven temporary classroom buildings are currently located at the southwest corner of Parking Lot 1. The majority of the buildings are clustered on the upper level of the mesa and the mid to lower portions of campus are dedicated to athletic fields, additional instructional buildings, and parking.

1.2 PROJECT DESCRIPTION

The CMP recommends a series of physical improvements across the Mesa College campus. The projects would generally demolish existing aging facilities on the campus and replace them with more modern facilities that accommodate existing programming. The CMP is conceptual in nature and describes potential projects for the campus that would assist Mesa College in meeting its educational and programming goals. Specific project designs, building footprints, architectural details, circulation and parking improvements, infrastructure alignments, and operational characteristics are expected to be refined during future planning and design phases. The improvements described below total approximately 719,000 GSF of new construction and would require demolition of 172,130 GSF of existing buildings, resulting in a net increase of 546,870 GSF of campus building space. Specific projects identified for development under the CMP include:

- Athletics Complex
- Performing Arts and Administration Center and Parking Structure

- English/English Language Acquisition/Student Resource Center replacement building
- Conference Center
- On-Campus Housing
- High School relocation
- Facilities Services relocation to dedicated area with loading and storage space
- New Welcome Center near eastern entrance
- Child Development Center relocation and expansion
- New Community Clinic
- West Entrance reconfiguration (Genesee Avenue and Marlesta Drive)

Campus-wide improvements related to utility infrastructure and circulation are also part of the CMP and could be implemented in coordination with the projects listed above or undertaken as campus-wide efforts. Interior renovations, continued maintenance, and other minor construction could also occur throughout existing campus buildings. The Athletics Complex and Performing Arts and Administration Center and Parking Structure projects are anticipated to be designed and constructed in the near term. Refer to Figure 3, *Comprehensive Master Plan Facility Overview*. No specific timing or phasing is identified for the remaining projects or campus-wide improvements.

Over the course of the 20-year buildout period anticipated for the CMP, student enrollment and associated staffing needs are anticipated to increase. Approximately 15,358 on-campus students are anticipated to attend Mesa College in 2045, an increase of 3,955 on-campus students compared to baseline (Fall 2025) conditions. In addition, approximately 2,745 employees would be required in 2045 to maintain the current staff-to-student ratio, which represents an increase of 707 employees compared to baseline conditions.

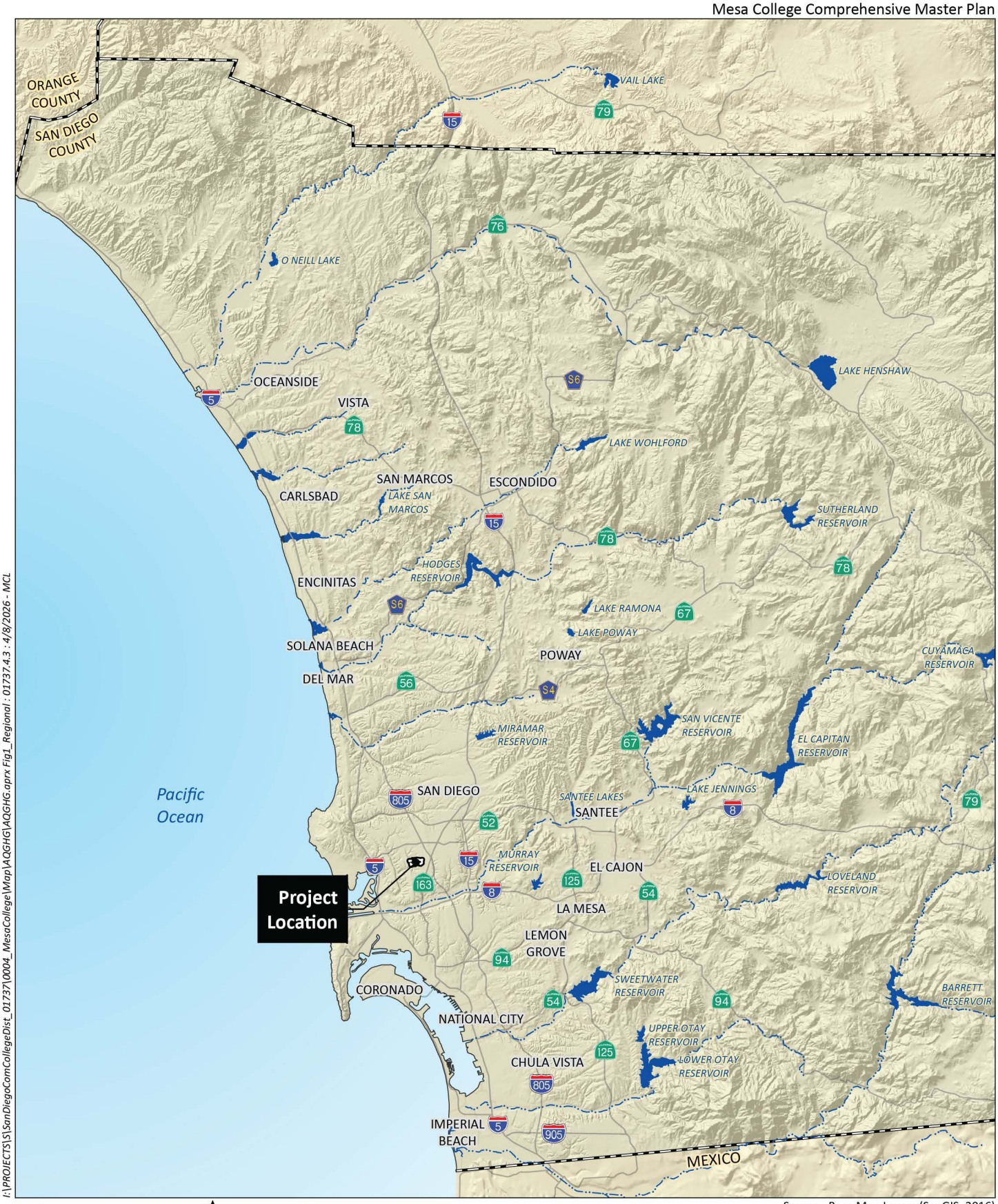
1.2.1 Near-Term Projects

1.2.1.1 Athletics Complex

A series of improvements are proposed to replace and reconfigure existing athletic, exercise science, and dance instructional and support spaces to improve connectivity and facility quality. The existing Pool, Upper Athletic Field, gym, and Physical Education building (L1) would be demolished.

The proposed reconfiguration would place a new three-court gym at the eastern end of the mesa top with two options for hillside extensions along the baseball field and stadium. In addition to court space, the approximately 175,000 GSF complex would include dance studios, athletic training spaces, offices, study areas, locker rooms, team rooms, weight rooms, classrooms, press boxes, ticketing/concessions and restrooms, stadium seating, and equipment storage space. Relocated and expanded pool complex, beach volleyball, softball field, and practice fields are proposed on the west side of the new gym building. These facilities would be accessible via the pedestrian network of pathways across campus. The existing baseball field would also be reconfigured, remaining generally in its existing location, and the field house located between the baseball field and stadium would be replaced.

Track and field event spaces, including for javelin and hammer throw events, currently located on and adjacent to the Upper Athletic Field are proposed to be relocated to the area east of the stadium where high fencing would be provided to address safety concerns related to pedestrian movement.



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0 8 Miles

Source: Base Map Layers (SanGIS, 2016)

HELIX Environmental Planning

Regional Location

Figure 1



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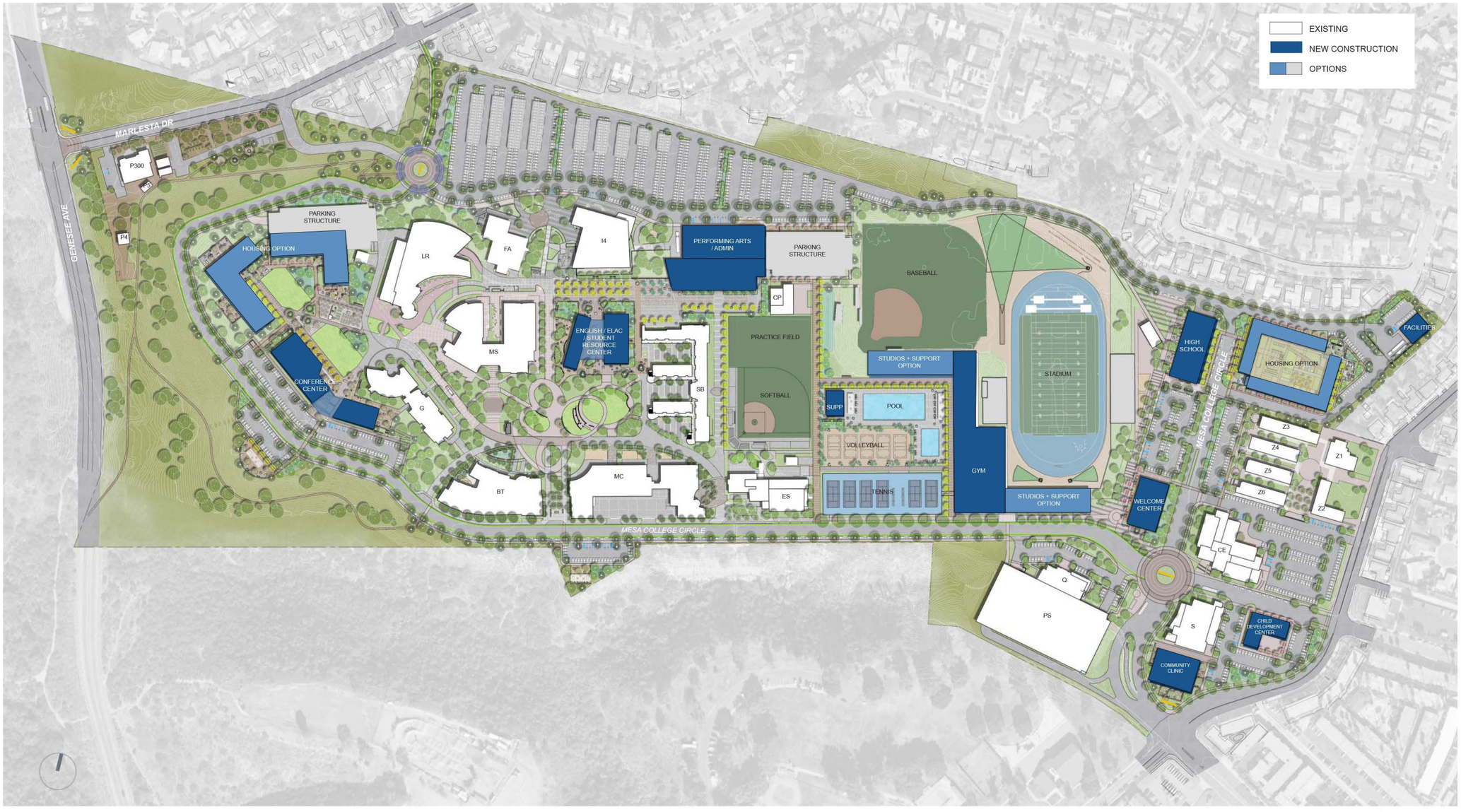
Source: Aerial (Maxar 2025)

HELIX Environmental Planning

Aerial Photograph

Figure 2

THE FUTURE CAMPUS



Gensler

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Source: Gensler 2025

1.2.1.2 Performing Arts and Administration Center and Parking Structure

A new multi-story, 140,000-GSF building is proposed on the north side of the mesa top and adjacent to the I-400 Student Services Center. The building would be constructed along the hillside and would therefore be accessible from both Lot 1 and the mesa level. A large main stage theater would occupy a portion of the building, with ground floor entry available from Lot 1. Theater support spaces would be constructed into the hillside while instructional labs and offices for Administration services would occur on the upper floors and be accessible from the active plaza on the mesa level of campus. Programs in the proposed Performing Arts and Administration Center would be relocated from their location in original campus buildings on the west side of campus, and these buildings would be demolished or re-purposed when future construction in this area occurs.

A multi-story parking structure is proposed adjacent to the Performing Arts and Administration Center on the east. The structure would replace all parking displaced by the construction of the new Performing Arts Center and Administration Building and would similarly be constructed along the hillside, improving access to large events at the Performing Arts and Administration Center and athletic fields.

1.3 CONSTRUCTION BEST MANAGEMENT PRACTICES

Future campus development projects would incorporate best management practices (BMPs) during construction to reduce emissions of fugitive dust. San Diego County Air Pollution Control District (SDAPCD) Rule 55 (Fugitive Dust Control) states that no dust and/or dirt shall leave the property line. SDAPCD Rule 55 requires the following (SDAPCD 2009):

(1) **Airborne Dust Beyond the Property Line**: No person shall engage in construction or demolition activity subject to this rule in a manner that discharges visible dust emissions into the atmosphere beyond the property line for a period or periods aggregating more than 3 minutes in any 60-minute period.

(2) **Track-Out/Carry-Out**: Visible roadway dust as a result of active operations, spillage from transport trucks, erosion, or track-out/carry-out shall:

(i) be minimized by the use of any of the following or equally effective track-out/carry-out and erosion control measures that apply to the project or operation:

(a) track-out grates or gravel beds at each egress point;

(b) wheel-washing at each egress during muddy conditions, soil binders, chemical soil stabilizers, geotextiles, mulching, or seeding; and for outbound transport trucks;

(c) using secured tarps or cargo covering, watering, or treating of transported material; and

(ii) be removed at the conclusion of each workday when active operations cease, or every 24 hours for continuous operations. If a street sweeper is used to remove any track-out/ carry-out, only PM_{10}-efficient (particulate matter less than 10 microns) street sweepers certified to meet the most current South Coast Air Quality Management District (SCAQMD) Rule 1186 requirements shall be used. The use of blowers for removal of track-out/carry-out is prohibited under any circumstances.

The District requires construction contractors to comply with local, state, and federal environmental regulations regarding dust control during construction. As part of the project, the BMP control measures listed below would be implemented during project construction activities to meet the requirements of SDAPCD Rule 55:

- Dirt and aggregate storage piles shall be stabilized by chemical binders, tarps, fencing, or other erosion control.
- A 15-mile-per-hour (mph) speed limit shall be enforced on unpaved surfaces.
- During dry weather, dirt and debris spilled onto paved surfaces shall be removed promptly to reduce the resuspension of particulate matter caused by vehicle movement. Track out of material onto public roads shall be cleaned daily during dry weather.
- Trucks hauling dirt, sand, soil, or other loose materials shall be covered, or two feet of freeboard will be maintained.
- Ground disturbance shall be terminated if winds exceed 25 mph.
- All exposed areas shall be watered a minimum of twice per day.

2.0 EXISTING CONDITIONS

2.1 SURROUNDING LAND USES

As discussed in Section 1.1, the campus is located in the Clairemont Mesa community of the City, which is a suburban community characterized by single-family homes generally confined to the mesas formed by surrounding canyons and hillsides. The campus is generally surrounded by a mix of single-family and multi-family residential uses and on two sides by the Tecolote Canyon nature preserve. Single-family residences are located to the north of campus across Mesa College Circle and to the east adjacent to the existing parking lot in the northeast corner of campus and east of Armstrong Street (refer to Figure 2).

2.2 CLIMATE AND METEOROLOGY

The climate in southern California, including the San Diego Air Basin (SDAB), is controlled largely by the large-scale meteorological condition that dominates the west coast of the U.S.: a seasonally semi-permanent high-pressure cell centered over the northeastern Pacific Ocean, called the Pacific high, which keeps most storms from affecting the California coast. Areas within 30 miles of the coast in the San Diego region, including the project site, experience moderate temperatures and comfortable humidity.

Due to its climate, the SDAB experiences frequent temperature inversions (temperature increases as altitude increases, which is the opposite of general patterns). Temperature inversions prevent air close to the ground from mixing with the air above it. As a result, air pollutants are trapped near the ground. During the summer, air quality problems are created due to the interaction between the ocean surface and the lower layer of the atmosphere, creating a moist marine layer. An upper layer of warm air mass forms over the cool marine layer, preventing air pollutants from dispersing upward. Additionally, hydrocarbons and nitrogen dioxide (NO_2) react under strong sunlight, creating smog. Light, daytime

winds, predominantly from the west, further aggravate the condition by driving the air pollutants inland, toward the foothills. During the fall and winter, air quality problems are created due to carbon dioxide (CO) and NO_2 emissions. High NO_2 levels usually occur during autumn or winter, on days with summer-like conditions.

The predominant wind direction in the vicinity of the project site is from the west and the average wind speed is approximately 5.6 mph (Iowa Environmental Mesonet 2025). The annual average maximum temperature in the project area is approximately 69.6 degrees Fahrenheit (°F), and the annual average minimum temperature is approximately 56.4°F. Total precipitation in the project area averages 9.84 inches annually (Iowa Environmental Mesonet 2026).

2.3 SENSITIVE RECEPTORS

The California Air Resources Board (CARB) and the Office of Environmental Health Hazard Assessment (OEHHA) have identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over 65 years of age, children under 14 years of age, infants (including in utero in the third trimester of pregnancy), and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis (CARB 2005; OEHHA 2015). Some land uses are considered more sensitive to air pollution than others due to the types of population groups or activities involved and are referred to as sensitive receptors. Examples of these sensitive receptors are residences, schools, hospitals, and daycare centers.

The closest existing sensitive receptors to the project site are the adjacent single-family residences to the north and east of campus. Further, as the project proposes the construction of a community clinic, daycare center, student housing, and high school facilities, some future campus projects would be considered sensitive receptors.

2.4 EXISTING REGIONAL AIR QUALITY

2.4.1 Attainment Designations

Attainment designations are discussed further in Section 3.1 below. In short, regions are designated as being in attainment or nonattainment for each criteria air pollutant based on whether they achieve the relevant federal or state air quality standards. The SDAB is classified as a nonattainment area under the National Ambient Air Quality Standards (NAAQS) for ozone (8-hour) and as a nonattainment area under the California Ambient Air Quality Standards (CAAQS) for ozone (1-hour and 8-hour), coarse particulate matter (PM_{10}), and fine particulate matter (particulate matter 2.5 microns or less in diameter [$PM_{2.5}$]). The SDAB is an attainment area for all other criteria pollutants.

2.4.2 Monitored Air Quality

The SDAPCD operates a network of ambient air monitoring stations throughout the San Diego region. The purpose of the monitoring stations is to measure ambient concentrations of criteria air pollutants and determine whether the ambient air quality meets state and federal standards. The nearest ambient monitoring station to the project site is the Kearny Villa Road monitoring station located approximately 3.5 miles northeast of the project site. Data at this monitoring site are collected for ozone, $PM_{2.5}$, and NO_2. Air quality monitoring data for CO and PM_{10} were obtained from the SDAPCD Annual Air Quality

Monitoring Network Plan (SDAPCD 2025a) and represent countywide concentrations. Air quality data for the years 2022 through 2024 are shown in Table 1, *Air Quality Monitoring Data*.

Table 1
AIR QUALITY MONITORING DATA

Pollutant Standard	2022	2023	2024
Ozone (O_3) – Kearny Villa Road			
Maximum concentration 1-hour period (ppm)	0.095	0.091	0.112
Maximum concentration 8-hour period (ppm)	0.083	0.079	0.080
Days above 1-hour state standard (>0.09 ppm)	1	0	2
Days above 8-hour state/federal standard (>0.070 ppm)	2	3	3
Carbon Monoxide (CO) – Countywide			
Maximum 8-hour concentration (ppm)	1.2	2.1	2.8
Days above federal standard (>9.0 ppm)	0	0	0
Respirable Particulate Matter (PM_{10}) – Countywide			
Maximum 24-hour concentration (µg/m^3)	243	175	152
Days above federal standard (>150 µg/m^3)	3	1	0[1]
Fine Particulate Matter ($PM_{2.5}$) – Kearny Villa Road			
Maximum 24-hour concentration (µg/m^3)	13.9	24.5	21.1
Measured Days above 24-hour federal standard (>35 µg/m^3)	0	0	0
Annual average (µg/m^3)	6.8	7.0	8.0
Exceed federal annual standard (>9.0 µg/m^3)	No	No	No
Exceed state annual standard (>12 µg/m^3)	No	No	No
Nitrogen Dioxide (NO_2) – Kearny Villa Road			
Maximum 1-hour concentration (ppm)	0.051	0.038	0.042
Days above state 1-hour standard (>0.18 ppm)	0	0	0
Days above federal 1-hour standard (>0.100 ppm)	0	0	0
Annual average (ppm)	0.008	0.006	0.005
Exceed annual federal standard (>0.053 ppm)	No	No	No
Exceed annual state standard (>0.030 ppm)	No	No	No

Source: CARB 2025; SDAPCD 2025a

[1] While the reported maximum 24-hour concentration exceeds 150 µg/m^3, SDACPD reports no daily exceedance for 2024.
ppm = parts per million; µg/m^3 = micrograms per cubic meter.

As shown in Table 1, monitoring data at the Kearny Villa Road station reported one exceedance of the 1-hour state ozone standard in 2022 and 2024 but no exceedance in 2023. Concentrations at the Kearny Villa Road station exceeded the 8-hour state/federal ozone standard on two days in 2022, three days in 2023, and three days in 2024. The Kearny Villa Road station reported the federal and state standard for $PM_{2.5}$ was not exceeded in 2022 through 2024. No exceedances of the state or federal standards for NO_2 occurred from 2022 to 2024 (CARB 2025). Countywide data shows exceedances of the 24-hour PM_{10} standard in 2022 and 2023 and no exceedances of the CO standards for the sample period (SDAPCD 2025a).

2.5 EXISTING ON-CAMPUS AIR QUALITY

Emissions associated with the existing development on the project site were estimated using the California Emissions Estimator Model (CalEEMod), as further described in Section 4.1. The project site is currently developed with 50 permanent buildings, containing approximately 1.3 million GSF. Based on aerial imagery, the model assumed that the approximately 104-acre main campus portion of the project

site (excluding the parcel north of Marlesta Drive) is comprised of approximately 20 percent landscaping. Existing emissions at the project site occur in association with the on-site uses, specifically mobile source emissions from vehicle trips to and from the campus; area source emissions generated by maintenance equipment, landscape equipment, and use of products that contain solvents; and energy source emissions from electricity and natural gas usage. According to the Local Mobility Analysis prepared for the project by Linscott, Law & Greenspan Engineers (LLG; 2026), the campus trip rate would be 1.15 average daily trips (ADT) per student. This rate was applied to the 2025 Mesa College on-campus enrollment of 11,403 students, resulting in approximately 13,113 ADT under existing conditions. The amount of electricity and natural gas consumed at the project site was calculated based on District energy bills. CalEEMod defaults for area sources and trip distances were used to estimate associated existing emissions.

Table 2, *Estimated Existing Daily Operational Emissions,* shows the model-calculated emissions associated with the existing uses at the project site modeled for the CMP buildout year (2045). The model additionally included the 2045 adjustment factors published by CARB for the on-road vehicle (mobile source) exhaust emissions to account for legislative updates as further described in Section 4.1.2.1 below. CalEEMod output files for the existing condition are included in Appendix A, *Existing Campus CalEEMod Output,* to this report.

Table 2
EXISTING DAILY OPERATIONAL EMISSIONS

Category	Pollutant Emissions (pounds per day)					
	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Mobile	29.3	18.4	223.0	0.6	72.8	18.6
Area	31.5	--	57.2	<0.1	0.1	0.1
Energy	1.2	21.9	18.4	0.1	1.7	1.7
Total Maximum Daily Emissions	**62.0**	**40.3**	**298.7**	**0.8**	**74.5**	**20.4**

Source: CalEEMod (output data is provided in Appendix A)
VOC = volatile organic compound; NO_X = nitrogen oxides; CO = carbon monoxide; SO_2 = sulfur dioxide; PM_{10} = particulate matter 10 microns or less in diameter; $PM_{2.5}$ = particulate matter 2.5 microns or less in diameter

2.6 CLIMATE CHANGE OVERVIEW

Global climate change refers to changes in average climatic conditions on Earth, including temperature, wind patterns, precipitation, and storms. Global temperatures are moderated by atmospheric gases. These gases are commonly referred to as GHGs because they function similar to a greenhouse by letting sunlight in but preventing heat from escaping, thus warming the Earth's atmosphere.

GHGs are emitted by natural processes and human (anthropogenic) activities. Anthropogenic GHG emissions are primarily associated with: (1) the burning of fossil fuels during motorized transport, electricity generation, natural gas consumption, industrial activity, manufacturing, and other activities; (2) deforestation; (3) agricultural activity; and (4) solid waste decomposition.

The National Aeronautics and Space Administration (NASA) temperature records show a decades-long trend of warming, indicating that 2024 was the warmest year on record since 1880, with global temperatures approximately 2.3°F (or about 1.28 degrees Celsius) warmer than the twentieth-century baseline (1951 through 1980) and 2.65°F (1.47 degrees Celsius) warmer than the late nineteenth century

(1850 through 1900) preindustrial average (NASA 2025). The 10 most recent years (2014 through 2024) have been the warmest on record (NASA 2025). GHG emissions from human activities are the most significant driver of observed climate change since the mid-twentieth century (United Nations Intergovernmental Panel on Climate Change [IPCC] 2013). The IPCC constructed several emission trajectories of GHGs needed to stabilize global temperatures and climate change impacts. The statistical models show a "high confidence" that the global temperature increase caused by anthropogenic GHG emissions could be kept to less than two degrees Celsius relative to pre-industrial levels if atmospheric concentrations are stabilized at about 450 parts per million (ppm) carbon dioxide equivalent (CO_2e) by the year 2100 (IPCC 2014).

2.7 GREENHOUSE GASES OF PRIMARY CONCERN

The GHGs, as defined under California's Assembly Bill (AB) 32, include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). Although water vapor is the most abundant and variable GHG in the atmosphere, it is not considered a pollutant; it maintains a climate necessary for life.

Carbon Dioxide. CO_2 is the most important and common anthropogenic GHG. CO_2 is an odorless, colorless GHG. Natural sources include the decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungi; evaporation from oceans; and volcanic outgassing. Anthropogenic sources of CO_2 include burning fuels, such as coal, oil, natural gas, and wood. Data from ice cores indicate that CO_2 concentrations remained steady prior to the current period of anthropogenic influences for approximately 10,000 years. The atmospheric CO_2 concentration in 2010 was 390 ppm, 39 percent above the concentration at the start of the Industrial Revolution (about 280 ppm in 1750). As of February 2026, the CO_2 concentration exceeded 429 ppm, an approximately 53 percent increase since 1750 (National Oceanic and Atmospheric Administration [NOAA] 2026).

Methane. CH_4 is a gas and is the main component of natural gas used in homes. A natural source of CH_4 is the decay of organic matter. Geological deposits known as natural gas fields contain CH_4, which is extracted for fuel. Other sources are from the decay of organic material in landfills, fermentation of manure, and cattle digestion.

Nitrous Oxide. N_2O is produced by both natural and human-related sources. N_2O is emitted during agricultural and industrial activities, as well as during the combustion of fossil fuels and solid waste. Primary human-related sources of N_2O are agricultural soil management, animal manure management, sewage treatment, mobile and stationary combustion of fossil fuel, adipic (fatty) acid production, and nitric acid production.

Fluorocarbons. Fluorocarbons are gases formed synthetically by replacing all hydrogen atoms in CH_4 or ethane with chlorine and/or fluorine atoms. Chlorofluorocarbons (CFCs) are nontoxic, nonflammable, insoluble, and chemically nonreactive in the troposphere (the level of air at Earth's surface). CFCs were first synthesized in 1928 for use as refrigerants, aerosol propellants, and cleaning solvents. They destroy stratospheric ozone; therefore, their production was stopped as required by the Montreal Protocol. PFCs and HFCs are synthetic gases used primarily to replace CFCs in similar types of uses while preventing ozone destruction; however, these gases have long atmospheric lifetimes.

Sulfur Hexafluoride. SF_6 is an inorganic, odorless, colorless, nontoxic, nonflammable gas. SF_6 is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection.

2.7.1 Global Warming Potential

GHGs have long atmospheric lifetimes that range from one year to several thousand years. Long atmospheric lifetimes allow for GHG emissions to disperse around the globe. Because GHG emissions vary widely in the power of their climatic effects, climate scientists have established a unit called global warming potential (GWP). The GWP of a gas is a measure of both potency and lifespan in the atmosphere as compared to CO_2. For example, because methane and N_2O are approximately 25 and 298 times more powerful than CO_2, respectively, in their ability to trap heat in the atmosphere, they have GWPs of 25 and 298, respectively (CO_2 has a GWP of 1). CO_2e is a quantity that enables all GHG emissions to be considered as a group despite their varying GWP. The GWP of each GHG is multiplied by the prevalence of that gas to quantify CO_2e.

Historically, GHG emission inventories have been calculated using the GWPs from the IPCC's Second Assessment Report. In 2007, IPCC updated the GWP values based on the latest science at the time in its Fourth Assessment Report (AR4). The updated GWPs in the IPCC AR4 have begun to be used in recent GHG emissions inventories. IPCC again updated the GWP values in its Fifth Assessment Report (AR5) in 2013 and Sixth Assessment Report (AR6) in 2023 (IPCC 2013, 2021). However, United Nations Framework Convention on Climate Change (UNFCCC) reporting guidelines for national inventories require the use of GWP values from the AR4. To comply with international reporting standards under the UNFCCC, official emission estimates for California and the U.S. are reported using AR4 GWP values. Therefore, statewide and national GHG inventories have not yet updated their GWP values to the AR5 or AR6 values.

By applying the GWP ratios, project-related CO_2e emissions can be tabulated in metric tons (MT) per year. Typically, the GWP ratio corresponding to the warming potential of CO_2 over a 100-year period is used as a baseline. The atmospheric lifetime and GWP of selected GHGs are summarized in Table 3, *Global Warming Potentials and Atmospheric Lifetimes*. As shown in Table 3, the GWP for common GHGs ranges from 1 (CO_2) to 22,800 (SF_6).

Table 3
GLOBAL WARMING POTENTIALS AND ATMOSPHERIC LIFETIMES

Greenhouse Gas	Atmospheric Lifetime (years)	Global Warming Potential (100-year time horizon)
Carbon Dioxide (CO_2)	50-200	1
Methane (CH_4)	12	25
Nitrous Oxide (N_2O)	114	298
HFC-134a	14	1,430
PFC: Tetrafluoromethane (CF_4)	50,000	7,390
PFC: Hexafluoroethane (C_2F_6)	10,000	12,200
Sulfur Hexafluoride (SF_6)	3,200	22,800

Source: IPCC 2007
HFC = hydrofluorocarbon; PFC = perfluorocarbon

2.8 GREENHOUSE GAS INVENTORIES

2.8.1 Worldwide and National Greenhouse Gas Inventory

In 2023, total anthropogenic GHG emissions worldwide were estimated at 50,800 million metric tons (MMT) of CO_2e emissions (Climate Watch 2023). The five largest emitting countries together account for about 52 percent of total global GHG emissions: China (26 percent), the U.S. (11 percent), India (8 percent), Brazil (4 percent), and Indonesia (3 percent). These countries also have the highest CO_2 emission levels (Climate Watch 2023).

Per the U.S. Environmental Protection Agency (USEPA) Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2022, total U.S. GHG emissions were approximately 6,343.2 MMT CO_2e in 2022 (USEPA 2024). The primary GHG emitted by human activities in the U.S. was CO_2, which represented approximately 79.7 percent of total GHG emissions (5,053 MMT CO_2e). The largest source of CO_2, and of overall GHG emissions, was fossil fuel combustion, which accounted for approximately 93 percent of gross CO_2 emissions in 2022 (4,699.4 MMT CO_2e). Relative to 1990, gross U.S. GHG emissions in 2022 were lower by 3.0 percent, down from a high of 15.2 percent above 1990 levels in 2007. Gross emissions increased from 2021 to 2022 by 0.2 percent (14.4 MMT CO_2e). Net emissions (i.e., including sinks) were 5,489 MMT CO_2e in 2022. Overall, net emissions increased by 1.3 percent from 2021 to 2022 and decreased by 16.7 percent from 2005 levels. Between 2021 and 2022, the increase in total GHG emissions was driven largely by an increase in CO_2 emissions from fossil fuel combustion across most end-use sectors due in part to increased energy use from the continued rebound of economic activity after the height of the COVID-19 pandemic (USEPA 2024).

2.8.2 State Greenhouse Gas Inventory

CARB performed statewide inventories for the years 1990 to 2023, as shown in Table 4, *California State Greenhouse Gas Emissions by Sector*. The inventory is divided into seven broad sectors of economic activity: agriculture, commercial and residential, electricity generation, high GWP, industrial, recycling and waste, and transportation, (CARB 2026a). For comparison, the 1990 baseline inventory for AB 32 is also shown in Table 4 (CARB 2007). Emissions are quantified in MMT CO_2e.

Table 4
CALIFORNIA GREENHOUSE GAS EMISSIONS BY SECTOR

Sector	Emissions (MMT CO_2e)			
	1990	**2000**	**2010**	**2023**
Agriculture	18.9 (4%)	32.3 (7%)	33.7 (8%)	29.2 (8%)
Commercial and Residential	44.1 (10%)	44.8 (10%)	46.3 (11%)	43.3 (12%)
Electricity Generation	110.5 (26%)	104.7 (23%)	90.3 (21%)	57.2 (16%)
High Global Warming Potential	-	6.6 (1%)	13.8 (3%)	21.4 (6%)
Industrial	105.3 (24%)	86.6 (19%)	82.4 (19%)	66.9 (19%)
Recycling and Waste	-	7.1 (2%)	7.9 (2%)	8.6 (2%)
Transportation	150.6 (35%)	176.5 (38%)	161.9 (37%)	133.7 (37%)
Unspecified Remaining	1.3 (<1%)	0.0 (0%)	0.0 (0%)	0.0 (0%)
Total	**430.7**	**458.7**	**436.2**	**360.4**

Source: CARB 2007 and CARB 2026a.
MMT = million metric tons; CO_2e = carbon dioxide equivalent

As shown in Table 4, statewide GHG source emissions totaled 430.7 MMT CO_2e in 1990, 458.7 MMT CO_2e in 2000, 436.2 MMT CO_2e in 2010, and 360.4 MMT CO_2e in 2023. Transportation-related emissions consistently contribute the most GHG emissions, followed by industrial and electricity generation emissions.

2.8.3 Existing Campus Greenhouse Gas Emissions

GHG emissions associated with the existing development on the project site were estimated using CalEEMod as further described in Section 4.1. Existing mobile, area, and energy emission sources were modeled based on the methodology outlined in Section 2.5. In addition, GHG emissions associated with indoor and outdoor water use were based on District utility bills for the period of October 2024 to September 2025, while emissions from solid waste and refrigerants relied on CalEEMod default values.

Table 5, *Existing Operational GHG Emissions,* shows the model-calculated GHG emissions associated with the existing uses at the project site modeled for the CMP buildout year (2045). The model additionally included the 2045 adjustment factors published by CARB for the on-road vehicle (mobile source) exhaust emissions to account for legislative updates as further described in Section 4.1.2.1 below. CalEEMod output files for the modeling of existing conditions are included in Appendix A, *Existing Campus CalEEMod Output,* to this report.

Table 5
EXISTING OPERATIONAL GHG EMISSIONS

Emission Sources	Existing Emissions (MT CO_2e)
Mobile	9,008.3
Area	19.3
Energy	4,428.7
Water/Wastewater	27.8
Solid Waste	418.2
Refrigerants	0.6
TOTAL[1]	**13,902.9**

Source: CalEEMod (output data is provided in Appendix A)
[1] Totals may not sum due to rounding.
MT = metric tons; CO_2e = carbon dioxide equivalent

3.0 REGULATORY SETTING

3.1 AIR QUALITY

The project site is located within the SDAB which is comprised of all of the County. Air quality in the SDAB is regulated by the USEPA at the federal level, by CARB at the state level, and by SDAPCD at the regional level.

3.1.1 Air Pollutants of Concern

3.1.1.1 Criteria Pollutants

Criteria pollutants are defined by state and federal law as a risk to the health and welfare of the public. In general, criteria air pollutants include the following compounds:

- Ozone (O_3)
- Carbon monoxide (CO)
- Nitrogen dioxide (NO_2)
- Particulate matter (PM), which is further subdivided:
  - Coarse PM, 10 microns or less in diameter (PM_{10})
  - Fine PM, 2.5 microns or less in diameter ($PM_{2.5}$)
- Sulfur dioxide (SO_2)
- Lead (Pb)

Criteria pollutants can be emitted directly from sources (primary pollutants; e.g., CO, SO_2, PM_{10}, $PM_{2.5}$, and lead), or they may be formed through chemical and photochemical reactions of precursor pollutants in the atmosphere (secondary pollutants; e.g., ozone, NO_2, PM_{10}, and $PM_{2.5}$). PM_{10} and $PM_{2.5}$ can be both primary and secondary pollutants. The principal precursor pollutants of concern are reactive organic gases ([ROGs] also known as volatile organic compounds [VOCs])[1] and nitrogen oxides (NO_X), which react to form ozone.

Descriptions of sources and general health effects for each of the criteria air pollutants are shown in Table 6, *Common Sources and Human Health Effects of Criteria Air Pollutants*. Specific adverse health effects on individuals or population groups induced by criteria pollutant emissions are highly dependent on a multitude of interconnected variables such as cumulative concentrations, local meteorology and atmospheric conditions, and the number and characteristics of exposed individuals (e.g., age, gender). Criteria pollutant precursors (ROG and NO_X) affect air quality on a regional scale, typically after a significant delay and distance from the pollutant source emissions. Health effects related to ozone and NO_2 are, therefore, the product of emissions generated by numerous sources throughout a region.

Emissions of criteria pollutants from vehicles traveling to or from the project site (mobile emissions) are distributed nonuniformly in location and time throughout the region, wherever the vehicles may travel. As such, specific health effects from these criteria pollutant emissions cannot be meaningfully correlated to the incremental contribution from the project at a regional scale.

[1] CARB defines and uses the term ROGs while the USEPA defines and uses the term VOCs. The compounds included in the lists of ROGs and VOCs and the methods of calculation are slightly different. However, for the purposes of estimating criteria pollutant precursor emissions, the two terms are often used interchangeably.

Table 6
COMMON SOURCES AND HUMAN HEALTH EFFECTS OF CRITERIA AIR POLLUTANTS

Pollutant	Major Man-Made Sources	Human Health Effects
Carbon Monoxide (CO)	An odorless, colorless gas formed when carbon in fuel is not burned completely; a component of motor vehicle exhaust.	Reduces the ability of blood to deliver oxygen to vital tissues, affecting the cardiovascular and nervous system. Impairs vision, causes dizziness, and can lead to unconsciousness or death.
Nitrogen Dioxide (NO_2)	A reddish-brown gas formed during fuel combustion for motor vehicles and industrial sources. Sources include motor vehicles, electric utilities, and other sources that burn fuel.	Respiratory irritant; aggravates lung and heart problems. Precursor to ozone and acid rain. Contributes to climate change and nutrient overloading, which deteriorates water quality. Causes brown discoloration of the atmosphere.
Ozone (O_3)	Formed by a chemical reaction between reactive organic gases (ROGs) and nitrogen oxides (NO_X) in the presence of sunlight. Common sources of these precursor pollutants include motor vehicle exhaust, industrial emissions, gasoline storage and transport, solvents, paints, and landfills.	Irritates and causes inflammation of the mucous membranes and lung airways; causes wheezing, coughing, and pain when inhaling deeply; decreases lung capacity; aggravates lung and heart problems. Damages plants; reduces crop yield. Damages rubber, some textiles, and dyes.
Particulate Matter (PM_{10} and $PM_{2.5}$)	Produced by power plants, steel mills, chemical plants, unpaved roads and parking lots, wood-burning stoves and fireplaces, automobiles, and other sources.	Increased respiratory symptoms, such as irritation of the airways, coughing, or difficulty breathing; aggravated asthma; development of chronic bronchitis; irregular heartbeat; nonfatal heart attacks; and premature death in people with heart or lung disease. Impairs visibility (haze).
Sulfur Dioxide (SO_2)	A colorless, nonflammable gas formed when fuel containing sulfur is burned, when gasoline is extracted from oil, or when metal is extracted from ore. Examples are petroleum refineries, cement manufacturing, metal processing facilities, locomotives, and ships.	Respiratory irritant. Aggravates lung and heart problems. In the presence of moisture and oxygen, sulfur dioxide converts to sulfuric acid, which can damage marble, iron, and steel. Damages crops and natural vegetation. Impairs visibility. Precursor to acid rain.
Lead	Metallic element emitted from metal refineries, smelters, battery manufacturers, iron and steel producers, use of leaded fuels by racing and aircraft industries.	Anemia, high blood pressure, brain and kidney damage, neurological disorders, cancer, lowered IQ. Affects animals, plants, and aquatic ecosystems.

Source: CARB 2026b; USEPA 2026a

3.1.1.2 Toxic Air Contaminants

California Health and Safety Code Section 39655(a) defines a toxic air contaminant (TAC) as "an air pollutant which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health." A substance that is listed as a hazardous air pollutant pursuant to Section 112(b) of the federal Clean Air Act (CAA) (42 U.S. Code Section 7412[b]) is a TAC. Under state law, the California Environmental Protection Agency (CalEPA), acting through CARB, is authorized to identify a substance as a TAC if it determines the substance is an air pollutant that may

cause or contribute to an increase in mortality or an increase in serious illness, or that may pose a present or potential hazard to human health.

Diesel engines emit a complex mixture of air pollutants, including both gaseous and solid material. The solid material in diesel exhaust is referred to as diesel particulate matter (DPM). Almost all DPM is 10 microns or less in diameter, and 90 percent of DPM is less than 2.5 microns in diameter (CARB 2026c). Because of their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lung. In 1998, CARB identified DPM as a TAC based on published evidence of a relationship between diesel exhaust exposure and lung cancer and other adverse health effects. DPM has a notable effect on California's population; it is estimated that about 70 percent of total known cancer risk related to air toxins in California is attributable to DPM (CARB 2026c).

3.1.2 Federal

Air quality is defined by ambient air concentrations of specific pollutants identified by the USEPA to be of concern with respect to health and welfare of the general public. The USEPA is responsible for enforcing the federal CAA of 1970 and its 1977 and 1990 Amendments. The federal CAA required the USEPA to establish NAAQS, which identify concentrations of pollutants in the ambient air below which no adverse effects on the public health and welfare are anticipated. In response, the USEPA established both primary and secondary standards for designated criteria pollutants discussed above. Primary standards are designed to protect human health with an adequate margin of safety. Secondary standards are designed to protect property and the public welfare from air pollutants in the atmosphere. Table 7, *Ambient Air Quality Standards*, shows the federal and state ambient air quality standards for these pollutants.

Table 7
AMBIENT AIR QUALITY STANDARDS

Pollutant	Averaging Time	California Standards	Federal Standards Primary[1]	Federal Standards Secondary[2]
O_3	1 Hour	0.09 ppm (180 µg/m^3)	–	–
	8 Hour	0.070 ppm (137 µg/m^3)	0.070 ppm (137 µg/m^3)	Same as Primary
PM_{10}	24 Hour	50 µg/m^3	150 µg/m^3	Same as Primary
	AAM	20 µg/m^3	–	Same as Primary
$PM_{2.5}$	24 Hour	–	35 µg/m^3	Same as Primary
	AAM	12 µg/m^3	9.0 µg/m^3 [(3)]	15.0 µg/m^3
CO	1 Hour	20 ppm (23 mg/m^3)	35 ppm (40 mg/m^3)	–
	8 Hour	9.0 ppm (10 mg/m^3)	9 ppm (10 mg/m^3)	–
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m^3)	–	–
NO_2	1 Hour	0.18 ppm (339 µg/m^3)	0.100 ppm (188 µg/m^3)	–
	AAM	0.030 ppm (57 µg/m^3)	0.053 ppm (100 µg/m^3)	Same as Primary
SO_2	1 Hour	0.25 ppm (655 µg/m^3)	0.075 ppm (196 µg/m^3)	–
	3 Hour	–	–	0.5 ppm (1,300 µg/m^3)
	24 Hour	0.04 ppm (105 µg/m^3)	–	–

Pollutant	Averaging Time	California Standards	Federal Standards Primary[1]	Federal Standards Secondary[2]
Lead	30-day Avg.	1.5 µg/m^3	–	–
	Calendar Quarter	–	1.5 µg/m^3	Same as Primary
	Rolling 3-month Avg.	–	0.15 µg/m^3	Same as Primary
Visibility Reducing Particles	8 Hour	Extinction coefficient of 0.23 per km – visibility ≥ 10 miles (0.07 per km – ≥30 miles for Lake Tahoe)	No Federal Standards	No Federal Standards
Sulfates	24 Hour	25 µg/m^3	No Federal Standards	No Federal Standards
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m^3)	No Federal Standards	No Federal Standards
Vinyl Chloride	24 Hour	0.01 ppm (26 µg/m^3)	No Federal Standards	No Federal Standards

Source: CARB 2024; USEPA 2025

[1] National Primary Standards: The levels of air quality necessary, within an adequate margin of safety, to protect public health.

[2] National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

[3] On February 7, 2024, the USEPA announced a final rule to lower the annual arithmetic mean (AAM) primary NAAQS for $PM_{2.5}$ from 12 µg/m^3 to 9 µg/m^3. The CAAQS has not been lowered; therefore, the more stringent NAAQS applies.

O_3 = ozone; ppm = parts per million; µg/m^3 = micrograms per cubic meter; PM_{10} = particulate matter with a diameter of 10 microns or less; AAM = Annual Arithmetic Mean; $PM_{2.5}$ = fine particulate matter; CO = carbon monoxide; mg/m^3 = milligrams per cubic meter; NO_2 = nitrogen dioxide; SO_2 = sulfur dioxide; km = kilometer; – = No Standard

The USEPA has classified air basins (or portions thereof) as being in "attainment," "nonattainment," "maintenance," or "unclassified" for each criteria air pollutant, based on whether the NAAQS have been achieved. Upon attainment of a standard for which an area was previously designated nonattainment, the area is classified as a maintenance area. If an area is designated unclassified, it is because inadequate air quality data were available as a basis for a nonattainment or attainment designation. The project site is located within the SDAB and, as such, is in an area designated as a nonattainment area for certain pollutants that are regulated under the federal CAA. Table 8, *San Diego Air Basin Attainment Status*, lists the federal and state attainment status of the SDAB for the criteria pollutants. Effective July 2, 2021, the SDAB was classified as a Severe-15 nonattainment area for the 8-hour NAAQS for ozone (USEPA 2025). The SDAB is an attainment area, or unclassifiable, for the NAAQS for all other criteria pollutants (SDAPCD 2026).

Table 8
SAN DIEGO AIR BASIN ATTAINMENT STATUS

Criteria Pollutant	Federal Designation	State Designation
Ozone (1-hour)	Attainment[1]	Nonattainment
Ozone (8-hour)	Nonattainment	Nonattainment
CO	Attainment	Attainment
PM_{10}	Unclassifiable[2]	Nonattainment
$PM_{2.5}$	Attainment	Nonattainment[3]
NO_2	Attainment	Attainment
SO_2	Attainment	Attainment
Lead	Attainment	Attainment
Sulfates	(No federal standard)	Attainment
Hydrogen Sulfide	(No federal standard)	Unclassified
Visibility	(No federal standard)	Unclassified

Source: SDAPCD 2026; USEPA 2025

1 The federal 1-hour standard of 12 ppm was in effect from 1979 through June 15, 2005. The revoked standard is referenced here because it was employed for such a long period and because this benchmark is addressed in State Implementation Plans.

2 At the time of designation, if the available data does not support a designation of attainment or nonattainment, the area is designated as unclassifiable.

3 CARB has not reclassified the region to attainment yet due to (1) incomplete data, and (2) the use of non-California Approved Samplers (CAS). While data collected does meet the requirements for designation of attainment with federal $PM_{2.5}$ standards, the data completeness requirements for state $PM_{2.5}$ standards substantially exceed federal requirements and mandates, and have historically not been feasible for most air districts to adhere to given local resources. SDAPCD has begun replacing most regional filter-based $PM_{2.5}$ monitors as they reach the end of their useful life with continuous $PM_{2.5}$ air monitors to ensure collected data meets stringent completeness requirements in the future. SDAPCD anticipates these new monitors will be approved as "CAS" monitors once CARB reviews the list of approved monitors, which has not been updated since 2013.

CO = carbon monoxide; PM_{10} = particulate matter 10 microns or less in diameter; $PM_{2.5}$ = particulate matter 2.5 microns or less in diameter; NO_2 = nitrogen dioxide; SO_2 = sulfur dioxide

3.1.3 State

3.1.3.1 California Clean Air Act

The federal CAA allows states to adopt ambient air quality standards and other regulations provided they are at least as stringent as federal standards. CARB has established the more stringent CAAQS for the six criteria pollutants through the California CAA of 1988 and has established CAAQS for additional pollutants, including sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles (refer to Table 7). Similar to the NAAQS, areas that do not meet the CAAQS for a particular pollutant are designated “nonattainment” areas for that pollutant. As shown in Table 8, the SDAB is currently classified as a nonattainment area under the CAAQS for ozone (8-hour and 1-hour), PM_{10}, and $PM_{2.5}$. The SDAB is an attainment area for the CAAQS for all other criteria pollutants (SDAPCD 2026).

3.1.3.2 State Implementation Plan

The federal CAA requires areas with unhealthy levels of criteria pollutants to develop plans, known as State Implementation Plans (SIPs). SIPs are comprehensive plans that describe how an area will attain the NAAQS. The 1990 amendments to the federal CAA set deadlines for attainment based on the severity of an area’s air pollution problem. SIPs are not single documents – they are a compilation of

new and previously submitted plans, programs (e.g., monitoring, modeling, permitting), district rules, state regulations, and federal controls. Many of California's SIPs rely on a core set of control strategies, including emission standards for cars and heavy trucks, fuel regulations, and limits on emissions from consumer products. State law makes CARB the lead agency for all purposes related to the SIP. Local air districts and other agencies prepare SIP elements and submit them to CARB for review and approval. CARB forwards the SIP revisions to the USEPA for approval and publication in the Federal Register. The Code of Federal Regulations Title 40, Chapter I, Part 52, Subpart F, Section 52.220 lists all of the items that are included in the California SIP (CARB 2026d). At any one time, several California submittals are pending USEPA approval.

Mobile sources are regulated by the USEPA and CARB, and the emissions reduction strategies related to mobile sources are considered in the local air quality plans. Public Laws 119-15, 119-16, and 119-17 were enacted by U.S. Congress in May 2025 and were signed into law in June 2025, which nullified various USEPA rules regarding California advanced clean car and truck emissions standards. Specifically, these Public Laws disapproved preemption waivers previously approved by the USEPA for the Advanced Clean Cars, California's Advanced Clean Trucks, Zero-Emission Airport Shuttle, and Omnibus Low NO_x regulations. Accordingly, these regulations are preempted by the federal CAA, meaning that California can no longer enforce or attempt to enforce the regulations and that estimated emissions reductions attributed to the regulations cannot be used for development of the California SIP or conformity determinations.

3.1.4 Regional

3.1.4.1 Attainment Plan and Regional Air Quality Strategy

The SDAPCD and San Diego Association of Governments (SANDAG) are responsible for developing and implementing the clean air plan for attainment and maintenance of the ambient air quality standards in the SDAB. The current regional air quality plan for attainment of the NAAQS in the County is SDAPCD's *2020 Plan for Attaining the National Ambient Air Quality Standards for Ozone in San Diego County* (Attainment Plan; SDAPCD 2020). The Attainment Plan, which would be a revision to the SIP, outlines SDAPCD's plans and control measures designed to attain the NAAQS for ozone. The current regional air quality plan for attainment of the CAAQS is SDAPCD's *2022 Revision to the Regional Air Quality Strategy for San Diego County* (RAQS; SDAPCD 2023). The RAQS was initially adopted in 1992 and identifies measures to reduce emissions from sources regulated by the SDAPCD, primarily stationary sources such as industrial operations and manufacturing facilities. The RAQS is periodically updated to reflect updated information on air quality, emission trends, and new feasible control measures (SDAPCD 2023). These plans accommodate emissions from all sources, including natural sources, through implementation of control measures, where feasible, on stationary sources to attain the NAAQS and CAAQS.

The Attainment Plan and RAQS rely on information from CARB and SANDAG, including mobile and area source emissions, as well as information regarding projected growth in the County, to project future emissions and then determine from that the strategies necessary for the reduction of emissions through regulatory controls. CARB mobile source emission projections and SANDAG growth projections are based on population and vehicle trends and land use plans developed by the cities and by the County.

3.1.4.2 San Diego County Air Pollution Control District Rules and Regulations

SDAPCD adopts rules to regulate pollutant emissions from various sources in the County. The rules also establish procedures for SDAPCD permitting, fees, and hearings. The SDAPCD rules most relevant to the project are described below.

Rule 50 (Visible Emissions)

Particulate matter pollution impacts the environment by decreasing visibility (haze). These particles vary greatly in shape, size, and chemical composition, and come from a variety of natural and manmade sources. Some haze-causing particles are directly emitted to the air such as windblown dust and soot. Others are formed in the air from the chemical transformation of gaseous pollutants (e.g., sulfates, nitrates, organic carbon particles) which are the major constituents of $PM_{2.5}$. These fine particles, caused largely by combustion of fuel, can travel hundreds of miles causing visibility impairment.

Visibility reduction is probably the most apparent symptom of air pollution. Visibility degradation is caused by the absorption and scattering of light by particles and gases in the atmosphere before it reaches the observer. As the number of fine particles increases, more light is absorbed and scattered, resulting in less clarity, color, and visual range. Light absorption by gases and particles is sometimes the cause of discolorations in the atmosphere but usually does not contribute very significantly to visibility degradation. Scattering by particulates impairs visibility much more readily. SDAPCD Rule 50 (Visible Emissions) sets emission limits based on the apparent density or opacity of the emissions using the Ringelmann scale (SDAPCD 1997).

3.1.4.3 Rule 51 (Nuisance)

SDAPCD Rule 51 (Nuisance) states that a person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public or which endanger the comfort, repose, health, or safety of any such persons or the public, or which cause or have a natural tendency to cause injury or damage to business or property. The provisions of the rule do not apply to odors emanating from agricultural operations in the growing of crops or raising of fowls or animals (SDAPCD 1976).

3.1.4.4 Rule 55 (Fugitive Dust Control)

SDAPCD Rule 55 (Fugitive Dust Control) requires action be taken to limit dust from construction and demolition activities from leaving the property line. Similar to Rule 50 (Visible Emissions), Rule 55 (Fugitive Dust Control) places limits on the amount of visible dust emissions in the atmosphere beyond the property line. It further stipulates that visible dust on roadways as a result of track-out/carry-out shall be minimized through implementation of control measures and removed at the conclusion of each workday using street sweepers (SDAPCD 2009).

3.1.4.5 Rule 67.0.1 (Architectural Coatings)

Effective January 1, 2022, SDAPCD Rule 67.0.1 (Architectural Coatings) establishes standards for the VOC content of architectural coatings by coating category. It requires general flat and non-flat coatings (e.g., paint) to have 50 grams per liter (g/L) or less VOC content and traffic marking coatings to have 100 g/L or less VOC content (SDAPCD 2021).

3.1.4.6 Rule 1200 (Toxic Air Contaminants - New Source Review)

Effective February 13, 2025, SDAPCD Rule 1200 (Toxic Air Contaminants - New Source Review) establishes how SDAPCD evaluates and limits health risks from toxic air contaminants emitted by new, modified, or relocated stationary sources. It requires facilities seeking permits to conduct a health risk assessment and install Toxics Best Available Control Technology when necessary to ensure cancer and non-cancer risks stay below SDAPCD-defined thresholds (SDAPCD 2025b).

3.1.5 District

3.1.5.1 District Design Guidelines and Standards Manual

Sustainability & Climate Strategy

Section 1.3, *Sustainability & Climate Strategy*, of the Design Guidelines and Standards Manual includes the Climate Action Plan, Sustainability Plan, Green Policies, and SDCCD Sustainability Levels.

Development of the District's Sustainability Plan included workshops in which feedback provided by students, faculty, and staff was used to identify key themes to guide the development of the goals for the Sustainability Plan. These goals have been incorporated into the District's Green Growth program and shall be considered on future facility improvement projects and include the following related to air quality.

Materials Impact Goal 2. Provide healthy environment that does not abuse material resources and improves health. **Key Performance Indicator:** Maintain optimal CO_2 and VOC levels. Use materials that are low-carbon, recycled, or responsibly sourced.

Design Guides and Standards

Section 2.1 of the District Design Guidelines and Standards Manual outlines general procedures and standards for new construction and building modifications on District campuses. This section specifies that interior finishes on all renovations or new construction on District properties must use composite wood products which meet CARB Phase 2 requirements, and that all adhesives, sealants, paints, and coatings must meet or exceed SCAQMD Rule 1113 VOC content limits. The SCAQMD Rule 1113 limits for building envelope coating (50 g/L) and traffic coatings (100 g/L) are equivalent to the SDAPCD Rule 67.0.1 requirements for general flat and non-flat coatings and traffic marking coatings outlined in Section 3.1.4.1 above).

General Specifications

Section 2.2 of the District Design Guidelines and Standards Manual includes general specifications and product and material data for the construction of District projects. These are expected to be incorporated into the design of future District projects; however, design professionals may work with the District to include modifications to the general specifications via special conditions to meet specific site conditions and/or program needs. Related to air quality, the District standard is for all new equipment to be all-electric and not use natural gas for functions that can instead be served by electric equipment, such as building and water heating. Natural gas may be used in select instances where electric alternatives are not available or would not serve the intended purpose, subject to prior approval by the District Architect.

3.1.6 Local (Non-Regulatory)

While the District is not subject to local zoning regulations or land use planning documents, the campus is located adjacent to properties within the City's jurisdiction and could involve construction work within City rights-of way, which would be subject to the San Diego Municipal Code section below.

3.1.6.1 San Diego Municipal Code

The San Diego Municipal Code addresses the release of air contaminants in Section 142.0710 (Air Contaminant Regulations) which states:

> Air contaminants including smoke, charred paper, dust, soot, grime, carbon, noxious acids, toxic fumes, gases, odors, and particulate matter, or any emissions that endanger human health, cause damage to vegetation or property, or cause soiling, shall not be permitted to emanate beyond the boundaries of the premises upon which the use emitting the contaminants is located.

3.2 GREENHOUSE GASES

3.2.1 Federal

3.2.1.1 Federal Clean Air Act

The U.S. Supreme Court ruled on April 2, 2007, in *Massachusetts v. U.S. Environmental Protection Agency* that CO_2 is an air pollutant, as defined under the federal CAA, and that the USEPA has the authority to regulate emissions of GHGs. The USEPA then established the Endangerment Finding in 2009, concluding that GHGs (including CO_2, CH_4, N_2O, HFC, PFC, and SF_6) threaten the public health and welfare of the American people (USEPA 2026b). This action was a prerequisite to finalizing the USEPA's GHG emissions standards for light-duty vehicles, which were jointly proposed by the USEPA and the U.S. Department of Transportation's National Highway Traffic Safety Administration (NHTSA).

On June 30, 2022, the U.S. Supreme Court decision published in *West Virginia v. U.S. Environmental Protection Agency* overturned the USEPA's Clean Power Plan rule which cited Section 111(d) of the federal CAA for authority to set limits on CO_2 emissions from existing coal- and natural-gas-fired power plants. The June 30, 2022 decision does not overturn the April 2, 2007 decision; however, it may limit the USEPA's authority to develop rules limiting GHG emissions without clear congressional authorization.

On February 12, 2026, the USEPA rescinded the 2009 Endangerment Finding, thus removing the federal obligation to regulate pollutants such as CO_2, CH_4, N_2O, HFC, PFC, and SF_6 that had previously been identified as potential threats to public health and welfare. Litigation remains ongoing; however, the rescission may further restrict the USEPA's ability to implement existing and future regulations limiting GHG emissions. Regardless of these federal regulatory changes, California retains independent authority to establish goals for GHG emissions reduction and regulate GHG emissions from certain sources under state law, as described in Section 3.2.2, below.

3.2.1.2 Light-Duty Vehicle Greenhouse Gas Emissions Standards and Corporate Average Fuel Economy Standards

The USEPA and the NHTSA worked together on developing a national program of regulations to reduce GHG emissions and improve fuel economy of light-duty vehicles. The USEPA established the first-ever national GHG emissions standards under the federal CAA, and the NHTSA established Corporate Average Fuel Economy (CAFE) standards under the Energy Policy and Conservation Act. On April 1, 2010, the USEPA and NHTSA announced a joint Final Rulemaking that established standards for 2012 through 2016 model year vehicles. This was followed up on October 15, 2012, when the agencies issued a Final Rulemaking with standards for model years 2017 through 2025.

In December 2021, USEPA issued a new rule formally adopting standards previously proposed in August 2021 for model years 2023 and 2024 and finalizing more stringent standards than previously proposed for model years 2025 and 2026. The rule assumes a 17 percent electric vehicle (EV) market penetration by 2026. Although this is a departure from the NHTSA CAFE standards, USEPA did coordinate with NHTSA during the development of the new standards. On March 20, 2024, USEPA announced new, more ambitious final standards to further reduce harmful air pollutant emissions from light-duty and medium-duty vehicles starting with model year 2027. The final standards build upon USEPA's final standards for federal GHG emissions standards for passenger cars and light trucks for model years 2023 through 2026 and leverages advances in clean car technology to result in benefits to Americans ranging from reducing climate pollution, to improving public health, to saving drivers money through reduced fuel and maintenance costs. The standards would phase in over model years 2027 through 2032.

3.2.2 State

The statewide GHG emissions regulatory framework is summarized below by category: state climate change targets, renewable energy, and energy procurement, building energy, mobile sources, solid waste, water, and other state regulations and goals. The following text describes executive orders (EOs), legislation, regulations, and other plans and policies that would directly or indirectly reduce GHG emissions and/or address climate change issues.

3.2.2.1 State Climate Change Targets

Executive Order S-3-05

On June 1, 2005, EO S-3-05 proclaimed that California is vulnerable to climate change impacts. It declared that increased temperatures could reduce snowpack in the Sierra Nevada mountain range, further exacerbate California's air quality problems, and potentially cause a rise in sea levels. To avoid or reduce climate change impacts, EO S-3-05 calls for a reduction in GHG emissions to year 2000 levels by 2010, to year 1990 levels by 2020, and to 80 percent below 1990 levels by 2050. EOs are not laws and can only provide the governor's direction to state agencies to act within their authority. Therefore, legislation is required to enact the goals of EO S-3-05 and establish frameworks for statewide implementation. AB 32, described below, mandated the 2020 GHG emissions reduction goal of EO S-3-05. The 2050 GHG emissions reduction goal of EO S-3-05 has not been enacted by any legislation and remains only a goal of the EO.

Assembly Bill 32 – Global Warming Solution Act of 2006

The California Global Warming Solutions Act of 2006 (AB 32 and Health and Safety Code Sections 38500, 38501, 28510, 38530, 38550, 38560, 38561-38565, 38570, 38571, 38574, 38580, 38590, 38592-38599), widely known as AB 32, requires that CARB develop and enforce regulations for the reporting and verification of statewide GHG emissions. CARB is directed to set a GHG emission limit, based on 1990 levels, to be achieved by 2020. The bill requires CARB to adopt rules and regulations in an open public process to achieve the maximum technologically feasible and cost-effective GHG emission reductions. AB 32 enacted the year 2020 GHG emission goals of EO S-3-05.

Executive Order B-30-15

On April 29, 2015, EO B-30-15 established a California GHG emission reduction target of 40 percent below 1990 levels by 2030. The EO aligns California's GHG emission reduction targets with those of leading international governments, including the 28-nation European Union. The emission reduction target of 40 percent below 1990 levels by 2030 will make it possible to reach the goal established by EO S-3-05 of reducing emissions 80 percent under 1990 levels by 2050. Senate Bill (SB) 32, described below, mandates the 2030 GHG emission reduction goals of EO B-30-15.

Senate Bill 32

SB 32 (Amendments to the California Global Warming Solutions Action of 2006) extends 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 continuing efforts to pursue the long-term target expressed in EO B-30-15 of 80 percent below 1990 emissions levels by 2050.

Assembly Bill 1279

Approved by Governor Newsom on September 16, 2022, AB 1279, *The California Climate Crisis Act* declares it the policy of the state to achieve net zero GHG emissions as soon as possible, but no later than 2045, and achieve and maintain net negative GHG emissions thereafter, and to ensure that by 2045, statewide anthropogenic GHG emissions are reduced to at least 85 percent below 1990 levels. AB 1279 anticipates achieving these policies through direct GHG emissions reductions, removal of CO_2 from the atmosphere (carbon capture), and almost complete transition away from fossil fuels.

Senate Bill 905

SB 905, *Carbon sequestration: Carbon Capture, Removal, Utilization, and Storage Program*, also approved by Governor Newsom on September 16, 2022, requires CARB to establish a Carbon Capture, Removal, Utilization, and Storage Program to evaluate the efficacy, safety, and viability of carbon capture, utilization, or storage technologies and CO_2 removal technologies and facilitate the capture and sequestration of CO_2 from those technologies, where appropriate. SB 905 is an integral part of achieving the state policies mandated in AB 1279.

California Air Resources Board Scoping Plan

The Scoping Plan is a strategy CARB develops and updates at least once every five years, as required by AB 32. It lays out the transformations needed across society and the economy to reduce emissions and reach established climate targets. The current 2022 Scoping Plan is the third update to the original plan that was adopted in 2008. The initial 2008 Scoping Plan laid out a path to achieve the AB 32 mandate of returning to 1990 levels of GHG emissions by 2020, a reduction of approximately 15 percent below a business as usual scenario. The 2008 Scoping Plan included a mix of incentives, regulations, and carbon pricing, laying out the portfolio approach to addressing climate change and clearly making the case for using multiple tools to meet California's GHG emissions targets. The 2013 Scoping Plan assessed progress toward achieving the 2020 mandate and made the case for addressing short-lived climate pollutants. The 2017 Scoping Plan also assessed the progress toward achieving the 2020 limit and provided a technologically feasible and cost-effective path to achieving the SB 32 mandate of reducing GHGs by at least 40 percent below 1990 levels by 2030.

On December 15, 2022, CARB approved the 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan). The 2022 Scoping Plan lays out a path to achieve targets for carbon neutrality and reduce anthropogenic GHG emissions by 85 percent below 1990 levels no later than 2045, as directed by AB 1279. The actions and outcomes in the plan would achieve significant reductions in fossil fuel combustion by deploying clean technologies and fuels; further reductions in short-lived climate pollutants; support for sustainable development; increased action on natural and working lands to reduce emissions and sequester carbon; and the capture and storage of carbon (CARB 2022).

3.2.2.2 Renewable Energy and Energy Procurement

Senate Bill 1078

SB 1078 (Sher) (September 2002) established the Renewable Portfolio Standard (RPS) program, which required an annual increase in renewable energy generation by the utilities equivalent to at least 1 percent of sales, with an aggregate goal of 20 percent by 2017. This goal was subsequently revised as described below.

Senate Bill 1368

SB 1368 (September 2006) required the California Energy Commission (CEC) to develop and adopt regulations for GHG emission performance standards for the long-term procurement of electricity by local, publicly owned utilities. These standards must be consistent with the standards adopted by the California Public Utilities Commission.

Executive Order S-14-08

EO S-14-08 (November 2008) focused on the contribution of renewable energy sources to meet the electrical needs of California while reducing the GHG emissions from the electrical sector. This EO required that all retail suppliers of electricity in California serve 33 percent of their load with renewable energy by 2020. Furthermore, the EO directed state agencies to take appropriate actions to facilitate reaching this target. The California Natural Resources Agency (CNRA), through collaboration with the CEC and California Department of Fish and Wildlife (formerly the California Department of Fish and Game), was directed to lead this effort.

Executive Order S-21-09 and Senate Bill X1-2

EO S-21-09 (September 2009) directed CARB to adopt a regulation consistent with the goal of EO S-14-08 by July 31, 2010. CARB was further directed to work with the California Public Utilities Commission and CEC to ensure that the regulation builds upon the RPS program and was applicable to investor-owned utilities, publicly owned utilities, direct access providers, and community choice providers. Under this order, CARB was to give the highest priority to those renewable resources that provide the greatest environmental benefits with the least environmental costs or impacts on public health and can be developed the most quickly in support of reliable, efficient, cost-effective electricity system operations. On September 23, 2010, CARB initially approved regulations to implement a Renewable Electricity Standard. However, this regulation was not finalized because of subsequent legislation (SB X1-2, Simitian, statutes of 2011) signed by Governor Brown in April 2011.

SB X1-2 expanded the RPS by establishing a renewable energy target for the total electricity sold to retail customers in California per year of 20 percent by December 31, 2013, and 33 percent by December 31, 2020, and in subsequent years. Under the bill, a renewable electrical generation facility is one that uses biomass, solar thermal, photovoltaic, wind, geothermal, fuel cells using renewable fuels, small hydroelectric generation (30 megawatts or less), digester gas, municipal solid waste conversion, landfill gas, ocean wave, ocean thermal, or tidal current, and that meets other specified requirements with respect to its location.

SB X1-2 applies to all electricity retailers in the state, including publicly owned utilities, investor-owned utilities, electricity service providers, and community choice aggregators. All of these entities must meet the renewable energy goals previously listed.

Senate Bill 350

SB 350 (October 2015, Clean Energy and Pollution Reduction Act) further expanded the RPS by establishing a goal of 50 percent of the total electricity sold to retail customers in California per year being from renewable sources by December 31, 2030. In addition, SB 350 included the goal to double the energy efficiency savings in electricity and natural gas final end uses (e.g., heating, cooling, lighting, or class of energy uses on which an energy-efficiency program is focused) of retail customers through energy conservation and efficiency. The bill also requires the California Public Utilities Commission, in consultation with the CEC, to establish efficiency targets for electrical and gas corporations consistent with this goal. Regarding mobile sources, SB 350 establishes California Public Utilities Code Section 740.12, which involves a statewide policy for widespread electrification of the transportation sector, recognizing that such electrification is required for the achievement of the state's 2030 and 2050 GHG emission reduction targets.

Senate Bill 100

SB 100 (2018) increased the renewable energy standards set forth in SB 350, establishing that of the total electricity sold to retail customers in California per year, 44 percent by December 31, 2024, 52 percent by December 31, 2027, and 60 percent by December 31, 2030, be secured from qualifying renewable energy sources. SB 100 states that it is the policy of the state that eligible renewable energy resources and zero-carbon resources supply 100 percent of the retail sales of electricity to California by 2045. This bill also requires that the achievement of 100 percent zero-carbon electricity resources does not increase carbon emissions elsewhere in the western grid and that the achievement does not occur through resource shuffling.

Senate Bill 1020

SB 1020 (September 2022) revises the standards from SB 100, requiring the following percentage of retail sales of electricity to California end-use customers to come from eligible renewable energy resources and zero-carbon resources: 90 percent by December 31, 2035; 95 percent by December 31, 2040; and 100 percent by December 31, 2045.

3.2.2.3 Building Energy

California Energy Code

CCR Title 24, Part 6 regulations, California's Energy Efficiency Standards for Residential and Non-residential Buildings, were first established in 1978 in response to a legislative mandate to reduce California's energy consumption. Energy-efficient buildings require less electricity, natural gas, and other fuels. Electricity production from fossil fuels and on-site fuel combustion (typically for space or water heating) results in GHG emissions. The Title 24 standards are updated approximately every three years to allow consideration and possible incorporation of new energy efficiency technologies and methods. The Building Energy Efficiency Standards focus on several key areas to improve the energy efficiency of newly constructed buildings and additions and alterations to existing buildings. These include standards for on-site PV (solar panels) and battery storage systems, electric-ready requirements, indoor air quality requirements, and requirements for EV charging (CEC 2025).

The standards are divided into three basic sets. First, there is a basic set of mandatory requirements that apply to all buildings. Second, there is a set of performance standards—the energy budgets—that vary by climate zone (of which there are 16 in California) and building type; thus, the standards are tailored to local conditions. Finally, the third set constitutes an alternative to the performance standards, which is a set of prescriptive packages that are basically a recipe or a checklist compliance approach.

California Green Building Standards Code

The California Green (CalGREEN) Building Standards Code (CCR Title 24, Part 11) is a code with mandatory requirements for all non-residential buildings (including industrial buildings) and residential buildings for which no other state agency has the authority to adopt green building standards. CALGreen also contains voluntary measures (i.e., Tier 1, Tier 2) that exceed minimum regulatory requirements. As is the case for the California Energy Code, CALGreen is updated every three years.

The development of CALGreen is intended to (1) cause a reduction in GHG emissions from buildings; (2) promote environmentally responsible, cost-effective, healthier places to live and work; (3) reduce energy and water consumption; and (4) respond to the directives by the Governor. In short, the code is established to reduce construction waste; make buildings more efficient in the use of materials and energy; and reduce environmental impact during and after construction.

CALGreen contains requirements for storm water control during construction, construction waste reduction, indoor water use reduction, material selection, natural resource conservation, site irrigation conservation, and more. The code provides for design options allowing the designer to determine how best to achieve compliance for a given site or building condition. The code also requires building commissioning, which is a process for the verification that all building systems, like heating and cooling equipment and lighting systems, are functioning at their maximum efficiency.

Assembly Bill 1109

Enacted in 2007, AB 1109 required the CEC to adopt minimum energy efficiency standards for general purpose lighting in order to reduce electricity consumption by 50 percent for indoor residential lighting and 25 percent for indoor commercial lighting.

3.2.2.4 Mobile Sources

Assembly Bill 1493 and Advanced Clean Cars

AB 1493 (Pavley) requires that CARB develop and adopt regulations that achieve "the maximum feasible reduction of GHGs emitted by passenger vehicles and light-duty truck and other vehicles determined by CARB to be vehicles whose primary use is noncommercial personal transportation in the State." On September 24, 2009, CARB adopted amendments to the Pavley regulations that intended to reduce GHG emissions in new passenger vehicles from 2009 through 2016. The amendments bind California's enforcement of AB 1493 (starting in 2009), while providing vehicle manufacturers with new compliance flexibility. The amendments also prepared California to merge its rules with the federal CAFE rules for passenger vehicles (CARB 2026e).

In January 2012, CARB approved Advanced Clean Cars I, a new emissions-control program for model years 2017 through 2025 including low emissions vehicle and zero-emissions vehicle criteria. The Advanced Clean Cars II regulations were adopted in 2022, imposing the next level of low-emission and zero-emission vehicle standards for model years 2026 through 2035 that contribute to meeting federal ambient air quality ozone standards and California's carbon neutrality targets.

On May 22, 2025, the U.S. Congress voted to eliminate the USEPA waivers for California's Advanced Clean Trucks and Heavy-Duty Omnibus regulations. Similarly, on June 12, 2025, President Donald Trump signed a Congressional Review Act resolution to revoke CARB's waivers for Advanced Clean Cars II. Immediately after President Trump signed the resolutions, California's Attorney General Rob Bonta, along with Governor Gavin Newsom and a coalition of 10 other states, sued the Trump administration. The lawsuit is still pending. Governor Newsom also signed EO N-27-25, calling on CARB to develop an Advanced Clean Cars III regulation if the federal disapproval of the Advanced Clean Cars II, Advanced Clean Trucks, and Heavy-Duty Omnibus regulations is not invalidated in court.

Executive Order S-01-07

EO S-01-07, signed by Governor Schwarzenegger on January 18, 2007, directed that a statewide goal be established to reduce the carbon intensity of California's transportation fuels by at least 10 percent by the year 2020. It ordered a Low Carbon Fuel Standard (LCFS) for transportation fuels to be established for California and directed CARB to determine whether a LCFS could be adopted as a discrete early action measure pursuant to AB 32. CARB approved the LCFS as a discrete early action item with a regulation adopted and implemented in April 2010. Although challenged in 2011, the Ninth Circuit Court of Appeals reversed the District Court's opinion and rejected arguments that implementing a LCFS violates the interstate commerce clause in September 2013. CARB, therefore, is continuing to implement the LCFS statewide.

Senate Bill 375

SB 375, the Sustainable Communities and Climate Protection Act of 2008, supports the state's climate action goals to reduce GHG emissions through coordinated transportation and land use planning with the goal of more sustainable communities. Under the Sustainable Communities Act, CARB sets regional targets for GHG emissions reductions from passenger vehicle use. In 2010, CARB established these targets for 2020 and 2035 for each region covered by one of the state's metropolitan planning organizations (MPOs). CARB periodically reviews and updates the targets, as needed.

Each of California's MPOs must prepare a Sustainable Communities Strategy (SCS) as an integral part of its regional transportation plan (RTP). The SCS contains land use, housing, and transportation strategies that, if implemented, would allow the region to meet its GHG emission reduction targets. Once adopted by the MPO, the RTP/SCS guides the transportation policies and investments for the region. CARB must review the adopted SCS to confirm and accept the MPO's determination that the SCS, if implemented, would meet the regional GHG targets. If the combination of measures in the SCS would not meet the regional targets, the MPO must prepare a separate alternative planning strategy to meet the targets. The alternative planning strategy is not a part of the RTP. Qualified projects consistent with an approved SCS or alternative planning strategy categorized as "transit priority projects" receive incentives to streamline CEQA processing.

Executive Order N-79-20

EO N-79-20, signed by Governor Newsom on September 23, 2020, establishes three goals for the implementation of zero emissions vehicles in California: first, 100 percent of in-state sales of new passenger cars and trucks will be zero-emissions by 2035; second, 100 percent of medium- and heavy-duty vehicles in the state will be zero-emissions vehicles by 2045 for all operations where feasible, and by 2035 for drayage trucks; and third, 100 percent of off-road vehicles and equipment will be zero emissions by 2035 where feasible.

3.2.2.5 Solid Waste

Assembly Bill 939

In 1989, AB 939, known as the Integrated Waste Management Act (California PRC Sections 40000 et seq.), was passed because of the increase in waste stream and the decrease in landfill capacity. The statute established the California Integrated Waste Management Board to oversee a disposal reporting system. AB 939 mandated a reduction of waste being disposed where jurisdictions were required to meet diversion goals of 25 percent by 1995 and 50 percent by the year 2000 for all solid waste through source reduction, recycling, and composting activities.

Assembly Bill 341

The state legislature enacted AB 341 (California PRC Section 42649.2), amending the Integrated Waste Management Act to include a provision declaring that it is the policy goal of the state that no less than 75 percent of solid waste generated be source-reduced, recycled, or composted by the year 2020, and annually thereafter. In addition, AB 341 required the California Department of Resources Recycling and Recovery (CalRecycle) to develop strategies to achieve the state's policy goal. CalRecycle conducted several general stakeholder workshops and several focused workshops. In August 2015, CalRecycle published a discussion document titled *AB 341 Report to the Legislature*, which identified five priority

strategies that CalRecycle believed would assist the state in reaching the 75 percent goal by 2020, legislative and regulatory recommendations, and an evaluation of program effectiveness (CalRecycle 2019).

Assembly Bill 1826

AB 1826 (Chapter 727, Statutes of 2014, effective 2016) requires businesses to recycle their organic waste (i.e., food waste, green waste, landscape, and pruning waste, nonhazardous wood waste, and food-soiled paper waste that is mixed in with food waste) depending on the amount of waste they generate per week. This law also requires local jurisdictions across the state to implement an organic waste recycling program to divert organic waste generated by businesses, including multifamily residential dwellings that consist of five or more units. The minimum threshold of organic waste generation by businesses decreases over time, which means an increasingly greater proportion of the commercial sector will be required to comply.

Senate Bill 1383

SB 1383 (Chapter 395, Statutes of 2016) established targets to achieve a 50 percent reduction in the statewide disposal of organic waste from the 2014 level by 2020 and a 75 percent reduction from the 2014 level by 2025. CalRecycle was granted the regulatory authority required to achieve the organic waste disposal reduction targets and established an additional target that not less than 20 percent of currently disposed edible food is recovered for human consumption by 2025 (CalRecycle 2019).

3.2.2.6 Water

Executive Order B-29-15

In response to an ongoing drought in California, EO B-29-15 (April 2015) set a goal of achieving a statewide reduction in potable urban water usage of 25 percent relative to water use in 2013. The term of the EO extended through February 28, 2016, although many of the directives have become permanent water-efficiency standards and requirements. The EO includes specific directives that set strict limits on water usage in the state. In response to EO B-29-15, the California Department of Water Resources modified and adopted a revised version of the Model Water Efficient Landscape Ordinance that, among other changes, significantly increased the requirements for landscape water use efficiency and broadened its applicability to include new development projects with smaller landscape areas.

Executive Order B-37-16

Issued in May 2016, EO B-37-16 directed the State Water Resources Control Board (SWRCB) to adjust emergency water conservation regulations through the end of January 2017 to reflect differing water supply conditions across the state. The SWRCB also developed a proposal to achieve a mandatory reduction of potable urban water usage that built off the mandatory 25 percent reduction called for in EO B-29-15. The SWRCB and Department of Water Resources were required to develop new, permanent water use targets that built upon the existing state law requirements to achieve 20 percent reduction in urban water usage by 2020. EO B-37-16 also specifies that the SWRCB permanently prohibit water-wasting practices such as hosing off sidewalks, driveways, and other hardscapes; washing automobiles with hoses not equipped with a shut-off nozzle; using non-recirculated water in a fountain or other decorative water feature; watering lawns in a manner that causes runoff, or within 48 hours after measurable precipitation; and irrigating ornamental turf on public street medians.

Executive Order N-10-21

In response to a state of emergency due to severe drought conditions, EO N-10-21 (July 2021) called on all Californians to voluntarily reduce their water use by 15 percent from their 2020 levels. Actions suggested in EO N-10-21 include reducing landscape irrigation, running dishwashers and washing machines only when full, finding and fixing leaks, installing water-efficient showerheads, taking shorter showers, using a shut-off nozzle on hoses, and taking cars to commercial car washes that use recycled water.

3.2.2.7 Other State Actions

Senate Bill 97

SB 97 (Dutton) (August 2007) directed the Governor's Office of Planning and Research (now named the Governor's Office of Land Use & Climate Innovation) to develop guidelines under CEQA for the mitigation of GHG emissions. In 2008, the Governor's Office of Planning and Research issued a technical advisory as interim guidance regarding the analysis of GHG emissions in CEQA documents. The advisory indicated that the lead agency should identify and estimate a project's GHG emissions, including those associated with vehicular traffic, energy consumption, water usage, and construction activities (Governor's Office of Planning and Research 2008). The advisory further recommended that the lead agency determine the significance of the impacts and impose all mitigation measures necessary to reduce GHG emissions to a level that is less than significant. The CNRA adopted the CEQA Guidelines amendments in December 2009, which became effective in March 2010.

Under the amended CEQA Guidelines, a lead agency has the discretion to determine whether to use a quantitative or qualitative analysis or apply performance standards to determine the significance of GHG emissions resulting from a particular project (14 CCR 15064.4[a]). The CEQA Guidelines require a lead agency to consider the extent to which a project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions (14 CCR 15064.4[b]). The CEQA Guidelines also allow a lead agency to consider feasible means of mitigating the significant effects of GHG emissions, including reductions in emissions through the implementation of project features or off-site measures. The adopted amendments do not establish a GHG emission threshold, instead allowing a lead agency to develop, adopt, and apply its own thresholds of significance or those developed by other agencies or experts. The CNRA also acknowledges that a lead agency may consider compliance with regulations or requirements implementing AB 32 in determining the significance of a project's GHG emissions (CNRA 2009).

With respect to GHG emissions, the CEQA Guidelines state in Section 15064.4(a) that lead agencies should "make a good faith effort, to the extent possible on scientific and factual data, to describe, calculate or estimate" GHG emissions. The CEQA Guidelines note that an agency may identify emissions by either selecting a "model or methodology" to quantify the emissions or by relying on "qualitative analysis or other performance-based standards" (14 CCR 15064.4[a]). Section 15064.4(b) states that the lead agency should consider the following when assessing the significance of impacts from GHG emissions on the environment: (1) the extent a project may increase or reduce GHG emissions as compared to the existing environmental setting; (2) whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project; and (3) the extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions (14 CCR 15064.4[b]).

3.2.3 Regional

3.2.3.1 San Diego Association of Government's Regional Plan

SANDAG's 2025 Regional Plan (Regional Plan; SANDAG 2025) is the currently approved long-range planning document developed to address the region's housing, economic, transportation, environmental, and overall quality-of-life needs. The purpose of the Regional Plan is to provide direction and guidance on future regional growth (i.e., the location of new residential and non-residential land uses) and transportation patterns throughout the region. The Regional Plan is a 30-year plan that considers how the community will grow, where residents will live, and how residents and visitors will move around the region. It combines the RTP, SCS, and Regional Comprehensive Plan. As such, the Regional Plan must comply with specific state and federal mandates. These include an SCS, per SB 375, that achieves GHG emissions reduction targets set by CARB; compliance with federal civil rights requirements (Title VI); environmental justice considerations; air quality conformity; and public participation.

3.2.4 District

3.2.4.1 California Community Colleges Board of Governors Climate Action and Sustainability Framework

The California Community Colleges Board of Governors' Climate Action and Sustainability Framework (California Community Colleges 2025) is a comprehensive systemwide plan that builds on the 2019 Climate Change and Sustainability Policy to guide all 116 colleges in the California Community Colleges system toward measurable environmental, social, and educational progress. It calls on community college districts throughout the state to set benchmarks and track their advancement toward 2025, 2030, and 2035 goals. The framework focuses on reducing GHG emissions, integrating sustainability into campus operations, and expanding climate-focused curriculum and workforce development.

3.2.4.2 San Diego Community College District Climate Action Plan

The District's 2023 Climate Action Plan (District CAP; District 2023) establishes a 2022 District GHG inventory, which determined that the District's carbon footprint was 62,325 MT CO_2e per year. The main source of these emissions was commuter mobile sources (commuter trips to campus by staff, faculty, and students), which accounted for 73.35 percent of the District's GHG emissions. This was followed by lesser emissions associated with natural gas used in fuel cells, natural gas used for space and water heating, and purchased electricity. The District CAP additionally includes various recommendations for next steps but does not make commitments regarding GHG emission reductions or specific implementation actions. In accordance with CEQA Guidelines Section 15183.5, the District CAP is not a CEQA-qualified CAP and therefore cannot be used for streamlining GHG analyses for future District development projects.

3.2.4.3 District Design Guidelines and Standards Manual

Sustainability & Climate Strategy

As discussed further under Section 3.1.5.1 above, Section 1.3, *Sustainability & Climate Strategy*, of the District Design Guidelines and Standards Manual includes the Climate Action Plan, Sustainability Plan, Green Policies, and Sustainability Levels. Related to GHG emissions, this includes Materials Impact Goal

2, which outlines the District goal of providing a healthy environment that does not abuse material resources and improves health, with a key performance indicator of maintaining optimal CO_2 levels through the use of materials that are low-carbon, recycled, or responsibly sourced. The Sustainability Levels framework included in this section is further described below.

Sustainability Levels

The District's Sustainability Levels are designed to recognize, measure, and promote sustainable practices across District campuses and facilities. They provide a tiered rating system that encourages environmentally responsible design, construction, and operations. All District capital projects, including new construction, major renovations, and modernization, are required to incorporate the principles outlined in the District Sustainability Levels and meet applicable local, state, and District-adopted sustainability policies. District-adopted sustainability standards include the following:

1. Each campus shall facilitate and maintain an ongoing waste recycling program that establishes where facilities on campus will handle recycled materials including paper, cardboard, glass, plastics, and metal.
2. Renewable woods shall be specified and detailed.
3. The designer shall specify the Carpet and Rug Institute's Green Label Plus Program. All carpet cushion installed in the building shall have low emitting materials and backing.
4. The District's Facilities Services have adopted a program of Green cleaning materials and techniques.

The District's Sustainability Levels include categories with specific requirements that each have an assigned point value. The categories include project design, climate resilience, energy and carbon performance, water conservation and management, materials and waste, indoor environmental quality and wellness, community engagement and learning, and innovation. A scorecard is filled out based on the requirements the project achieves, which determines the sustainability level for the project from the following:

- Baseline/Sagebrush (Baseline Sustainability) – Meets the District's minimum sustainability standards, with basic energy and water conservation measures.
- Certified/Coast Live Oak (Sustainable Performance) – Demonstrates significant sustainable strategies.
- Silver/Torrey Pine (High-Performance Green Building) – Meets advanced sustainable quality benchmarks.
- Gold/Redwood (Leadership in Sustainability) – Implements innovative sustainability strategies.
- Platinum/Sequoia (Exemplar of Sustainability) – Sets model for sustainable education facilities.

All final programming documents must contain a section related to sustainability. The conceptual design for new building projects must have sustainable features that achieve the Certified/Coastal Live Oak level at a minimum. Conceptual design schemes for major renovation projects should have sustainable features and may be required to achieve a Certified/Coastal Live Oak level; however, this is determined on a case-by-case basis based on the feasibility of incorporating such features into a renovation project.

3.2.4.4 District Board Policies and Administrative Procedures

Board Policy 6970: Green Building Policy and Major Renovation Standards. The Board of Trustees has established a Green Building Policy and Major Renovation Standards to provide District students, faculty and staff with working and learning environments that are healthy, thermally, visually and acoustically comfortable; energy efficient; material efficient; water efficient; easy to maintain and operate; safe and secure and sited in an environmentally responsible manner. In accordance with this Board Policy, the District will select architects, engineers and other professionals who have demonstrated expertise in sustainable design and are Leadership in Energy and Environmental Design (LEED) accredited as deemed appropriate as well as encourage District personnel to become familiar with these standards.

Administrative Procedure 6970: Green Buildings. The purpose of this procedure is to provide guidance for implementing District policies and standards for the design and construction of green buildings and renovations. Efficient energy use and efficiently designed buildings are central to resource sustainability efforts of the District, City, and state. Energy conservation in building design (1) reduces the operating costs of the District, (2) reduces the carbon footprint of the District, and (3) provides environmental education. This Administrative Procedure goes on to outline criteria for new buildings including, but not limited to, outperforming Title 24 energy efficiency standards by at least 20 percent, striving to achieve a Leadership in Energy and Environmental Design for New Construction (LEED-NC) gold rating, and requiring that at least 5 percent of a project's total energy is generated on site from renewable sources.

3.2.5 Local (Non-Regulatory)

The District is not subject to local zoning or land use planning documents, including the City of San Diego's 2022 CAP and associated implementing regulations. However, as the Mesa College campus is within the City, a summary of the City's CAP strategy is provided below for informational purposes.

3.2.5.1 City of San Diego Climate Action Plan

On August 2, 2022, the San Diego City Council adopted the 2022 CAP update to establish a community-wide goal and roadmap to net-zero emissions by 2035. The 2022 CAP includes the following six strategies: decarbonization of the built environment, access to clean and renewable energy, mobility and land use, circular economy and clean communities, resilient infrastructure and healthy ecosystems, and emerging climate actions (City 2022a). The City is in the process of preparing a Climate Action Plan Update to maintain alignment with state targets and goals for reducing emissions, which is anticipated to be complete in 2027.

As proposed in the 2022 CAP, in October 2022, the City Council approved an amendment to the Land Development Code (San Diego Municipal Code Chapter 14, Article 3, Division 14), which established the CAP Consistency Regulations. The CAP Consistency Regulations replaced the CAP Consistency Checklist previously established by the City's 2015 CAP as the measures that could be implemented on a project-by-project basis to streamline evaluation of GHG emissions under CEQA pursuant to CEQA Guidelines Section 15183.5(b)(1)(D). Implementation of these measures would ensure that new development projects are consistent with relevant CAP strategies that work toward achieving the identified GHG reduction targets. Projects that are consistent with the CAP as determined through compliance with the CAP Consistency Regulations may rely on the CAP for the cumulative impact analysis of GHG emissions.

4.0 METHODOLOGY AND SIGNIFICANCE CRITERIA

4.1 METHODOLOGY

Criteria pollutant and precursor emissions and GHG emissions were calculated using CalEEMod, Version 2022.1. CalEEMod is a computer model used to estimate emissions resulting from land development projects throughout California. CalEEMod was developed by the California Air Pollution Control Officers Association (CAPCOA) in collaboration with California air quality management and pollution control districts. The calculation methodology, source of emission factors used, and default data are described in the CalEEMod User's Guide Appendices C, D, and G (CAPCOA 2022).

In brief, CalEEMod is a computer model that estimates criteria air pollutant and GHG emissions from mobile (i.e., vehicular) sources, area sources (fireplaces, woodstoves, and landscape maintenance equipment), energy use (electricity and natural gas used in space heating, ventilation, and cooling; lighting; and plug-in appliances), water use and wastewater generation, solid waste disposal, and stationary sources. In various places, the user can input additional information and/or override the default assumptions to account for project- or location-specific parameters. For the assessment of air quality impacts, the inputs focus on mobile, area, energy (natural gas), and stationary sources, while the quantification of GHG emissions also incorporates inputs related to electricity use, water use and wastewater generation, solid waste disposal, and refrigerants. Default parameters were not changed unless otherwise noted below.

4.1.1 Construction Emissions

As described above, construction emissions are assessed using CalEEMod, Version 2022.1. The CalEEMod output files for construction of each of the near-term projects (Athletics Complex and the Performing Arts and Administration Center and Parking Structure projects) are included in Appendix B, *Near-Term CMP Construction CalEEMod Output*.

CalEEMod contains OFFROAD2011 and EMFAC2021 emission factors from CARB's models for off-road equipment and on-road vehicles, respectively. In response to the Public Laws passed in June 2025 as discussed in Section 3.1.3, CARB developed off-model adjustment factors that remove the estimated emissions benefits attributed to California's Advanced Clean Trucks, Zero-Emission Airport Shuttle, Heavy-Duty Vehicle and Engine Emission Warranty and Maintenance Provisions, and Heavy-Duty Omnibus regulations from EMFAC2021, which were approved by the USEPA in November 2025. The default on-road emissions factors utilized in CalEEMod do include the emissions benefits attributed to the prior regulations listed above. The benefits and adjustment factors would only apply to the emissions associated with truck trips during construction. As the majority (approximately 78 percent) of construction vehicle trips are not truck trips, application of the adjustment factors would yield resulting emissions that vary from those estimated herein by less than 0.1 percent. Therefore, the Public Laws would have a negligible effect on calculated mobile source construction emissions.

The construction analysis included modeling of the projected construction equipment that would be used during each construction phase. Construction input data for CalEEMod include, but are not limited to, (1) the anticipated start and finish dates of construction activity; (2) inventories of construction

equipment to be used; (3) areas to be excavated and graded; and (4) volumes of materials to be exported from and imported to the project area. The analysis assessed maximum daily emissions from individual construction activities associated with implementation of the near-term projects, which are each expected to include demolition, site preparation, grading, utility undergrounding, building construction, architectural coating, and paving. The District anticipates that grading would be balanced on-site for future projects, and as such the model did not include import or export during construction. The models additionally included the approximate building square footage which would be demolished. Based on these inputs, the model calculates emissions of CO, PM_{10}, $PM_{2.5}$, SO_2, and the ozone precursors VOC and NO_X.

The quantity, duration, and intensity of construction activity influence the amount of construction emissions and related pollutant concentrations that occur at any one time. As such, the emission forecasts provided herein reflect a specific set of conservative assumptions based on the expected construction scenario wherein a relatively large amount of construction activity is occurring in a relatively intensive manner. Because of this conservative assumption, actual emissions could be less than those forecasted. If construction is delayed or occurs over a longer period, emissions could be reduced because of: (1) a more modern and cleaner-burning construction equipment fleet mix than assumed in CalEEMod; and/or (2) a less intensive buildout schedule (i.e., fewer daily emissions occurring over a longer time interval).

4.1.1.1 Construction Activities

Construction emissions were estimated based on the overall construction timeline provided by the District Architect for each of the near-term projects. The length of individual construction phases relied on CalEEMod defaults which were then proportionally scaled to the overall construction timelines. See Appendix B the assumed construction schedules for the near-term projects.

CalEEMod has the capability to calculate reductions in construction emissions from the effects of dust control, diesel-engine classifications, and other selected emissions reduction measures. In compliance with SDAPCD Rule 55, fugitive dust emission calculations assume application of water on exposed surfaces a minimum of two times per day. Based on CalEEMod defaults, the dust control efficiency for material movement from watering two times per day is 61 percent, and the dust control efficiency for demolition from watering two times per day is 36 percent.

4.1.1.2 Construction Off-Road Equipment

Construction would require the use of heavy off-road equipment throughout the full term of construction. Construction equipment estimates for the project were all based on default values in CalEEMod, except for the utilities undergrounding phases in which one dozer and one excavator were manually added to the model.

4.1.1.3 Construction On-Road Trips

Worker commute trips and vendor delivery trips were modeled based on CalEEMod defaults. Default vendor trips are not included for demolition, grading, paving, and site preparation phases. As such, vendor trips were added to each of these phases as applicable based on the Proposed Construction Activity Default Updates Memorandum prepared by Ramboll (2023). For the demolition phases of each of the near-term projects, hauling trips were modeled based on CalEEMod default values for the size of

the buildings which would be demolished during implementation of the near-term projects. CalEEMod default worker, vendor, and haul trip distances and fleet mixed were used in the model.

4.1.1.4 Construction Architectural Coatings

Architectural coatings applied during construction were assumed to be building interior and exterior coatings and parking coatings according to CalEEMod defaults for the proposed building and parking areas. Per CalEEMod defaults for the County, all interior and exterior building coatings would have a maximum VOC content of 50 g/L, and all parking area coatings would have a maximum VOC content of 100 g/L. These VOC content assumptions are consistent with the SDAPCD Rule 67.0.1 VOC limits discussed in Section 3.1.4.

4.1.2 Operational Emissions

Operational emissions associated with the buildout of the CMP were estimated using CalEEMod. The CalEEMod output files for the full buildout of the CMP are included in Appendix C, *CMP Full Buildout CalEEMod Output.* Operational sources of emissions include mobile (on-road vehicles), area, energy, water/wastewater, solid waste, refrigerant, and stationary. The CMP would not include the addition of emergency generators but could include the installation of a linear generator to address electrical utility load reduction. The methodology for each of the sources is discussed below.

4.1.2.1 Vehicular (Mobile) Sources

Operational emissions from mobile sources are associated with project-related vehicle trip generation and trip length. According to the Local Mobility Analysis, the campus trip rate would be 1.15 ADT per student (LLG 2026). This trip rate was applied to the projected 2045 Mesa College on-campus enrollment of 15,358 students, resulting in an estimate of 17,662 ADT for buildout conditions. CalEEMod default vehicle speeds, trip purposes, and trip distances were applied to the trips associated with growth in on-campus enrollment.

EMFAC2021 emission factors from CARB's models for on-road vehicles are incorporated in CalEEMod by default and were used in the model for the project. To account for the Public Laws discussed in Section 3.1.3 and 4.1.1, the 2045 adjustment factors published by CARB were applied to the on-road vehicle (mobile source) exhaust emissions. To apply these adjustment factors to the CalEEMod output data, a weighted adjustment factor was calculated for each pollutant or GHG based on the fleet mix and CARB adjustment factors for each vehicle type. These weighted adjustment factors were then applied to the exhaust portion of the maximum daily mobile source emissions calculated in CalEEMod for each respective pollutant or GHG.

4.1.2.2 Area Sources

Area sources include emissions from landscaping equipment, the use of consumer products, the reapplication of architectural coatings for maintenance in accordance with SDAPCD Rule 67.0.1, and hearths. The landscaped area associated with Mesa College campus was assumed to be approximately 20 percent of the total campus acreage. Projects implemented under the CMP would not include any natural gas fireplaces, wood fireplaces, or wood stoves. Accordingly, the number of hearths was set to zero in CalEEMod. Emissions associated with all other area sources were estimated using the CalEEMod default values.

4.1.2.3 Energy Sources

Projects implemented under the CMP would use energy for lighting, heating, and cooling, among other building functions. Direct emissions from the burning of natural gas typically result from furnaces, hot water heaters, and cooking appliances. A portion of electricity generation typically entails the combustion of fossil fuels, including natural gas and coal, which occurs at the power plant(s). A building's electricity use is thus associated with off-site or indirect emissions at the source of electricity generation, and these emissions are not included in the analysis of a land use development project's local or regional air quality impacts but do not contribute to GHG emissions.

To calculate the electricity and natural gas that would be consumed upon buildout of the CMP, energy consumption rates per square foot were calculated based on District energy bills for the period from March 2024 to February 2025. In accordance with District policies, future buildings constructed as part of the project would typically be all-electric (would not use natural gas). Therefore, the natural gas use per square foot for the newly proposed buildings was converted to the equivalent energy in electricity based on the methods described in CAPCOA's Handbook for Analyzing GHG Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity for measure E-15, Require All-Electric Development (CAPCOA 2024) and added to the future electricity use that was calculated using the District energy consumption rates. The existing buildings which would remain under the CMP were assumed to consume electricity and natural gas at the rates calculated for existing conditions.

4.1.2.4 Water and Wastewater Sources

Water-related GHG emissions are from the conveyance and treatment of water and wastewater. To calculate the water and wastewater that would be used upon buildout of the CMP, water consumption rates per square foot were calculated based on District water bills for the period from October 2024 to September 2025. As these bills did not specify indoor and outdoor water use, these water and wastewater amounts were then separated out in the model based on the default ratios of indoor-to-outdoor water use within CalEEMod for the community college land use type in CalEEMod (Junior College [2yr]).

4.1.2.5 Solid Waste Sources

The disposal of solid waste produces GHG emissions from anaerobic decomposition in landfills, incineration, and transportation of waste. Portions of these emissions are biogenic. CalEEMod methods for quantifying GHG emissions from solid waste are based on the IPCC method using the degradable organic content of waste. Solid waste emission were modeled using CalEEMod default waste generation rates.

4.1.2.6 Refrigerants

CalEEMod calculates GHG emissions associated with refrigerants (typically HFCs or blends of gases containing HFCs), which are emitted through leakage or maintenance from project refrigeration systems, freezers, and air conditioning systems. Refrigerant emissions were calculated using CalEEMod defaults.

4.1.2.7 Stationary Sources

No change to existing emergency generators is planned in the CMP; therefore, these source types are not analyzed further. However, a linear generator intended to address electrical utility load reduction could be installed. Linear generators are devices that convert linear mechanical motion into electrical energy. The core mechanism involves the relative motion between a magnetic field and a conductor (usually a coil) to induce an electrical current. Following the trial of a linear generator system at City College, the addition of a similar linear generator system is also anticipated at Mesa College, though the specific location of this linear generator is not known at this time. The linear generator would provide peak load flexibility and therefore would have an irregular operation schedule. Generators are typically permitted by SDAPCD for 50 hours per year for maintenance and testing and 200 total operational hours per year. Therefore, the model included the operation of a generator for 8 hours per day and 200 hours per year.

4.2 GUIDELINES FOR THE DETERMINATION OF SIGNIFICANCE

4.2.1 Air Quality

Thresholds used to evaluate potential air quality and odor impacts are based on applicable criteria in the CEQA Guidelines Appendix G. A significant air quality and/or odor impact could occur if the implementation of the proposed CMP would:

Threshold 1: *Conflict with or obstruct implementation of the applicable air quality plan; or*

Threshold 2: *Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard; or*

Threshold 3: *Expose sensitive receptors to substantial pollutant concentrations; or*

Threshold 4: *Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.*

Appendix G of the CEQA Guidelines states that the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the above determinations. Therefore, to determine whether a project would result in a cumulatively considerable net increase of PM_{10}, $PM_{2.5}$, or ozone precursors (NO_X and VOCs), project emissions can be evaluated in comparison with the quantitative emission thresholds established by the SDAPCD. As part of its air quality permitting process, the SDAPCD has established thresholds in Rules 20.2 and 20.3 for the preparation of Air Quality Impact Assessments. In the absence of SDAPCD adopted thresholds for VOCs, the City's screening threshold is used in this analysis (City 2022b).

The screening criteria were developed by SDAPCD with the purpose of attaining the NAAQS and CAAQS. Therefore, for CEQA purposes, these screening criteria can be used as numeric methods to demonstrate that a project's total emissions would not result in a significant impact to regional air quality. The screening thresholds are included in Table 9, *Screening-Level Thresholds for Air Quality Impact Analysis*.

Table 9
SCREENING-LEVEL THRESHOLDS FOR AIR QUALITY IMPACT ANALYSIS

Pollutant	Emissions		
	Pounds per Hour	Pounds per Day	Tons per Year
Respirable Particulate Matter (PM_{10})	--	100	15
Fine Particulate Matter ($PM_{2.5}$)	--	67	10
Oxides of Nitrogen (NO_X)	25	250	40
Oxides of Sulfur (SO_X)	25	250	40
Carbon Monoxide (CO)	100	550	100
Lead and Lead Compounds	--	3.2	0.6
Volatile Organic Compounds (VOC)	--	137	15

Source: SDAPCD 2019; City 2022b

4.2.2 Greenhouse Gases

Given the relatively small levels of GHG emissions generated by a typical development in relation to the total amount of GHG emissions generated on a national or global basis, individual development projects are not expected to result in significant, direct impacts to climate change. However, given the magnitude of the impact of GHG emissions on the global climate, GHG emissions from new development could result in significant, cumulative impacts with respect to climate change. Therefore, the potential for a significant GHG emissions impact is limited to cumulative impacts.

According to Appendix G of the CEQA Guidelines, a project would have a significant GHG emissions impact if it would:

Threshold 1: *Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or*

Threshold 2: *Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.*

The determination of significance for GHG emissions is governed by CEQA Guidelines 15064.4, titled "Determining the Significance of Impacts from Greenhouse Gas Emissions." CEQA Guidelines Section 15064.4(a) states, "[t]he determination of the significance of greenhouse gas emissions calls for a careful judgment by the lead agency consistent with the provisions in Section 15064. A lead agency should make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate, or estimate the amount of greenhouse gas emissions resulting from a project. A lead agency shall have discretion to determine, in the context of a particular project, whether to … [use a quantitative model or qualitative model]." CEQA Guidelines Section 15064.4(b) clarifies that a lead agency should consider the following factors when determining the significance of impacts from GHG emissions:

1. The extent to which a project may increase or reduce GHG emissions as compared to the existing environmental setting.

2. Whether project emissions exceed a threshold of significance that the lead agency determines applies to a project.

3. The extent to which a project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions.

Therefore, consistent with CEQA Guidelines Section 15064.4, the GHG emissions analysis for the CMP relies upon a threshold based on the exercise of careful judgment and believed to be appropriate in the context of the project.

Neither the State of California, SDAPCD, nor District has adopted a quantitative emission-based thresholds to determine significance for GHG emissions associated with campus development under CEQA. In the absence of an adopted numeric threshold, the significance of GHG emissions for the project is evaluated based on consistency with statewide goals for the reduction of GHG emissions as outlined in the 2022 Scoping Plan. As the California Supreme Court held in *Center for Biological Diversity v. Department of Fish & Wildlife* (2015) (62 Cal. 4th 204), the evaluation of a project based on its effect on California's efforts to meet long-term climate goals is an appropriate significance criterion under CEQA. A project that would be consistent with meeting those goals can be found to have a less than significant impact on climate change under CEQA. If a project would contribute its "fair share" of what would be required to achieve those long-term climate goals, then a reviewing agency can find that the impact would not be significant because the project would help to solve the problem of global climate change (62 Cal. 4th 220-223; Bay Area Air District 2022).

As discussed further in Section 3.2.2, the 2022 Scoping Plan lays out a path to achieve targets for carbon neutrality and reduce anthropogenic GHG emissions by 85 percent below 1990 levels no later than 2045, as directed by AB 1279. Appendix D to the 2022 Scoping Plan specifically includes recommendations for local government actions that align with the state's climate goals, with a focus on local GHG reduction strategies and approval of new land use development. Project consistency with these locally recommended strategies would demonstrate that proposed development is in alignment with state goals and incorporates the design features necessary to contribute its fair share to the state's goal of carbon neutrality by 2045. Therefore, if the project complies with the local strategy recommendations, it can be found to contribute its "fair share" to achieve the state's long-term climate goals and have a less than significant GHG emissions impact.

5.0 AIR QUALITY IMPACT ANALYSIS

5.1 ISSUE 1: CONFLICT WITH AIR QUALITY PLANS

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

5.1.1 Impacts

5.1.1.1 Program-Level Analysis

The SDAPCD is required, pursuant to the federal CAA, to reduce emissions of criteria pollutants for which the SDAB is in nonattainment. Strategies to achieve these emissions reductions are developed in the Attainment Plan, RAQS, and SIP, prepared by the SDAPCD for the region. The Attainment Plan, RAQS, and SIP are based on SANDAG population projections, as well as land use designations and population projections included in general plans for cities and the County. Regional population growth is typically associated with the construction of residential units or large employment centers.

Projects that propose development that is consistent with the growth anticipated by SANDAG would be consistent with the Attainment Plan and RAQS. If a project proposes development that is less intensive than anticipated within the applicable general plan or land use assumptions used by SANDAG to develop its projections, the project would likewise be consistent with the Attainment Plan and RAQS. If a project proposes development that is more emissions-intensive than that anticipated in the applicable general plan or growth projections upon which the Attainment Plan and RAQS are based, the project could conflict with the Attainment Plan and RAQS and may have a potentially significant impact on air quality. This situation would warrant further analysis to determine whether the project and the surrounding projects exceed the growth projections used in the Attainment Plan and RAQS for the specific subregional area.

The purpose of the proposed CMP is to implement campus wide improvements to modernize existing facilities, improve programming, and accommodate on-campus student enrollment growth anticipated through 2045 within the existing Mesa College campus. The project would accommodate regional growth that is projected through 2045 and would include land uses that are generally consistent with the existing campus land use types. Therefore, the project would not increase the regional population beyond SANDAG's growth forecasts. The RAQS and Attainment Plan rely on the same information from the SANDAG growth forecast to develop emission inventories and emission reduction strategies that are included in the attainment demonstration for the air basin. Because the project would not generate population growth beyond the levels assumed for the region, the project would not conflict with population growth projections for the region and would, therefore, be consistent with the RAQS and Attainment Plan. In addition, as detailed in Section 5.2, below, the project would not exceed daily screening level thresholds for emissions of ozone precursors or criteria air pollutants.

5.1.1.2 Project-Level Analysis

As individual components of the CMP described in the program-level analysis above, the near-term projects would be consistent with the existing campus land use types and would not generate population growth beyond the levels assumed for the region. As such, the near-term projects would not conflict with population projections for the region and would, therefore, be consistent with the RAQS and Attainment Plan. In addition, as detailed in Section 5.2, below, the near-term projects would not exceed daily screening level thresholds for emissions of ozone precursors or criteria air pollutants.

5.1.2 Significance of Impacts

Implementation of the CMP, including the near-term projects, would not conflict with or obstruct implementation of the applicable air quality plan and impacts would be less than significant. Therefore, no mitigation is required.

5.2 ISSUE 2: CUMULATIVELY CONSIDERABLE NET INCREASE OF NONATTAINMENT CRITERIA POLLUTANTS

Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard?

5.2.1 Impacts

By its very nature, air pollution is largely a cumulative impact. The nonattainment status of regional pollutants is a result of past and present development within the SDAB. The region is a federal and/or state nonattainment area for ozone, PM_{10}, and $PM_{2.5}$. Implementation of the CMP would generate criteria pollutants and ozone precursors sporadically during construction activities and on an ongoing basis during campus operation. To determine whether the project would result in a cumulatively considerable net increase in criteria pollutants that would violate an air quality standard or contribute substantially to an existing or projected air quality violation, the near-term project construction emissions and the CMP buildout operational emissions are evaluated in comparison with the quantitative screening thresholds discussed in Section 4.2.1 and shown in Table 9.

5.2.1.1 Program-Level Analysis

Construction Emissions

Construction of the long-term projects proposed under the CMP would be similar in scale and construction intensity, would require similar types of construction activity, and would utilize similar types of construction equipment to the near-term projects, the maximum daily emissions for which are presented in Section 5.2.1.2 below and do not exceed applicable screening thresholds. Further, even if the maximum day of emissions associated with each of the two near-term projects occurred on the same day, the screening thresholds would not be exceeded. Simultaneous construction of these two projects is a reasonably conservative scenario for the intensity of concurrent construction that may occur during implementation of the CMP. The use of equipment for minor renovations or other maintenance projects would be less intensive than for the near-term or long-term redevelopment projects. As the criteria pollutant and precursor emissions associated with construction of each of the near-term projects would be below the applicable screening thresholds, even with concurrent construction, it can be assumed that future construction activities required for buildout of the CMP also would not exceed these screening level thresholds.

Operational Emissions

The net increase in operational emissions associated with full buildout of the CMP over existing conditions (refer to Table 2) was estimated using CalEEMod, as described in Section 4.1.2. Buildout of the CMP is anticipated to be complete in 2045. Operational emissions calculations and model outputs are provided in Appendix C. Table 10, *Net Daily Operational Emissions at Buildout*, presents the summary of the net increase in daily operational emissions for the project in comparison with the daily thresholds provided in Table 9.

Table 10
NET DAILY OPERATIONAL EMISSIONS AT BUILDOUT

Category	Pollutant Emissions (pounds per day)					
	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Mobile	39.4	24.8	300.4	0.9	98.0	25.1
Area	48.7	--	122.5	<0.1	0.2	0.1
Energy	0.9	17.2	14.4	0.1	1.3	1.3
Stationary	23.6	<0.1	61.4	<0.1	0.1	0.1
Total Daily Emissions[1]	**112.7**	**42.0**	**498.7**	**1.0**	**99.6**	**26.6**
Existing Daily Emissions (Table 2)	62.0	40.3	298.7	0.8	74.5	20.4
Net Daily Emissions[1]	**50.7**	**1.7**	**200.0**	**0.2**	**25.1**	**6.2**
Screening Thresholds	*137*	*250*	*550*	*250*	*100*	*67*
Significant Impact?	***No***	***No***	***No***	***No***	***No***	***No***

Source: CalEEMod (output data is provided in Appendix C)

[1] Totals and differences may not compute due to rounding.

VOC = volatile organic compound; NO_X = nitrogen oxides; CO = carbon monoxide; SO_2 = sulfur dioxide; PM_{10} = particulate matter 10 microns or less in diameter; $PM_{2.5}$ = particulate matter 2.5 microns or less in diameter

As shown in Table 10, the net increase in emissions of all criteria pollutants and ozone precursors associated with operation of the project would be below the daily screening thresholds.

5.2.1.2 Project-Level Analysis

Construction Emissions

The near-term project construction emissions were estimated using CalEEMod as described in Section 4.1.1. Emissions estimated for construction assume conformance with SDAPCD Rules 55 and 67.0.1, specifically watering exposed areas twice per day, limiting vehicle speeds on unpaved on-site roads, and limiting the VOC content of architectural coatings to 50 g/L for building coatings and 100 g/L for parking lot markings.

The results of the emissions calculations for construction of the near-term projects are shown in Table 11, *Maximum Daily Construction Emissions*. The data are presented as the maximum anticipated daily emissions for each of the near-term projects. As certain phases of construction would occur concurrently for the near-term projects and could similarly occur concurrently during future construction, the combined maximum daily emissions are additionally presented and compared to the applicable screening thresholds as a conservative construction scenario. The complete CalEEMod output is provided in Appendix B to this report.

Table 11
MAXIMUM DAILY CONSTRUCTION EMISSIONS

Year	Pollutant Emissions (pounds per day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Athletics Complex						
2028	3.1	27.5	29.0	<0.1	9.0	5.0
2029	1.2	9.6	16.0	<0.1	1.1	0.5
2030	11.7	25.3	29.0	<0.1	8.9	5.0
2031	11.7	0.8	1.1	<0.1	<0.1	<0.1
Athletics Complex Maximum Daily Emissions	***11.7***	***27.5***	***29.0***	***<0.1***	***9.0***	***5.0***
Performing Arts and Administration Center and Parking Structure						
2027	1.7	12.3	18.4	<0.1	3.4	1.9
2028	12.2	11.9	18.0	<0.1	3.4	1.8
2029	1.6	10.8	17.6	<0.1	1.8	3.4
2030	9.0	10.6	16.6	<0.1	1.8	0.6
Performing Arts and Administration Center and Parking Structure Maximum Daily Emissions	***12.2***	***12.3***	***18.4***	***<0.1***	***3.4***	***3.4***
Combined Maximum Daily Emissions[1]	**23.9**	**39.8**	**47.4**	**0.1**	**12.4**	**8.4**
Screening Threshold	*137*	*250*	*550*	*250*	*100*	*67*
Significant Impact?	***No***	***No***	***No***	***No***	***No***	***No***

Source: CalEEMod (output data is provided in Appendix B)

[1] Combined maximum daily emissions are presented without regard for construction year to represent the maximum daily emissions anticipated to be generated by simultaneous construction projects during CMP implementation.

VOC = volatile organic compound; NO_X = nitrogen oxides; CO = carbon monoxide; SO_X = sulfur oxides;
PM_{10} = particulate matter 10 microns or less in diameter; $PM_{2.5}$ = particulate matter 2.5 microns or less in diameter

As shown in Table 11, the near-term project's combined short-term construction-related criteria pollutant and precursor emissions would be below the screening thresholds during concurrent construction.

Operational Emissions

Operational emissions from the near-term projects proposed under the CMP are accounted for in the emissions calculated for the full buildout of the CMP provided in Table 10 above, which demonstrates that the net increase in operational emissions would be below the applicable thresholds. The incremental change in pollutant and precursor emissions as each near-term project becomes operational would be minimal as these projects would replace similar uses with new but expanded facilities. As shown in Table 10, mobile sources contribute the most to daily emissions and campus-related trips; however, trip generation would not be affected by the near-term projects. The increase in building area proposed by the near-term projects would result in a slight increase in area emissions as these are proportional to building square footage. While the expanded buildings would likely require more energy, they would remove the use of natural gas which contributes to air pollutant and precursor emissions.

5.2.2 Significance of Impacts

Implementation of the CMP, including the near-term projects, would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard and impacts would be less than significant. Therefore, no mitigation is required.

5.3 ISSUE 3: IMPACTS TO SENSITIVE RECEPTORS

Would the project expose sensitive receptors to substantial pollutant concentrations?

5.3.1 Impacts

5.3.1.1 Program-Level Analysis

Construction Activities

Implementation of the CMP would result in the use of heavy-duty construction equipment, haul trucks, on-site generators, and construction worker vehicles. These vehicles and equipment could generate the TAC DPM. CARB has declared that DPM from diesel engine exhaust is a TAC, and OEHHA has determined that chronic exposure to DPM can cause carcinogenic and non-carcinogenic health effects. For this reason, although other pollutants would be generated from project construction, DPM is the primary pollutant of concern.

The dose (of TAC) to which receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance in the environment and the extent of exposure a person has to the substance; a longer exposure period to a fixed quantity of emissions would result in higher health risks. Current models and methodologies for conducting cancer Health Risk Assessments (HRAs) are associated with longer-term exposure periods (typically 30 years for individual residents based on guidance from OEHHA) and are best suited for evaluation of long-duration TAC emissions with predictable schedules and locations. These assessment models and methodologies do not correlate well with the temporary and highly variable nature of construction activities. Cancer potency factors are based on animal lifetime studies or worker studies where there is long-term exposure to the carcinogenic agent. There is considerable uncertainty in trying to evaluate the cancer risk from projects that will only last a small fraction of a lifetime (OEHHA 2015). In addition, concentrations of mobile-source DPM emissions disperse rapidly and are typically reduced by 70 percent at approximately 500 feet (CARB 2005).

Generation of DPM from construction projects typically occurs in a localized area (e.g., at the project site) for a short period of time. Because construction activities and subsequent emissions vary depending on the construction activity, the construction-related emissions to which nearby receptors are exposed would also vary throughout the construction period. During some equipment-intensive activities, such as site preparation or grading, construction-related emissions would be higher than during other, less equipment-intensive activities, such as building construction. Considering the short duration when intensive off-road diesel equipment would be used on the campus, the highly dispersive nature of DPM, and the fact that construction activities would occur at various locations throughout the campus (not concentrated near any single receptor for extended periods), construction projects implemented under the CMP would not expose sensitive receptors to substantial DPM concentrations.

Operational Activities

Potential impacts to sensitive receptors during project operation are analyzed for CO hotspots and exposure to land uses that typically generate TACs.

CO Hotspots

Vehicle exhaust is the primary source of CO. In an urban setting, the highest CO concentrations are generally found within close proximity to congested intersections. Under typical meteorological conditions, CO concentrations tend to decrease as the distance from the emissions source (i.e., congested intersection) increases. The increased trips associated with future increases in on-campus enrollment have the potential of contributing to localized "hot spots" of CO off-site. Because CO is a byproduct of incomplete combustion, exhaust emissions are worse when fossil-fueled vehicles are operated inefficiently, such as in stop-and-go traffic or through heavily congested intersections.

The SDAPCD has not adopted quantitative screening criteria for when an intersection or road segment might generate CO hotspots. However, the volume of vehicles required to result in a CO hotspot is very high. For example, the Bay Area Air District's screening criteria for CO hotspots is intersections with more than 44,000 vehicles per hour, or intersections with 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway; Bay Area Air District 2023). Based on the Local Mobility Analysis prepared for the CMP, the project is estimated to generate an increase of 4,548 ADT by the operational year of 2045 (LLG 2026). The addition of these trips to nearby intersections would not be of a quantity to generate a CO hotspot, given roadway segments near the project site are projected to carry up to 17,969 vehicles per day in 2045 and do not include roadway types where vertical and/or horizontal mixing is substantially limited (LLG 2026).

Sensitive Receptors

CARB siting recommendations within the *Air Quality and Land Use Handbook* suggest a detailed health risk assessment should be conducted for sensitive receptors within 1,000 feet of a warehouse distribution center, within 300 feet of a large gas station (defined as a facility with a throughput of 3.6 million gallons per year or greater), 50 feet of a typical gas dispensing facilities, within 300 feet of a dry cleaning facility that uses perchloroethylene, or 500 feet of a freeway or urban road with 100,000 or more vehicles per day (CARB 2005).

The CMP would include instructional, student support, athletics, and parking land uses. As such, the CMP would not include any of the land use types listed above and would not represent a substantial source of TACs. Operation of the proposed natural gas-fired linear generator system would result in TAC emissions that could affect sensitive receptors. Because the generator location and operating characteristics are unknown at this stage of the planning process, quantification of health risks would be speculative at this program level of analysis. However, as a new stationary source, the generator would be subject to SDAPCD permitting requirements, including Rule 1200, which ensures that emissions of TACs do not result in unacceptable health risks. Compliance with applicable SDAPCD regulations would reduce potential impacts to sensitive receptors to a less than significant level. As such, implementation of the CMP would not expose sensitive receptors to substantial pollutant concentrations.

5.3.1.2 Project-Level Analysis

Construction

Implementation of the near-term projects under the CMP would result in the use of heavy-duty construction equipment, haul trucks, on-site generators, and construction worker vehicles which could generate the TAC DPM. However, as detailed further under the Program-Level Analysis above, based on the short duration when intensive off-road diesel equipment would be used during construction of the near-term projects, the highly dispersive nature of DPM, and the fact that construction activities would occur at various locations (not concentrated near any single receptor for extended periods), construction of the near-term projects would not expose sensitive receptors to substantial DPM concentrations.

Operation

Potential impacts to sensitive receptors during operation of the near-term projects are analyzed for CO hotspots and exposure to land uses that typically generate TACs similar to the Program-Level Analysis above.

CO Hotspots

As discussed under the program-level analysis above, buildout of the CMP would not result in the generation of CO hotspots as the addition of campus-related trips to nearby intersections would not exceed screening thresholds established by the Bay Area Air District. As such, the near-term projects, which are not directly associated with the generation of additional vehicle trips, would not result in CO hotspots.

Sensitive Receptors

The near-term projects include recreational, educational, and administrative land uses and would not include the land uses or other equipment that generate substantial TACs and described under the program-level analysis above. As such, the near-term projects would not expose sensitive receptors to substantial pollutant concentrations.

5.3.2 Significance of Impacts

Implementation of the CMP, including the near-term projects, would not expose sensitive receptors to substantial pollutant concentrations and impacts would be less than significant. Therefore, no mitigation is required.

5.4 ISSUE 4: OTHER EMISSIONS (SUCH AS THOSE LEADING TO ODORS)

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

5.4.1 Impacts

5.4.1.1 Program-Level Analysis

California Health and Safety Code Sections 41700 and 41705, and SDAPCD Rule 51 prohibit emissions from any source whatsoever in such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to the public health or damage to property. An unreasonable odor discernible at the property line of the project site is considered a significant odor impact.

Implementation of the CMP could produce temporary odors during proposed construction activities from construction equipment exhaust, application of asphalt, and/or the application of architectural coatings. However, odors emitted during construction would be temporary, short-term, and intermittent in nature, as they would cease upon the completion of the respective phase of construction. Accordingly, implementation of the CMP would not create objectionable odors affecting a substantial number of people during construction

According to the SCAQMD CEQA Air Quality Handbook, land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting activities, refineries, landfills, dairies, and fiberglass molding operations (SCAQMD 1993). The CMP, involving academic, housing, childcare, medical, and parking uses, does not propose these types of odor-generating land uses. The CMP would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

5.4.1.2 Project-Level Analysis

The near-term projects proposed under the CMP could produce odors during construction activities from construction equipment exhaust, application of asphalt, and/or the application of architectural coatings. However, odors emitted during construction would be temporary, short-term, and intermittent in nature, and would cease upon the completion of the respective phase of construction. In addition, the near-term projects proposed under the CMP would not include the land uses associated with odor complaints as described in Section 5.4.1.1. The near-term projects would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

5.4.2 Significance of Impacts

Implementation of the CMP, including the near-term projects, would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people and impacts would be less than significant. Therefore, no mitigation is required.

6.0 GREENHOUSE GAS IMPACT ANALYSIS

6.1 ISSUE 1: GREENHOUSE GAS EMISSIONS

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

6.1.1 Impacts

6.1.1.1 Program-Level Analysis

Project-Generated Emissions

CEQA Guidelines Section 15064.4 states, "[a] lead agency should make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate, or estimate the amount of GHG emissions resulting from a project." While project GHG emissions impacts are based on implementation of 2022 Scoping Plan strategies as described in Section 4.2.2 above, the following discussion presents an estimate of the GHG emissions generated by project construction and operation for informational purposes.

Construction Emissions

The GHG emissions associated with construction of the CMP are quantified for the near-term projects in Section 6.1.1.2 below. These near-term projects would consist of similar construction phases, utilize similar construction equipment, and be similar in scale and construction intensity to future projects; therefore, their quantified GHG emissions are generally reflective of the additional projects which would be implemented under the CMP in the future. During concurrent construction of the two near-term projects, the year with the highest GHG emissions would be 2029, with 968.3 MT CO_2e produced from construction. Construction activity would vary by year throughout implementation of the CMP but can be anticipated to result in similar GHG emissions as anticipated annually for the near-term projects. This is a relatively conservative scenario for concurrent construction activity that may occur within a single year for construction of the remaining CMP projects.

Operational Emissions

GHG emissions associated with buildout of the CMP were estimated using CalEEMod as described in Section 4.1.2 and compared with GHG emissions from existing campus operations (refer to Table 5). For informational purposes, the campus' total annual and net new with CMP GHG emissions for the buildout year of 2045 are shown in Table 12, *Operational GHG Emissions*. Appendix C contains the CalEEMod output files.

Table 12
OPERATIONAL GHG EMISSIONS

Emission Sources	2045 Emissions (MT CO_2e)
Vehicular (Mobile)	12,132.6
Area	35.8
Energy	4,156.7

Emission Sources	2045 Emissions (MT CO_2e)
Water/Wastewater	40.1
Solid Waste	813.4
Refrigerants	1.1
Stationary	18.0
Campus Total[1]	**17,197.7**
Existing Campus GHG Emissions (Table 5)	*13,902.9*
Net New CMP GHG Emissions	**3,294.8**

Source: CalEEMod (output data is provided in Appendix C)

[1] Totals may not sum due to rounding.

GHG = greenhouse gas; MT = metric tons; CO_2e = carbon dioxide equivalent

Although operational emissions would increase with CMP buildout, the increase reflects intensified educational use and campus programming and is reduced by design through building electrification, improvements in transportation efficiency, and consistency with state decarbonization strategies.

Scoping Plan Consistency Analysis

The Scoping Plan (approved by CARB in 2008 and updated in 2014, 2017, and 2022) provides a framework to reduce California's GHG emissions in accordance with AB 32. The 2022 Scoping Plan identified additional GHG reduction measures necessary to achieve targets for carbon neutrality and reduce anthropogenic GHG emissions by 85 percent below 1990 levels no later than 2045 in accordance with goals set in AB 1279. The Scoping Plan requires CARB and other state agencies to adopt regulations and other strategies to reduce GHGs. As many of the strategies identified in the Scoping Plan are not directly applicable to specific projects, the 2022 Scoping Plan included Appendix D providing recommendations and clarification on local GHG-reduction strategies and project-level environmental review. As described in Section 4.2.2, consistency with the 2022 Scoping Plan was determined to be an appropriate methodology for assessment of project GHG emissions impact significance as implementation of these strategies would represent the project's "fair share" contribution to meeting state GHG reduction targets.

Table 1 of Appendix D of the 2022 Scoping Plan provides impactful GHG reduction strategies that can be implemented by local governments that address the three local priority areas: (1) transportation electrification, (2) VMT reduction, and (3) building electrification. These areas and strategies are designated as "priority" because they are the GHG reduction opportunities over which local governments have the most authority and that have the highest GHG reduction potential. The project's consistency with these strategies is provided in Table 13, *Scoping Plan Consistency Analysis*.

Table 13
SCOPING PLAN CONSISTENCY ANALYSIS

2022 Scoping Plan Priority Areas	2022 Scoping Plan Priority GHG Reduction Strategies	Project Consistency Statement
Transportation Electrification	Convert local government fleets to zero-emission vehicles (ZEVs) and provide EV charging at public sites	**Consistent.** EV charging stations are currently available to Mesa College students, staff, visitors, and the general public in the PS1 parking structure. The CMP parking improvements would additionally include new EV charging stations on campus, though parking at EV chargers is regulated consistent with campus parking requirements. Further, the District is currently purchasing ZEVs for maintenance and facilities staff as the fleet requires replacement, and development of the CMP would not conflict with policies regarding the conversion of fleets to ZEVs.
	Create a jurisdiction-specific ZEV ecosystem to support deployment of ZEVs statewide (such as building standards that exceed state building codes, permit streamlining, infrastructure siting, consumer education, preferential parking policies, and ZEV readiness plans)	**Consistent.** The CMP would not inhibit the implementation of any actions to support statewide ZEV deployment. The District is currently in the process of purchasing ZEVs for maintenance and facilities staff.
VMT Reduction	Reduce or eliminate minimum parking standards	**Consistent.** The District does not have minimum parking standards for its campuses. Although the CMP would include new parking facilities, these improvements would accommodate anticipated student growth and would not result in increased VMT due to the provision of excessive parking (refer to discussion of parking pricing below).
	Implement Complete Streets policies and investments, consistent with general plan circulation element requirements	**Consistent.** Although the District is not subject to municipal regulations or plans such as the City's Complete Streets Policy or General Plan Circulation Element, the CMP would not impede implementation of these policies or future complete street improvements on City roadways. The CMP would also include elements to improve on-campus circulation and safety through the construction pedestrian connections and bicycle paths.

2022 Scoping Plan Priority Areas	2022 Scoping Plan Priority GHG Reduction Strategies	Project Consistency Statement
VMT Reduction (cont.)	Increase access to public transit by increasing density of development near transit, improving transit service by increasing service frequency, creating bus priority lanes, reducing or eliminating fares, microtransit, etc.	**Consistent.** The CMP would increase the density of the Mesa College campus, which is located within an area with easy access to trolley and bus services. The District would continue to provide transit passes for sale at the discounted student rate established by MTS.
	Increase public access to clean mobility options by planning for and investing in electric shuttles, bike share, car share, and walking	**Consistent.** The CMP would encourage clean mobility options by including improvements such as pedestrian connections, bicycle paths, ride share drop off areas, and bus stops.
	Implement parking pricing or transportation demand management pricing strategies	**Consistent.** Parking within the Mesa College campus requires the purchase of a permit, which would align with pricing strategies to encourage the use of public transit in the area. Carpooling is also encouraged through the discounted carpool parking permit option.
	Amend zoning or development codes to enable mixed-use, walkable, transit-oriented, and compact infill development (such as increasing the allowable density of a neighborhood)	**Consistent.** The CMP would implement higher density infill development projects within the Mesa College campus, which is fully developed with campus uses and surrounded by urban development. Bus stops are also available within campus.
	Preserve natural and working lands by implementing land use policies that guide development toward infill areas and do not convert “greenfield” land to urban uses (e.g., green belts, strategic conservation easements)	**Consistent.** The CMP would implement infill development projects within the boundaries of the Mesa College campus, which is fully developed with campus uses and surrounded by urban development. Therefore, no greenfield conversion would occur.
Building Decarbonization	Adopt all-electric new construction reach codes for residential and commercial uses	**Consistent.** The new buildings constructed under the CMP would be all-electric in accordance with District sustainability policies outlined in the District Design Guidelines and Standards Manual. Construction on campus would be required to comply with Title 24 standards, and projects are further incentivized to reach energy efficiency above the Title 24 baseline as outlined in the District’s Sustainability Levels framework. In addition, Administrative Procedure 6970 includes the goals of outperforming Title 24 energy efficiency standards by at least 20 percent, striving to achieve a LEED-NC gold rating, and requiring that at least 5 percent of a project’s total energy is generated on site from renewable sources.

2022 Scoping Plan Priority Areas	2022 Scoping Plan Priority GHG Reduction Strategies	Project Consistency Statement
Building Decarbonization (cont.)	Adopt policies and incentive programs to implement energy efficiency retrofits for existing buildings, such as weatherization, lighting upgrades, and replacing energy-intensive appliances and equipment with more efficient systems (such as Energy Star-rated equipment and equipment controllers)	**Consistent.** The District would continue to implement green building standards in campus facilities in accordance with Board Policy 6970 (Green Building Policy and Major Renovation Standards) and Administrative Procedure 6970 (Green Buildings) as outlined in Section 3.2.4.2. Administrative Procedure 6970 requires that the renovation of buildings that require 100 percent replacement of mechanical, electrical, and plumbing systems and replacement of over 50 percent of all non-shell areas (interior walls, doors, floor coverings and ceiling systems) would at a minimum achieve LEED Silver or an equivalent certification.
	Adopt policies and incentive programs to electrify all appliances and equipment in existing buildings such as appliance rebates, existing building reach codes, or time of sale electrification ordinances	**Consistent.** The District Design Guidelines and Standards Manual includes policies related to building electrification, including a goal to achieve a 75 percent reduction in natural gas usage by 2035. To reduce natural gas usage, the District builds new facilities with no natural gas connections, except in rare circumstances for specialized equipment, and replaces gas-powered equipment with electric equivalents when replacement is needed.
	Facilitate deployment of renewable energy production and distribution and energy storage on privately owned land uses (e.g., permit streamlining, information sharing)	**Consistent.** The Mesa College campus currently hosts solar panels that generate renewable energy. The District has previously used programs intended to increase renewable energy generation, such as power purchase agreements for solar panels on other campuses. While no specific renewable energy facilities are part of the CMP, the District would continue to evaluate the feasibility of incorporating such technology on campus as it is available and economically feasible.
	Deploy renewable energy production and energy storage directly in new public projects and on existing public facilities (e.g., solar photovoltaic systems on rooftops of municipal buildings and on canopies in public parking lots, battery storage systems in municipal buildings)	**Consistent.** The Mesa College campus currently has an on-site solar thermal system at the Mesa Commons building and solar panels throughout the campus.

Source: CARB 2022

ZEV = zero-emission vehicle, EV = electric vehicle; CMP = Comprehensive Master Plan; VMT = vehicle miles traveled; MTS = Metropolitan Transit System; LEED-NC = Leadership in Energy and Environmental Design for New Construction; LEED = Leadership in Energy and Environmental Design

As shown in Table 13, the CMP would not impede implementation of the GHG reduction strategies identified in the 2022 Scoping Plan. Rather, many of the District and Mesa College policies would be consistent with these GHG reduction strategies. Therefore, buildout of the CMP would not generate GHG emissions, either directly or indirectly, that may have a significant effect on the environment.

6.1.1.2 Project-Level Analysis

Construction Emissions

GHG emissions would be associated with the construction phases of each of the near-term projects through the use of off-road heavy equipment and vehicle trips from construction worker, vendor, and haul trips. An inventory of construction GHG emissions for each of the near-term projects is provided below for informational purposes.

GHG emissions associated with construction of each of the near-term projects were estimated using CalEEMod, as described in Section 4.1.1. Construction emissions calculations and model outputs are provided in Appendix B. Table 14, *Near-Term Construction GHG Emissions by Year*, presents a summary of the total annual GHG emissions associated with the construction of the near-term projects.

Table 14
NEAR-TERM CONSTRUCTION GHG EMISSIONS BY YEAR

Year	Athletics Complex Emissions (MT CO_2e)	Performing Arts and Administration Center and Parking Structure Emissions (MT CO_2e)	Total Annual Emissions (MT CO_2e)
2027	--	411.2	**411.2**
2028	441.4	505.9	**947.3**
2029	406.6	561.7	**968.3**
2030	245.0	118.4	**363.4**
2031	2.6	--	**2.6**
Total Construction Emissions	**1,095.4**	**1,597.2**	**--**

Source: CalEEMod (output data is provided in Appendix B)
MT = metric tons; CO_2e = carbon dioxide equivalent

Operational Emissions

Operation of the near-term projects proposed under the CMP is accounted for in the GHG emissions calculated for the full buildout of the CMP provided for informational purposes in Table 12 above and the Scoping Plan consistency analysis contained in Table 13. The incremental change in GHG emissions as each near-term project becomes operational would be minimal as these projects would replace similar uses with new but expanded facilities that incorporate more stringent energy efficiency standards. As the near-term projects would be consistent with the Scoping Plan, operation of the near-term projects would not generate GHG emissions, either directly or indirectly, that may have a significant effect on the environment.

6.1.2 Significance of Impacts

The CMP, including the near-term projects, would not generate greenhouse gas emissions, either directly or indirectly, that may have a significant effect on the environment, and impacts would be less than significant. No mitigation is required.

6.2 ISSUE 2: CONFLICT WITH APPLICABLE PLANS ADOPTED FOR THE PURPOSE OF REDUCING GREENHOUSE GAS EMISSIONS

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

6.2.1 Impacts

6.2.1.1 Program-Level Analysis

There are numerous state plans, policies, and regulations adopted for the purpose of reducing GHG emissions. Statewide plans and regulations such as GHG emissions standards for vehicles (AB 1493), the LCFS, and regulations requiring an increasing fraction of electricity to be generated from renewable sources are being implemented at the statewide level; as such, compliance at the project level is not addressed. Impacts of the CMP are evaluated based on whether the project would conflict with or obstruct implementation of CARB's 2022 Scoping Plan or the California Community Colleges Sustainability and Climate Action goals.

California Air Resources Board 2022 Scoping Plan

As discussed in Section 3.2.2.1, the 2022 Scoping Plan lays out a path to achieve targets for carbon neutrality and reduce anthropogenic GHG emissions by 85 percent below 1990 levels no later than 2045, as directed by AB 1279. Appendix D to the 2022 Scoping Plan includes recommendations for local government actions that align with the state's climate goals, with a focus on local GHG reduction strategies or new land use development. As demonstrated in Section 6.1.1 above, the project would be consistent with the priority GHG reduction strategies identified in Appendix D of the 2022 Scoping Plan and therefore address the three key priorities identified by the 2022 Scoping Plan for local jurisdictions.

California Community Colleges Board of Governors Climate Action and Sustainability Framework

The California Community College Climate Action and Sustainability Framework provides goals and recommendations for community college districts in response to the Board of Governors Climate Change and Sustainability Policy. The latest version of this framework aligned the California Community Colleges with the 2017 Scoping Plan; therefore, the analysis provided in Section 6.1.1 related to the 2022 Scoping Plan demonstrates that the project would be consistent with the more recent state goals and recommendations. Nonetheless, the following describes how District programs and the CMP align with the Climate Action and Sustainability Framework goals, which are intended to be specifically relevant to community colleges.

Greenhouse Gas Emissions Reduction

The GHG Emissions Reduction goals of the Climate Action and Sustainability Framework recommend that each campus submits to the Chancellor's Office measurable sustainability objectives, including

carbon emissions baselines, carbon emissions inventories, and local Climate Action Plans, and then continues to track and report campus GHG emissions. To achieve statewide goals, campuses are then recommended to reduce campus/district GHG emissions (purchases of electricity and natural gas; fleet and marine vessel usage; and other emissions over which the entity has direct control) by at least 75 percent by 2030 and 100 percent by 2035. While emissions from commute sources are outside of a district's control, the community colleges are encouraged to promote the use of alternative transportation and/or alternative fuels to reduce transportation emissions. Lastly, new construction and renovation projects are encouraged to emphasize optimum energy utilization, low life cycle operating costs, and compliance with all applicable energy codes (enhanced Title 24 energy codes) and regulations, including for specialized construction types (e.g., historical buildings) that are not regulated through the current energy codes.

As summarized in Section 3.2.4.1, the District completed its carbon emission baseline inventory and the District CAP in 2023 (District 2023). In addition, as discussed further under Green Buildings below, the District has Board Policies and Administrative Procedures which mandate certain green building techniques to reduce GHG emissions for new construction and renovation projects. In addition, the Sustainability Levels provide incentives for exceeding Title 24 regulations as discussed further under Energy below. All new buildings constructed under the CMP would be all-electric and would therefore reduce emissions from natural gas use and be consistent with the goals outlined above.

Green Buildings

The Green Buildings goals of the Climate Action and Sustainability Framework encourage districts to benchmark energy usage intensity for each building and develop a zero net energy and campus electrification strategy or conduct LEED or WELL assessment of existing buildings. By 2030, it is recommended that new buildings and major renovations are constructed as zero net energy ready, new buildings be certified LEED or WELL Gold, and natural gas use in buildings be reduced by 30 percent. Building on these goals, by 2035 it is recommended that new buildings and major renovations are constructed as zero net energy and certified Zero Carbon, existing buildings are certified LEED Operations and Maintenance Gold or WELL Gold equivalent, and natural gas use in buildings be reduced by 75 percent.

The District Energy and Environmental Plan within the Strategic Energy and Environmental Plan included a LEED assessment of existing District buildings. The District currently implements green building standards in campus facilities in accordance with Board Policy 6970 (Green Building Policy and Major Renovation Standards) and Administrative Procedure 6970 (Green Buildings) as outlined in Section 3.2.4.2. Board Policy 6970 requires the District to select architects, engineers and other professionals who have demonstrated expertise in sustainable design and are accredited. Administrative Procedure 6970 provides guidance for implementing District policies and standards for the design and construction of green buildings and renovations and outlines criteria for new buildings including, but not limited to, outperforming Title 24 energy efficiency standards by at least 20 percent, striving to achieve a LEED-NC gold rating, and requiring that at least five percent of a project's total energy is generated on site from renewable sources. The District has additionally developed the Sustainability Levels, which provide a tiered rating system that encourages environmentally responsible design, construction, and operations and applies to new construction, major renovations, and modernization projects. See Section 3.2.4.3 for additional details regarding this program. The projects implemented under the CMP would continue to comply with these policies throughout design, construction, and operation of individual projects.

Energy

The Energy goals of the Climate Action and Sustainability Framework state that California's local community colleges should consider establishing a campus Energy Use Intensity score, conduct Effective Useful Life analysis of all gas-using appliances and systems, and plan for electrification of systems with Effective Useful Life of less than 10 years. In addition, the Energy goals encourage colleges to decrease Energy Use Intensity by 25 percent compared to the campus benchmark and annually produce or procure 75 percent of on-site electrical consumption using renewable energy by 2030. Lastly, the Energy goals encourage college campuses to decrease Energy Use Intensity by 40 percent compared to the campus benchmark and accomplish Net Zero Energy Campus by 2035.

The District has identified the goal of decreasing energy consumption through metering on-campus buildings, utilizing cool roofs, and utilizing natural daylight for lighting through the installation of skylights. The Strategic Energy and Environmental Plan identifies equipment replacement and energy conservation enhancements to be undertaken for existing buildings to improve their energy efficiency. The Sustainability Levels framework additionally identifies incentives for energy and carbon performance standards, including energy efficiency greater than Title 24 requirements, integration of on-site renewable energy sources and battery storage, and all-electric construction. Further, as stated in the District Design Guidelines and Standards Manual, it is the policy of the District for all projects to be as energy efficient and as space efficient as possible. Future campus projects would continue to incorporate energy efficiency features into their design and minimize the use of natural gas in support of these goals.

Water

The Water goals of the Climate Action and Sustainability Framework encourage community colleges to manage water more sustainably by using local benchmarks for potable water consumption, identifying non-potable water sources, and adopting best-practice programs such as the California Community College Model Stormwater Management Program. They are additionally encouraged to reduce potable water use by 25 percent through measures such as separately metering large irrigation systems, prioritizing native plants, limiting turf grass, and aligning with Municipal Separate Storm Sewer Systems requirements by 2030. By 2035, colleges should aim for a 50 percent reduction in potable water use from baseline levels and ensure stormwater runoff and discharge match predevelopment conditions by incorporating green infrastructure and low-impact development across campuses and in new construction.

The District has identified a goal of decreasing water usage on its campuses with supporting actions including separating landscape from domestic water reporting, implementing rainwater capture, using water efficient plumbing fixtures, and planting native and water efficient planting. In addition, the Sustainability Levels establish incentives for District projects to incorporate water conversation measures, including low-flow plumbing fixtures, reduction in potable water use, and utilizing native and/or drought tolerant species for landscaping. The District Design Guidelines and Standards Manual further includes the Storm Water Management Requirements section, which states that the District has elected to comply with Municipal Separate Storm Sewer Systems requirements. Low impact development strategies would also be incorporated into site designs to promote stormwater infiltration. Projects implemented under the CMP would incorporate these actions as feasible into their design and would therefore support these goals.

Waste

The Waste goals of the Climate Action and Sustainability Framework encourage districts and community colleges to strengthen their waste-reduction efforts by conducting waste categorization assessments, benchmarking material use, complying with relevant Title 14 regulations, assessing AB 341 compliance, and centralizing waste-reporting systems by 2025. By 2030, they should work toward zero waste to landfills, complete a circularity analysis, and reduce total material consumption by 10 percent. By 2035, they are encouraged to increase material circularity by 25 percent and reduce overall material consumption by 25 percent.

The District Design Guidelines and Standards Manual includes a list of sustainability standards adopted by the District, which states that each campus shall facilitate and maintain an ongoing waste recycling program that establishes where facilities on campus will handle recycled materials including paper, cardboard, glass, plastics, and metal. The Mesa College campus would continue to maintain this program, and implementation of the CMP, including the near-term projects, would not impede implementation of this program. In addition, the District Design Guidelines and Standards Manual identifies the goal of achieving a minimum "end-of-project" recycling rate of 75 percent for non-hazardous solid waste and a further goal of 90 percent diversion from landfills and incinerators by weight, including both demolition and construction waste. The projects implemented under the CMP would implement these waste reduction goals as feasible to be consistent with the Waste goals of the Climate Action and Sustainability Framework.

Purchasing and Procurement

The Purchasing and Procurement goals of the Climate Action and Sustainability Framework encourage Districts and community colleges to strengthen sustainable purchasing practices by benchmarking the environmental performance of current products and services, adopting sustainable procurement policies, and prioritizing environmentally preferable electronics by 2025. By 2030, they should work to increase their procurement of sustainable goods and services by 25 percent above baseline levels, and by 2035, they are encouraged to expand that progress to a 50 percent increase. In order for the state's community colleges to reach these goals, campuses can promote use of suppliers and/or vendors who reduce waste, re-purpose recycled material, or support other environmentally friendly practices in the provision of goods or services. In order to move to zero waste, campus practices can: (1) encourage use of products that minimize the volume of trash sent to landfills or incinerators; (2) participate in the CalRecycle Buy-Recycled program or equivalent; and (3) increase recycled content purchases in all Buy-Recycled program product categories.

The Sustainability Levels establish incentives for on-campus projects to incorporate sustainability practices into each phase of project implementation. Specifically, the Sustainability Levels identify incentives for implementing sustainable procurement policies and construction waste diversion strategies, and use of at least 30 percent recycled building materials. Individual projects under the CMP would incorporate these sustainability measures as feasible in order to achieve a score that meets the baseline sustainability requirements outlined in the Sustainability Levels section of the District Design Guidelines and Standards Manual. As such, the CMP would implement the Purchasing and Procurement goals during the construction and operation phases of each project consistent with these goals.

Transportation

The Transportation goals of the Climate Action and Sustainability Framework encourage districts and community colleges to improve sustainable transportation by assessing the condition and electrification potential of their fleet vehicles, expanding EV-charging infrastructure, promoting shared and accessible transportation options, and enhancing pedestrian and bicycle access by 2025. By 2030, they should aim for half of all new fleet vehicles and rolling stock to be zero-emission and may consider green parking permits. By 2035, they are encouraged to transition fully so that 100 percent of new fleet vehicles and rolling stock are zero-emission, supporting a long-term shift toward cleaner campus mobility.

The Mesa College campus is accessible from high-quality public transit options accessible via existing pedestrian infrastructure. The use of shared or public transportation is encouraged through the requirement to pay for on-campus parking, with a discounted option for carpool permits. The long-term projects under the CMP that include parking would expand EV-charging infrastructure through the installation of EV-charging stations at new parking facilities at the Mesa College campus. In addition, projects planned under the CMP would include pedestrian connections, bicycle paths, ride share drop off areas, and bus stops. The District also anticipates continuing to electrify its vehicle fleet as existing vehicles require replacement.

Food Systems

The Food Systems goals of the Climate Action and Sustainability Framework encourage Districts and colleges to improve the sustainability of their food systems by having food service providers track and report sustainable food purchases using the Real Food Challenge guidelines or an equivalent framework. By 2030, they should work toward ensuring that 20 percent of their total food budget goes to sustainable options, and by 2035, aim for 80 percent of all food served on campus to meet Real Food Challenge standards or similar criteria, strengthening long-term commitments to ethical, healthy, and environmentally responsible dining.

Implementation of the CMP would not prevent implementation of the practices and policies related to food systems that the District is implementing or preparing to implement at its campuses, including Mesa College. In addition, projects implemented under the CMP that include dining facilities, such as the Building A Expansion project, would be required to implement the specific sustainable food procurement policies outlined in the Food Systems goals above as they are implemented by the District.

6.2.1.2 Project-Level Analysis

Consistency with applicable plans, policies, and regulations related to GHG emissions that are implemented at the District level is discussed above. Of these, the ones that would apply at the individual project level would include Board Policy 6970 (Green Building Policy and Major Renovation Standards), Administrative Procedure 6970 (Green Buildings), implementation of the goals in the Sustainability Levels as feasible, and installation of EV charging stations at new parking facilities. In accordance with Administrative Procedure 6970, the near-term projects would be designed and built to a minimum standard equivalent to a LEED-NC Silver rating and would strive to achieve a standard equivalent to a LEED- NC gold rating. Water efficient features would also be incorporated into the project designs. With adherence to these District policies, implementation of the near-term projects would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs.

6.2.2 Significance of Impacts

The CMP, including the near-term projects, would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs, and impacts would be less than significant. No mitigation is required.

7.0 LIST OF PREPARERS

Victor Ortiz	Principal Air Quality Specialist
Sydney Wells	Air Quality Specialist
Vanessa Toscano	Principal Planner, Project Manager
Shelby Bocks	Assistant Project Manager, Air Quality Specialist

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Appendix A

Existing Campus CalEEMod Output

In response to Public Laws 119-15, 119-16, and 119-17, CARB developed off-model adjustment factors that remove the estimated emissions benefits attributed to California's Advanced Clean Trucks, Zero-Emission Airport Shuttle, Heavy-Duty Vehicle and Engine Emission Warranty and Maintenance Provisions, and Heavy-Duty Omnibus regulations from EMFAC2021, which were approved by the USEPA in November 2025. To apply these adjustment factors to the CalEEMod output data, a weighted adjustment factor was calculated for each pollutant or GHG based on the fleet mix and CARB adjustment factors for each vehicle type. The weighted adjustment factors are shown below.

	Weighted Adjustment Factors						
Year	NOx (exh)	Total PM2.5 (exh, bw, and tw)	Total PM10 (exh, bw, and tw)	Total ROG (exh and evap)	CO2 (exh)	CH4 (exh)	N2O (exh)
2045	1.023998	1.025635	1.026269	1.016728	1.021467	1.020657	1.0219763

The weighted adjustment factors were applied to the exhaust portion of the maximum daily mobile source emissions calculated in CalEEMod for each respective pollutant or GHG, as shown below. The additional adjusted emissions for each pollutant or GHG were then added to the total maximum daily mobile source emissions presented in the following CalEEMod output file.

	ROG	NOx	PM10E	PM2.5E	PM10D	PM2.5D	PM10TOT	PM2.5TOT	CO_2	CH_4	N_2O	CO_2e
CMP Mobile Source Exhaust (pounds/day)	28.8	16.32	0.27	0.253	70.63	17.9	70.9	18.15	65,857	2.2	2.309	66,615
Adjustment Factor	1.01672826	1.023998	1.02626913	1.0256355	1.02626913	1.0256355			1.021467145	1.02065683	1.02197634	
Additional Adjusted Emissions	**0.48177389**	**0.39164734**	**0.00709266**	**0.00648578**	**1.8553886**	**0.45887538**	**1.862481267**	**0.465361164**	**1413.761772**	**0.04544502**	**0.05074337**	**1430.01942**

CMP - Existing Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

1.2. Land Use Types

1.3. User-Selected Emission Reduction Measures by Emissions Sector

2. Emissions Summary

2.3. Operations Emissions Compared Against Thresholds

2.4. Operations Emissions by Sector, Unmitigated

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

4.3. Area Emissions by Source

4.3.1. Unmitigated

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

5.10. Operational Area Sources

5.10.1. Hearths

5.10.2. Architectural Coatings

5.10.3. Landscape Equipment

5.11. Operational Energy Consumption

5.11.1. Unmitigated

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

5.13. Operational Waste Generation

5.13.1. Unmitigated

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

8.1. Justifications

8.3. Land Use

8.5. Operations

8.5.1. Mobile Sources

8.5.1.1. Vehicle Data

8.5.3. Energy Usage

8.5.4. Water and Waste Water

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	CMP - Existing
Operational Year	2045
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50000
Precipitation (days)	0.40000
Location	32.805208837759196, -117.16850143308352
County	San Diego
City	San Diego
Air District	San Diego County APCD
Air Basin	San Diego
TAZ	6330
EDFZ	12
Electric Utility	San Diego Gas & Electric
Gas Utility	San Diego Gas & Electric
App Version	2022.1.1.41

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Junior College (2yr)	930.128	1000sqft	104.000	930,128	871,200	871,200	—	—
Health Club	16.0220	1000sqft	0.00000	16,022.0	0.00000	—	—	—

Day-Care Center	4.39800	1000sqft	0.00000	4,398.00	0.00000	—	—	—
Enclosed Parking with Elevator	340.015	1000sqft	0.00000	340,015	0.00000	—	—	—
High School	25.7010	1000sqft	0.00000	25,701.0	0.00000	0.00000	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.3. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	65.8360	61.5462	38.6949	298.660	0.78244	2.03539	70.6263	72.6616	1.99319	17.9002	19.8934	746.692	92,823.8	93,570.5	79.3336	2.43448	19.4621	96,298.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	55.5493	52.0380	39.9149	226.378	0.74921	1.93384	70.6263	72.5601	1.91645	17.9002	19.8166	746.692	89,573.6	90,320.2	79.4363	2.57046	4.19264	93,076.3
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	51.4120	48.1741	34.7634	195.636	0.57758	1.90675	50.4343	52.3411	1.88210	12.7826	14.6647	746.692	72,060.1	72,806.8	78.7574	1.85314	8.62097	75,336.6
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	9.38269	8.79177	6.34432	35.7037	0.10541	0.34798	9.20427	9.55225	0.34348	2.33282	2.67630	123.623	11,930.4	12,054.0	13.0392	0.30681	1.42730	12,472.8

2.4. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	31.1005	28.8005	16.3221	223.023	0.64768	0.26998	70.6263	70.8962	0.25260	17.9002	18.1528	—	65,856.7	65,856.7	2.19982	2.30863	15.6759	66,615.4
Area	32.3274	31.5417	0.48172	57.2479	0.00341	0.10168	—	0.10168	0.07687	—	0.07687	—	235.409	235.409	0.00988	0.00202	—	236.258
Energy	2.40802	1.20401	21.8911	18.3885	0.13135	1.66372	—	1.66372	1.66372	—	1.66372	—	26,670.4	26,670.4	2.41872	0.06217	—	26,749.4
Water	—	—	—	—	—	—	—	—	—	—	—	24.7189	61.2058	85.9246	2.54655	0.06167	—	167.965
Waste	—	—	—	—	—	—	—	—	—	—	—	721.973	0.00000	721.973	72.1587	0.00000	—	2,525.94
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.78613	3.78613
Total	65.8360	61.5462	38.6949	298.660	0.78244	2.03539	70.6263	72.6616	1.99319	17.9002	19.8934	746.692	92,823.8	93,570.5	79.3336	2.43448	19.4621	96,298.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	31.0095	28.7022	18.0238	207.990	0.61787	0.27012	70.6263	70.8964	0.25273	17.9002	18.1529	—	62,841.9	62,841.9	2.31235	2.44663	0.40652	63,629.2
Area	22.1318	22.1318	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	2.40802	1.20401	21.8911	18.3885	0.13135	1.66372	—	1.66372	1.66372	—	1.66372	—	26,670.4	26,670.4	2.41872	0.06217	—	26,749.4
Water	—	—	—	—	—	—	—	—	—	—	—	24.7189	61.2058	85.9246	2.54655	0.06167	—	167.965
Waste	—	—	—	—	—	—	—	—	—	—	—	721.973	0.00000	721.973	72.1587	0.00000	—	2,525.94
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.78613	3.78613
Total	55.5493	52.0380	39.9149	226.378	0.74921	1.93384	70.6263	72.5601	1.91645	17.9002	19.8166	746.692	89,573.6	90,320.2	79.4363	2.57046	4.19264	93,076.3
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	21.8442	20.1978	12.6348	149.016	0.44455	0.19288	50.4343	50.6272	0.18047	12.7826	12.9631	—	45,212.4	45,212.4	1.62864	1.72831	4.83485	45,773.0
Area	27.1598	26.7723	0.23756	28.2318	0.00168	0.05015	—	0.05015	0.03791	—	0.03791	—	116.092	116.092	0.00487	0.00100	—	116.511
Energy	2.40802	1.20401	21.8911	18.3885	0.13135	1.66372	—	1.66372	1.66372	—	1.66372	—	26,670.4	26,670.4	2.41872	0.06217	—	26,749.4
Water	—	—	—	—	—	—	—	—	—	—	—	24.7189	61.2058	85.9246	2.54655	0.06167	—	167.965
Waste	—	—	—	—	—	—	—	—	—	—	—	721.973	0.00000	721.973	72.1587	0.00000	—	2,525.94
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.78613	3.78613
Total	51.4120	48.1741	34.7634	195.636	0.57758	1.90675	50.4343	52.3411	1.88210	12.7826	14.6647	746.692	72,060.1	72,806.8	78.7574	1.85314	8.62097	75,336.6

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.98657	3.68609	2.30584	27.1954	0.08113	0.03520	9.20427	9.23947	0.03294	2.33282	2.36576	—	7,485.42	7,485.42	0.26964	0.28614	0.80046	7,578.23
Area	4.95666	4.88594	0.04335	5.15231	0.00031	0.00915	—	0.00915	0.00692	—	0.00692	—	19.2204	19.2204	0.00081	0.00016	—	19.2897
Energy	0.43946	0.21973	3.99512	3.35590	0.02397	0.30363	—	0.30363	0.30363	—	0.30363	—	4,415.60	4,415.60	0.40045	0.01029	—	4,428.67
Water	—	—	—	—	—	—	—	—	—	—	—	4.09249	10.1333	14.2258	0.42161	0.01021	—	27.8084
Waste	—	—	—	—	—	—	—	—	—	—	—	119.531	0.00000	119.531	11.9467	0.00000	—	418.198
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.62684	0.62684
Total	9.38269	8.79177	6.34432	35.7037	0.10541	0.34798	9.20427	9.55225	0.34348	2.33282	2.67630	123.623	11,930.4	12,054.0	13.0392	0.30681	1.42730	12,472.8

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Junior College (2yr)	31.1005	28.8005	16.3221	223.023	0.64768	0.26998	70.6263	70.8962	0.25260	17.9002	18.1528	—	65,856.7	65,856.7	2.19982	2.30863	15.6759	66,615.4
Health Club	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Day-Care Center	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Enclosed Parking with Elevator	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

High School	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Total	31.1005	28.8005	16.3221	223.023	0.64768	0.26998	70.6263	70.8962	0.25260	17.9002	18.1528	—	65,856.7	65,856.7	2.19982	2.30863	15.6759	66,615.4
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Junior College (2yr)	31.0095	28.7022	18.0238	207.990	0.61787	0.27012	70.6263	70.8964	0.25273	17.9002	18.1529	—	62,841.9	62,841.9	2.31235	2.44663	0.40652	63,629.2
Health Club	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Day-Care Center	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Enclosed Parking with Elevator	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
High School	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Total	31.0095	28.7022	18.0238	207.990	0.61787	0.27012	70.6263	70.8964	0.25273	17.9002	18.1529	—	62,841.9	62,841.9	2.31235	2.44663	0.40652	63,629.2
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Junior College (2yr)	3.98657	3.68609	2.30584	27.1954	0.08113	0.03520	9.20427	9.23947	0.03294	2.33282	2.36576	—	7,485.42	7,485.42	0.26964	0.28614	0.80046	7,578.23
Health Club	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Day-Care Center	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Enclosed Parking with Elevator	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

High School	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Total	3.98657	3.68609	2.30584	27.1954	0.08113	0.03520	9.20427	9.23947	0.03294	2.33282	2.36576	—	7,485.42	7,485.42	0.26964	0.28614	0.80046	7,578.23

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Junior College (2yr)	—	—	—	—	—	—	—	—	—	—	—	—	550.729	550.729	0.10714	0.01299	—	557.277
Health Club	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Day-Care Center	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
High School	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	—	550.729	550.729	0.10714	0.01299	—	557.277
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Junior College (2yr)	—	—	—	—	—	—	—	—	—	—	—	—	550.729	550.729	0.10714	0.01299	—	557.277

Health Club	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Day-Care Center	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
High School	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	—	550.729	550.729	0.10714	0.01299	—	557.277
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Junior College (2yr)	—	—	—	—	—	—	—	—	—	—	—	—	91.1794	91.1794	0.01774	0.00215	—	92.2635
Health Club	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Day-Care Center	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
High School	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	—	91.1794	91.1794	0.01774	0.00215	—	92.2635

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Junior College (2yr)	2.40802	1.20401	21.8911	18.3885	0.13135	1.66372	—	1.66372	1.66372	—	1.66372	—	26,119.7	26,119.7	2.31158	0.04918	—	26,192.2
Health Club	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Day-Care Center	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Enclosed Parking with Elevator	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
High School	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	2.40802	1.20401	21.8911	18.3885	0.13135	1.66372	—	1.66372	1.66372	—	1.66372	—	26,119.7	26,119.7	2.31158	0.04918	—	26,192.2
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Junior College (2yr)	2.40802	1.20401	21.8911	18.3885	0.13135	1.66372	—	1.66372	1.66372	—	1.66372	—	26,119.7	26,119.7	2.31158	0.04918	—	26,192.2
Health Club	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Day-Care Center	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Enclosed Parking with Elevator	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
High School	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000

Total	2.40802	1.20401	21.8911	18.3885	0.13135	1.66372	—	1.66372	1.66372	—	1.66372	—	26,119.7	26,119.7	2.31158	0.04918	—	26,192.2
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Junior College (2yr)	0.43946	0.21973	3.99512	3.35590	0.02397	0.30363	—	0.30363	0.30363	—	0.30363	—	4,324.42	4,324.42	0.38271	0.00814	—	4,336.41
Health Club	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Day-Care Center	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Enclosed Parking with Elevator	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
High School	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	0.43946	0.21973	3.99512	3.35590	0.02397	0.30363	—	0.30363	0.30363	—	0.30363	—	4,324.42	4,324.42	0.38271	0.00814	—	4,336.41

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	20.8917	20.8917	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.24006	1.24006	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landsca Equipmer	10.1957 t	9.40993	0.48172	57.2479	0.00341	0.10168	—	0.10168	0.07687	—	0.07687	—	235.409	235.409	0.00988	0.00202	—	236.258
Total	32.3274	31.5417	0.48172	57.2479	0.00341	0.10168	—	0.10168	0.07687	—	0.07687	—	235.409	235.409	0.00988	0.00202	—	236.258
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	20.8917	20.8917	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.24006	1.24006	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	22.1318	22.1318	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	3.81274	3.81274	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.22631	0.22631	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.91761	0.84689	0.04335	5.15231	0.00031	0.00915	—	0.00915	0.00692	—	0.00692	—	19.2204	19.2204	0.00081	0.00016	—	19.2897
Total	4.95666	4.88594	0.04335	5.15231	0.00031	0.00915	—	0.00915	0.00692	—	0.00692	—	19.2204	19.2204	0.00081	0.00016	—	19.2897

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Junior College (2yr)	—	—	—	—	—	—	—	—	—	—	—	24.7189	61.2058	85.9246	2.54655	0.06167	—	167.965
Health Club	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Day-Care Center	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
High School	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	24.7189	61.2058	85.9246	2.54655	0.06167	—	167.965
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Junior College (2yr)	—	—	—	—	—	—	—	—	—	—	—	24.7189	61.2058	85.9246	2.54655	0.06167	—	167.965
Health Club	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Day-Care Center	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000

High School	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	24.7189	61.2058	85.9246	2.54655	0.06167	—	167.965
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Junior College (2yr)	—	—	—	—	—	—	—	—	—	—	—	4.09249	10.1333	14.2258	0.42161	0.01021	—	27.8084
Health Club	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Day-Care Center	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
High School	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	4.09249	10.1333	14.2258	0.42161	0.01021	—	27.8084

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Junior College (2yr)	—	—	—	—	—	—	—	—	—	—	—	651.667	0.00000	651.667	65.1317	0.00000	—	2,279.96
Health Club	—	—	—	—	—	—	—	—	—	—	—	49.2188	0.00000	49.2188	4.91924	0.00000	—	172.200

Day-Care Center	—	—	—	—	—	—	—	—	—	—	—	3.08133	0.00000	3.08133	0.30797	0.00000	—	10.7805
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
High School	—	—	—	—	—	—	—	—	—	—	—	18.0066	0.00000	18.0066	1.79970	0.00000	—	62.9991
Total	—	—	—	—	—	—	—	—	—	—	—	721.973	0.00000	721.973	72.1587	0.00000	—	2,525.94
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Junior College (2yr)	—	—	—	—	—	—	—	—	—	—	—	651.667	0.00000	651.667	65.1317	0.00000	—	2,279.96
Health Club	—	—	—	—	—	—	—	—	—	—	—	49.2188	0.00000	49.2188	4.91924	0.00000	—	172.200
Day-Care Center	—	—	—	—	—	—	—	—	—	—	—	3.08133	0.00000	3.08133	0.30797	0.00000	—	10.7805
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
High School	—	—	—	—	—	—	—	—	—	—	—	18.0066	0.00000	18.0066	1.79970	0.00000	—	62.9991
Total	—	—	—	—	—	—	—	—	—	—	—	721.973	0.00000	721.973	72.1587	0.00000	—	2,525.94
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Junior College (2yr)	—	—	—	—	—	—	—	—	—	—	—	107.891	0.00000	107.891	10.7833	0.00000	—	377.473
Health Club	—	—	—	—	—	—	—	—	—	—	—	8.14873	0.00000	8.14873	0.81444	0.00000	—	28.5097

Day-Care Center	—	—	—	—	—	—	—	—	—	—	—	0.51015	0.00000	0.51015	0.05099	0.00000	—	1.78484
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
High School	—	—	—	—	—	—	—	—	—	—	—	2.98121	0.00000	2.98121	0.29796	0.00000	—	10.4302
Total	—	—	—	—	—	—	—	—	—	—	—	119.531	0.00000	119.531	11.9467	0.00000	—	418.198

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Junior College (2yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.59294	3.59294
Health Club	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.07692	0.07692
Day-Care Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01699	0.01699
High School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.09928	0.09928
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.78613	3.78613
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Junior College (2yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.59294	3.59294
Health Club	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.07692	0.07692
Day-Care Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01699	0.01699
High School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.09928	0.09928
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.78613	3.78613
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Junior College (2yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.59485	0.59485
Health Club	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01273	0.01273
Day-Care Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00281	0.00281
High School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01644	0.01644
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.62684	0.62684

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Junior College (2yr)	13,113.4	0.00000	0.00000	3,418,864	100,172	0.00000	0.00000	26,116,300
Health Club	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Day-Care Center	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Enclosed Parking with Elevator	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
High School	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

5.10. Operational Area Sources

5.10.1. Hearths

Land Use	Hearth Type	Unmitigated (number)	Mitigated (number)
Junior College (2yr)	Wood Fireplaces	0	0
Junior College (2yr)	Gas Fireplaces	0	0
Junior College (2yr)	Propane Fireplaces	0	0
Junior College (2yr)	Electric Fireplaces	0	0
Junior College (2yr)	No Fireplaces	0	0
Junior College (2yr)	Conventional Wood Stoves	0	0
Junior College (2yr)	Catalytic Wood Stoves	0	0
Junior College (2yr)	Non-Catalytic Wood Stoves	0	0
Junior College (2yr)	Pellet Wood Stoves	0	0
Health Club	Wood Fireplaces	0	0
Health Club	Gas Fireplaces	0	0
Health Club	Propane Fireplaces	0	0
Health Club	Electric Fireplaces	0	0
Health Club	No Fireplaces	0	0
Health Club	Conventional Wood Stoves	0	0
Health Club	Catalytic Wood Stoves	0	0
Health Club	Non-Catalytic Wood Stoves	0	0
Health Club	Pellet Wood Stoves	0	0
Day-Care Center	Wood Fireplaces	0	0
Day-Care Center	Gas Fireplaces	0	0
Day-Care Center	Propane Fireplaces	0	0

Day-Care Center	Electric Fireplaces	0	0
Day-Care Center	No Fireplaces	0	0
Day-Care Center	Conventional Wood Stoves	0	0
Day-Care Center	Catalytic Wood Stoves	0	0
Day-Care Center	Non-Catalytic Wood Stoves	0	0
Day-Care Center	Pellet Wood Stoves	0	0
Enclosed Parking with Elevator	Wood Fireplaces	0	0
Enclosed Parking with Elevator	Gas Fireplaces	0	0
Enclosed Parking with Elevator	Propane Fireplaces	0	0
Enclosed Parking with Elevator	Electric Fireplaces	0	0
Enclosed Parking with Elevator	No Fireplaces	0	0
Enclosed Parking with Elevator	Conventional Wood Stoves	0	0
Enclosed Parking with Elevator	Catalytic Wood Stoves	0	0
Enclosed Parking with Elevator	Non-Catalytic Wood Stoves	0	0
Enclosed Parking with Elevator	Pellet Wood Stoves	0	0
High School	Wood Fireplaces	0	0
High School	Gas Fireplaces	0	0
High School	Propane Fireplaces	0	0
High School	Electric Fireplaces	0	0
High School	No Fireplaces	0	0
High School	Conventional Wood Stoves	0	0
High School	Catalytic Wood Stoves	0	0
High School	Non-Catalytic Wood Stoves	0	0
High School	Pellet Wood Stoves	0	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

0.00000	0.00000	1,464,374	488,125	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00000
Summer Days	day/yr	180.000

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Junior College (2yr)	1,184,985	169.636	0.0330	0.0040	81,500,500
Health Club	0.00000	169.636	0.0330	0.0040	0.00000
Day-Care Center	0.00000	169.636	0.0330	0.0040	0.00000
Enclosed Parking with Elevator	0.00000	169.636	0.0330	0.0040	0.00000
High School	0.00000	169.636	0.0330	0.0040	0.00000

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Junior College (2yr)	12,899,710	8,269,045
Health Club	0.00000	0.00000
Day-Care Center	0.00000	0.00000
Enclosed Parking with Elevator	0.00000	0.00000
High School	0.00000	0.00000

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Junior College (2yr)	1,209.17	0.00000
Health Club	91.3254	0.00000
Day-Care Center	5.71740	0.00000
Enclosed Parking with Elevator	0.00000	0.00000
High School	33.4113	0.00000

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Junior College (2yr)	Household refrigerators and/or freezers	R-134a	1,430.00	0.01679	0.60000	0.00000	1.000000
Junior College (2yr)	Other commercial A/C and heat pumps	R-410A	2,088.00	0.00180	4.00000	4.00000	18.0000
Junior College (2yr)	Stand-alone retail refrigerators and freezers	R-134a	1,430.00	0.00004	1.000000	0.00000	1.000000
Junior College (2yr)	Walk-in refrigerators and freezers	R-404A	3,922.00	0.00040	7.50000	7.50000	20.0000
Health Club	Other commercial A/C and heat pumps	R-410A	2,088.00	0.00180	4.00000	4.00000	18.0000
Health Club	Stand-alone retail refrigerators and freezers	R-134a	1,430.00	0.03750	1.000000	0.00000	1.000000
Day-Care Center	Household refrigerators and/or freezers	R-134a	1,430.00	0.01679	0.60000	0.00000	1.000000

Day-Care Center	Other commercial A/C and heat pumps	R-410A	2,088.00	0.00180	4.00000	4.00000	18.0000
Day-Care Center	Stand-alone retail refrigerators and freezers	R-134a	1,430.00	0.00004	1.000000	0.00000	1.000000
Day-Care Center	Walk-in refrigerators and freezers	R-404A	3,922.00	0.00040	7.50000	7.50000	20.0000
High School	Household refrigerators and/or freezers	R-134a	1,430.00	0.01679	0.60000	0.00000	1.000000
High School	Other commercial A/C and heat pumps	R-410A	2,088.00	0.00180	4.00000	4.00000	18.0000
High School	Stand-alone retail refrigerators and freezers	R-134a	1,430.00	0.00004	1.000000	0.00000	1.000000
High School	Walk-in refrigerators and freezers	R-404A	3,922.00	0.00040	7.50000	7.50000	20.0000

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	7.50000	annual days of extreme heat
Extreme Precipitation	2.70000	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	3.64000	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	37.5731
AQ-PM	41.7424
AQ-DPM	80.7218
Drinking Water	28.9871
Lead Risk Housing	42.8986
Pesticides	0.00000
Toxic Releases	33.3083
Traffic	89.1500
Effect Indicators	—
CleanUp Sites	34.6211
Groundwater	50.8717
Haz Waste Facilities/Generators	46.8034
Impaired Water Bodies	12.4528
Solid Waste	40.0916
Sensitive Population	—
Asthma	54.1002

Cardio-vascular	17.4975
Low Birth Weights	46.7667
Socioeconomic Factor Indicators	—
Education	45.5834
Housing	71.5716
Linguistic	41.4400
Poverty	53.2663
Unemployment	73.4123

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	48.72321314
Employed	56.3839343
Median HI	30.15526755
Education	—
Bachelor's or higher	49.33915052
High school enrollment	100
Preschool enrollment	95.7141024
Transportation	—
Auto Access	18.88874631
Active commuting	53.20159117
Social	—
2-parent households	82.26613628
Voting	71.14076736
Neighborhood	—
Alcohol availability	60.33619915

Park access	42.92313615
Retail density	91.23572437
Supermarket access	78.60900808
Tree canopy	19.26087514
Housing	—
Homeownership	41.12665212
Housing habitability	44.15501091
Low-inc homeowner severe housing cost burden	31.75927114
Low-inc renter severe housing cost burden	25.11228025
Uncrowded housing	56.30694213
Health Outcomes	—
Insured adults	55.13922751
Arthritis	27.4
Asthma ER Admissions	30.8
High Blood Pressure	46.3
Cancer (excluding skin)	27.6
Asthma	55.1
Coronary Heart Disease	31.2
Chronic Obstructive Pulmonary Disease	33.2
Diagnosed Diabetes	48.6
Life Expectancy at Birth	39.9
Cognitively Disabled	13.7
Physically Disabled	7.5
Heart Attack ER Admissions	89.7
Mental Health Not Good	50.5
Chronic Kidney Disease	45.1
Obesity	63.1
Pedestrian Injuries	63.7

Physical Health Not Good	53.6
Stroke	34.3
Health Risk Behaviors	—
Binge Drinking	30.9
Current Smoker	47.6
No Leisure Time for Physical Activity	48.5
Climate Change Exposures	—
Wildfire Risk	14.9
SLR Inundation Area	0.0
Children	95.4
Elderly	22.5
English Speaking	43.4
Foreign-born	55.0
Outdoor Workers	81.3
Climate Change Adaptive Capacity	—
Impervious Surface Cover	11.8
Traffic Density	85.7
Traffic Access	87.4
Other Indices	—
Hardship	38.7
Other Decision Support	—
2016 Voting	68.8

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	50.0000
Healthy Places Index Score for Project Location (b)	60.0000
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No

Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

8.1. Justifications

Screen	Justification
Land Use	The existing on campus buildings and land uses are based on the Building Report provided by the District. The landscape area was estimated as 20% of the total campus area.
Operations: Vehicle Data	Existing trips were modeled based on the trip rate of 1.15 trips per students (LLG 2026), which was multiplied by the Mesa College enrollment for 2025 (11,403 students) and adjusted for the Junior College land use size ((1.15*11,403)/930.128) = 14.098543.
Operations: Energy Use	The existing electricity and natural gas consumption on the Mesa College campus was provided via energy bills from the District for 2024.
Operations: Water and Waste Water	Existing water consumption on campus was provided via water bills from the District for October 2024 through September 2025. The indoor/outdoor split was determined using a ratio of 1.56 indoor:1 outdoor based on CalEEMod defaults.

8.3. Land Use

Model Parameter	Units	Default Value	New Value
Lot Area	acre	21.3528	104.000

Landscape Area	sq. ft	—	871,200
Lot Area	acre	0.36781	0.00000
Landscape Area	sq. ft	—	0.00000
Lot Area	acre	0.10096	0.00000
Landscape Area	sq. ft	—	0.00000
Lot Area	acre	7.80567	0.00000
Landscape Area	sq. ft	—	0.00000
Lot Area	acre	0.59001	0.00000
Landscape Area	sq. ft	—	0.00000

8.5. Operations

8.5.1. Mobile Sources

8.5.1.1. Vehicle Data

Land Use	Model Parameter	Units	Default Value	New Value
Junior College (2yr)	Weekday Trip Rate	size/day	20.2500	14.0985
Junior College (2yr)	Saturday Trip Rate	size/day	11.2300	0.00000
Junior College (2yr)	Sunday Trip Rate	size/day	1.21000	0.00000
Health Club	Weekday Trip Rate	size/day	32.9300	0.00000
Health Club	Saturday Trip Rate	size/day	20.8700	0.00000
Health Club	Sunday Trip Rate	size/day	26.7300	0.00000
Day-Care Center	Weekday Trip Rate	size/day	47.6200	0.00000
Day-Care Center	Saturday Trip Rate	size/day	6.22000	0.00000
Day-Care Center	Sunday Trip Rate	size/day	5.84000	0.00000
High School	Weekday Trip Rate	size/day	14.0700	0.00000
High School	Saturday Trip Rate	size/day	3.98000	0.00000
High School	Sunday Trip Rate	size/day	1.71000	0.00000

8.5.3. Energy Usage

Land Use	Model Parameter	Units	Default Value	New Value
Junior College (2yr)	Electricity	kWh/yr	12,168,302	1,184,985
Junior College (2yr)	Electricity (Subject to Title 24)	kWh/yr	9,536,362	928,679
Junior College (2yr)	Electricity (Not Subject to Title 24)	kWh/yr	2,631,940	256,306
Junior College (2yr)	Natural Gas	kBTU/yr	57,755,999	81,500,500
Junior College (2yr)	Natural Gas (Subject to Title 24)	kBTU/yr	52,746,769	74,431,887
Junior College (2yr)	Natural Gas (Not Subject to Title 24)	kBTU/yr	5,009,230	7,068,613
Health Club	Electricity	kWh/yr	143,772	0.00000
Health Club	Electricity (Subject to Title 24)	kWh/yr	118,882	0.00000
Health Club	Electricity (Not Subject to Title 24)	kWh/yr	24,890.6	0.00000
Health Club	Natural Gas	kBTU/yr	646,716	0.00000
Health Club	Natural Gas (Subject to Title 24)	kBTU/yr	331,730	0.00000
Health Club	Natural Gas (Not Subject to Title 24)	kBTU/yr	314,986	0.00000
Day-Care Center	Electricity	kWh/yr	29,668.6	0.00000
Day-Care Center	Electricity (Subject to Title 24)	kWh/yr	24,929.4	0.00000
Day-Care Center	Electricity (Not Subject to Title 24)	kWh/yr	4,739.26	0.00000
Day-Care Center	Natural Gas	kBTU/yr	69,265.4	0.00000
Day-Care Center	Natural Gas (Subject to Title 24)	kBTU/yr	38,316.0	0.00000
Day-Care Center	Natural Gas (Not Subject to Title 24)	kBTU/yr	30,949.5	0.00000
Enclosed Parking with Elevator	Electricity	kWh/yr	1,255,142	0.00000
Enclosed Parking with Elevator	Electricity (Subject to Title 24)	kWh/yr	1,190,539	0.00000
Enclosed Parking with Elevator	Electricity (Not Subject to Title 24)	kWh/yr	64,602.8	0.00000
High School	Electricity	kWh/yr	173,377	0.00000
High School	Electricity (Subject to Title 24)	kWh/yr	145,682	0.00000
High School	Electricity (Not Subject to Title 24)	kWh/yr	27,695.2	0.00000
High School	Natural Gas	kBTU/yr	404,773	0.00000
High School	Natural Gas (Subject to Title 24)	kBTU/yr	223,911	0.00000

High School	Natural Gas (Not Subject to Title 24)	kBTU/yr	180,862	0.00000

8.5.4. Water and Waste Water

Land Use	Model Parameter	Units	Default Value	New Value
Junior College (2yr)	Indoor Water	gal/year	45,621,879	12,899,710
Junior College (2yr)	Outdoor Water	gal/year	28,931,901	8,269,045
Health Club	Indoor Water	gal/year	947,591	0.00000
Day-Care Center	Indoor Water	gal/year	188,628	0.00000
High School	Indoor Water	gal/year	853,392	0.00000

Appendix B

Near-Term Construction CalEEMod Output

CMP - Athletics Complex Detailed Report

Table of Contents

1. Basic Project Information
   1.1. Basic Project Information
   1.2. Land Use Types
   1.3. User-Selected Emission Reduction Measures by Emissions Sector
2. Emissions Summary
   2.1. Construction Emissions Compared Against Thresholds
   2.2. Construction Emissions by Year
      2.2.1. Total Construction Emissions by Year, Unmitigated
      2.2.2. Onsite Construction Emissions by Year, Unmitigated
      2.2.3. Offsite Construction Emissions by Year, Unmitigated
3. Construction Emissions Details
   3.1. Phase 2 - Demolition (2030)
      3.1.1. Onsite - Unmitigated
      3.1.2. Offsite - Unmitigated
   3.2. Phase 1- Site Preparation (2028)
      3.2.1. Onsite - Unmitigated
      3.2.2. Offsite - Unmitigated
   3.3. Phase 2 - Site Preparation (2030)

3.3.1. Onsite - Unmitigated
3.3.2. Offsite - Unmitigated
3.4. Phase 1- Grading (2028)
3.4.1. Onsite - Unmitigated
3.4.2. Offsite - Unmitigated
3.5. Phase 2 - Grading (2030)
3.5.1. Onsite - Unmitigated
3.5.2. Offsite - Unmitigated
3.6. Phase 1- Building Construction (2028)
3.6.1. Onsite - Unmitigated
3.6.2. Offsite - Unmitigated
3.7. Phase 1- Building Construction (2029)
3.7.1. Onsite - Unmitigated
3.7.2. Offsite - Unmitigated
3.8. Phase 1- Paving (2029)
3.8.1. Onsite - Unmitigated
3.8.2. Offsite - Unmitigated
3.9. Phase 1- Paving (2030)
3.9.1. Onsite - Unmitigated
3.9.2. Offsite - Unmitigated
3.10. Phase 1- Architectural Coating (2030)
3.10.1. Onsite - Unmitigated

3.10.2. Offsite - Unmitigated
3.11. Phase 2 - Architectural Coating (2031)
3.11.1. Onsite - Unmitigated
3.11.2. Offsite - Unmitigated
3.12. Phase 1 - Utilities Undergrounding (2029)
3.12.1. Onsite - Unmitigated
3.12.2. Offsite - Unmitigated
3.13. Phase 2 - Utilities Undergrounding (2030)
3.13.1. Onsite - Unmitigated
3.13.2. Offsite - Unmitigated
4. Operations Emissions Details
4.10. Soil Carbon Accumulation By Vegetation Type
4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated
4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated
4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated
5. Activity Data
5.1. Construction Schedule
5.2. Off-Road Equipment
5.2.1. Unmitigated
5.3. Construction Vehicles
5.3.1. Unmitigated
5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies
5.5. Architectural Coatings
5.6. Dust Mitigation
5.6.1. Construction Earthmoving Activities
5.6.2. Construction Earthmoving Control Strategies
5.7. Construction Paving
5.8. Construction Electricity Consumption and Emissions Factors
5.18. Vegetation
5.18.1. Land Use Change
5.18.1.1. Unmitigated
5.18.1. Biomass Cover Type
5.18.1.1. Unmitigated
5.18.2. Sequestration
5.18.2.1. Unmitigated
6. Climate Risk Detailed Report
6.1. Climate Risk Summary
6.2. Initial Climate Risk Scores
6.3. Adjusted Climate Risk Scores
6.4. Climate Risk Reduction Measures
7. Health and Equity Details
7.1. CalEnviroScreen 4.0 Scores
7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores
7.4. Health & Equity Measures
7.5. Evaluation Scorecard
7.6. Health & Equity Custom Measures
8. User Changes to Default Data
8.1. Justifications
8.3. Land Use
8.4. Construction
8.4.9. Paving

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	CMP - Athletics Complex
Construction Start Date	1/19/2028
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50000
Precipitation (days)	0.40000
Location	32.805334834513246, -117.16633771838454
County	San Diego
City	San Diego
Air District	San Diego County APCD
Air Basin	San Diego
TAZ	6330
EDFZ	12
Electric Utility	San Diego Gas & Electric
Gas Utility	San Diego Gas & Electric
App Version	2022.1.1.45

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Health Club	175.000	1000sqft	10.00000	175,000	87,120.0	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.52981	2.97424	25.2465	29.0333	0.04889	1.06629	7.81424	8.88052	0.98098	3.97465	4.95563	—	5,447.47	5,447.47	0.21713	0.20951	3.34505	5,467.80
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	11.7572	11.7355	27.5337	28.9603	0.04909	1.14409	7.82064	8.96473	1.05259	3.97641	5.02900	—	5,471.83	5,471.83	0.21897	0.14044	0.08664	5,492.85
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.78430	1.64041	8.17919	11.8153	0.02075	0.27841	1.39199	1.65069	0.25659	0.63415	0.87226	—	2,636.70	2,636.70	0.09837	0.08667	0.86536	2,665.85

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.32563	0.29937	1.49270	2.15630	0.00379	0.05081	0.25404	0.30125	0.04683	0.11573	0.15919	—	436.535	436.535	0.01629	0.01435	0.14327	441.361

2.2. Construction Emissions by Year

2.2.1. Total Construction Emissions by Year, Unmitigated

Includes both onsite and offsite emissions.

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	1.51121	1.26606	9.93043	16.1781	0.02823	0.30989	0.80518	1.11507	0.28587	0.19642	0.48229	—	3,729.40	3,729.40	0.13422	0.14044	3.34505	3,777.95
2029	1.46332	1.23103	9.52666	15.9709	0.02822	0.28529	0.80518	1.09047	0.25842	0.19642	0.45484	—	3,698.24	3,698.24	0.13257	0.13561	2.98943	3,744.96
2030	3.52981	2.97424	25.2465	29.0333	0.04889	1.06629	7.81424	8.88052	0.98098	3.97465	4.95563	—	5,447.47	5,447.47	0.21713	0.20951	2.17689	5,467.80
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	3.68019	3.09598	27.5337	28.9603	0.04909	1.14409	7.82064	8.96473	1.05259	3.97641	5.02900	—	5,471.83	5,471.83	0.21897	0.14044	0.08664	5,492.85
2029	1.46107	1.22490	9.58349	15.6329	0.02822	0.34881	0.80518	1.09047	0.32091	0.19642	0.45484	—	3,662.80	3,662.80	0.13581	0.13561	0.07750	3,706.69
2030	11.7572	11.7355	25.2523	28.9587	0.04889	1.06629	7.81424	8.88052	0.98098	3.97465	4.95563	—	5,439.06	5,439.06	0.21752	0.04874	0.00977	5,459.03
2031	11.7063	11.6862	0.77690	1.10346	0.00173	0.00943	0.00000	0.00943	0.00867	0.00000	0.00867	—	133.518	133.518	0.00542	0.00108	0.00000	133.976
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
2028	1.19473	1.00051	8.17919	11.8153	0.02075	0.27841	1.12191	1.40032	0.25659	0.43995	0.69654	—	2,636.70	2,636.70	0.09837	0.08667	0.86536	2,665.85
2029	0.99306	0.83270	6.59647	10.6307	0.01882	0.20244	0.50897	0.71141	0.18373	0.12407	0.30780	—	2,427.13	2,427.13	0.08919	0.08565	0.81200	2,455.70
2030	1.78430	1.64041	6.42584	7.60185	0.01301	0.25870	1.39199	1.65069	0.23810	0.63415	0.87226	—	1,469.75	1,469.75	0.05843	0.02743	0.12695	1,479.52
2031	1.34702	1.34472	0.08940	0.12697	0.00020	0.00108	0.00000	0.00108	0.00100	0.00000	0.00100	—	15.3637	15.3637	0.00062	0.00012	0.00000	15.4164
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	0.21804	0.18259	1.49270	2.15630	0.00379	0.05081	0.20475	0.25556	0.04683	0.08029	0.12712	—	436.535	436.535	0.01629	0.01435	0.14327	441.361
2029	0.18123	0.15197	1.20386	1.94009	0.00343	0.03695	0.09289	0.12983	0.03353	0.02264	0.05617	—	401.839	401.839	0.01477	0.01418	0.13444	406.569
2030	0.32563	0.29937	1.17272	1.38734	0.00237	0.04721	0.25404	0.30125	0.04345	0.11573	0.15919	—	243.335	243.335	0.00967	0.00454	0.02102	244.951
2031	0.24583	0.24541	0.01631	0.02317	0.00004	0.00020	0.00000	0.00020	0.00018	0.00000	0.00018	—	2.54363	2.54363	0.00010	0.00002	0.00000	2.55236

2.2.2. Onsite Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	1.18481	0.99143	8.92495	12.9352	0.02340	0.30024	0.00000	0.30024	0.27622	0.00000	0.27622	—	2,397.46	2,397.46	0.09725	0.01945	0.00000	2,405.68
2029	1.15336	0.96514	8.58166	12.9012	0.02340	0.27564	0.00000	0.27564	0.25359	0.00000	0.25359	—	2,396.83	2,396.83	0.09723	0.01945	0.00000	2,405.06
2030	3.47350	2.91871	25.2092	28.4319	0.04889	1.06629	7.66623	8.73252	0.98098	3.93995	4.92094	—	5,295.67	5,295.67	0.21482	0.04296	0.00000	5,313.84
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	3.61333	3.03620	27.4549	28.3524	0.04893	1.14375	7.66623	8.80999	1.05225	3.93995	4.99221	—	5,300.02	5,300.02	0.21499	0.04300	0.00000	5,318.21
2029	1.15336	0.96514	8.58166	12.9012	0.02340	0.34881	0.00000	0.34881	0.32091	0.00000	0.32091	—	2,396.83	2,396.83	0.09723	0.01945	0.00000	2,405.06

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
2030	11.7099	11.6892	25.2092	28.4319	0.04889	1.06629	7.66623	8.73252	0.98098	3.93995	4.92094	—	5,295.67	5,295.67	0.21482	0.04296	0.00000	5,313.84
2031	11.7063	11.6862	0.77690	1.10346	0.00173	0.00943	0.00000	0.00943	0.00867	0.00000	0.00867	—	133.518	133.518	0.00542	0.00108	0.00000	133.976
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	1.00123	0.83889	7.55534	10.0457	0.01791	0.27274	0.63670	0.90944	0.25092	0.32170	0.57262	—	1,859.77	1,859.77	0.07544	0.01509	0.00000	1,866.15
2029	0.79977	0.66954	5.97789	8.87749	0.01583	0.19646	0.00000	0.19646	0.18074	0.00000	0.18074	—	1,629.05	1,629.05	0.06608	0.01322	0.00000	1,634.64
2030	1.75735	1.61835	6.29404	7.35479	0.01233	0.25743	1.30936	1.56679	0.23684	0.61371	0.85055	—	1,323.14	1,323.14	0.05367	0.01073	0.00000	1,327.68
2031	1.34702	1.34472	0.08940	0.12697	0.00020	0.00108	0.00000	0.00108	0.00100	0.00000	0.00100	—	15.3637	15.3637	0.00062	0.00012	0.00000	15.4164
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	0.18272	0.15310	1.37885	1.83334	0.00327	0.04977	0.11620	0.16597	0.04579	0.05871	0.10450	—	307.906	307.906	0.01249	0.00250	0.00000	308.963
2029	0.14596	0.12219	1.09096	1.62014	0.00289	0.03585	0.00000	0.03585	0.03299	0.00000	0.03299	—	269.707	269.707	0.01094	0.00219	0.00000	270.633
2030	0.32072	0.29535	1.14866	1.34225	0.00225	0.04698	0.23896	0.28594	0.04322	0.11200	0.15523	—	219.060	219.060	0.00889	0.00178	0.00000	219.812
2031	0.24583	0.24541	0.01631	0.02317	0.00004	0.00020	0.00000	0.00020	0.00018	0.00000	0.00018	—	2.54363	2.54363	0.00010	0.00002	0.00000	2.55236

2.2.3. Offsite Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	0.32640	0.27463	1.00548	3.24289	0.00482	0.00965	0.80518	0.81483	0.00965	0.19642	0.20607	—	1,331.94	1,331.94	0.03697	0.12099	3.34505	1,372.27
2029	0.30996	0.26589	0.94500	3.06964	0.00482	0.00965	0.80518	0.81483	0.00482	0.19642	0.20125	—	1,301.41	1,301.41	0.03534	0.11616	2.98943	1,339.90
2030	0.12336	0.06843	1.40886	1.09218	0.00825	0.01542	0.45669	0.47211	0.01542	0.12007	0.13549	—	1,253.12	1,253.12	0.04754	0.18171	2.17689	1,310.64

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	0.32225	0.27012	1.06330	2.89905	0.00482	0.00965	0.80518	0.81483	0.00965	0.19642	0.20607	—	1,295.82	1,295.82	0.03859	0.12099	0.08664	1,332.92
2029	0.30771	0.25977	1.00184	2.73164	0.00482	0.00965	0.80518	0.81483	0.00482	0.19642	0.20125	—	1,265.97	1,265.97	0.03859	0.11616	0.07750	1,301.63
2030	0.05630	0.05515	0.04313	0.52680	0.00000	0.00000	0.14800	0.14800	0.00000	0.03469	0.03469	—	143.391	143.391	0.00270	0.00578	0.00977	145.190
2031	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	0.19350	0.16162	0.62385	1.76964	0.00284	0.00567	0.48521	0.49089	0.00567	0.11825	0.12392	—	776.926	776.926	0.02293	0.07158	0.86536	799.694
2029	0.19329	0.16315	0.61858	1.75316	0.00299	0.00599	0.50897	0.51495	0.00299	0.12407	0.12706	—	798.085	798.085	0.02311	0.07244	0.81200	821.060
2030	0.02695	0.02205	0.13180	0.24706	0.00068	0.00127	0.08264	0.08390	0.00127	0.02044	0.02171	—	146.617	146.617	0.00476	0.01670	0.12695	151.840
2031	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	0.03531	0.02950	0.11385	0.32296	0.00052	0.00103	0.08855	0.08959	0.00103	0.02158	0.02262	—	128.629	128.629	0.00380	0.01185	0.14327	132.399
2029	0.03528	0.02978	0.11289	0.31995	0.00055	0.00109	0.09289	0.09398	0.00055	0.02264	0.02319	—	132.132	132.132	0.00383	0.01199	0.13444	135.936
2030	0.00492	0.00402	0.02405	0.04509	0.00012	0.00023	0.01508	0.01531	0.00023	0.00373	0.00396	—	24.2742	24.2742	0.00079	0.00276	0.02102	25.1388
2031	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3. Construction Emissions Details

3.1. Phase 2 - Demolition (2030)

3.1.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.48435	2.08511	18.1258	18.6740	0.03253	0.71801	—	0.71801	0.66057	—	0.66057	—	3,426.32	3,426.32	0.13899	0.02780	—	3,438.08
Demolition	—	—	—	—	—	—	0.94516	0.94516	—	0.14312	0.14312	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.20419	0.17138	1.48979	1.53485	0.00267	0.05901	—	0.05901	0.05429	—	0.05429	—	281.616	281.616	0.01142	0.00228	—	282.582
Demolition	—	—	—	—	—	—	0.07768	0.07768	—	0.01176	0.01176	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03727	0.03128	0.27189	0.28011	0.00049	0.01077	—	0.01077	0.00991	—	0.00991	—	46.6247	46.6247	0.00189	0.00038	—	46.7847
Demolition	—	—	—	—	—	—	0.01418	0.01418	—	0.00215	0.00215	—	—	—	—	—	—	—

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.1.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04826	0.04760	0.03202	0.51547	0.00000	0.00000	0.12686	0.12686	0.00000	0.02974	0.02974	—	130.113	130.113	0.00198	0.00495	0.32378	131.962
Vendor	0.00309	0.00160	0.05247	0.02555	0.00034	0.00034	0.01280	0.01314	0.00034	0.00354	0.00387	—	44.0992	44.0992	0.00145	0.00636	0.07409	46.1061
Hauling	0.07201	0.01923	1.32437	0.55116	0.00792	0.01508	0.31703	0.33211	0.01508	0.08680	0.10188	—	1,078.91	1,078.91	0.04411	0.17040	1.77902	1,132.57
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00391	0.00383	0.00269	0.03744	0.00000	0.00000	0.01042	0.01042	0.00000	0.00244	0.00244	—	10.1918	10.1918	0.00019	0.00041	0.01149	10.3293
Vendor	0.00025	0.00013	0.00446	0.00213	0.00003	0.00003	0.00105	0.00108	0.00003	0.00029	0.00032	—	3.62591	3.62591	0.00012	0.00053	0.00263	3.78849
Hauling	0.00586	0.00152	0.11304	0.04549	0.00065	0.00124	0.02605	0.02729	0.00124	0.00713	0.00837	—	88.6957	88.6957	0.00363	0.01401	0.06310	93.0230
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00071	0.00070	0.00049	0.00683	0.00000	0.00000	0.00190	0.00190	0.00000	0.00045	0.00045	—	1.68737	1.68737	0.00003	0.00007	0.00190	1.71014
Vendor	0.00005	0.00002	0.00081	0.00039	0.00001	0.00001	0.00019	0.00020	0.00001	0.00005	0.00006	—	0.60031	0.60031	0.00002	0.00009	0.00044	0.62723
Hauling	0.00107	0.00028	0.02063	0.00830	0.00012	0.00023	0.00475	0.00498	0.00023	0.00130	0.00153	—	14.6846	14.6846	0.00060	0.00232	0.01045	15.4010

3.2. Phase 1- Site Preparation (2028)

3.2.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.61333	3.03620	27.4549	28.3524	0.04893	1.14375	—	1.14375	1.05225	—	1.05225	—	5,300.02	5,300.02	0.21499	0.04300	—	5,318.21
Dust From Material Movement	—	—	—	—	—	—	7.66623	7.66623	—	3.93995	3.93995	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26729	0.22460	2.03091	2.09730	0.00362	0.08461	—	0.08461	0.07784	—	0.07784	—	392.057	392.057	0.01590	0.00318	—	393.402
Dust From Material Movement	—	—	—	—	—	—	0.56709	0.56709	—	0.29145	0.29145	—	—	—	—	—	—	—

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04878	0.04099	0.37064	0.38276	0.00066	0.01544	—	0.01544	0.01421	—	0.01421	—	64.9094	64.9094	0.00263	0.00053	—	65.1322
Dust From Material Movement	—	—	—	—	—	—	0.10349	0.10349	—	0.05319	0.05319	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.2.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06517	0.05901	0.04891	0.59381	0.00000	0.00000	0.14800	0.14800	0.00000	0.03469	0.03469	—	148.346	148.346	0.00309	0.00578	0.01215	150.157
Vendor	0.00169	0.00078	0.02991	0.01412	0.00017	0.00034	0.00640	0.00674	0.00034	0.00177	0.00210	—	23.4555	23.4555	0.00089	0.00337	0.00124	24.4840
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Worker	0.00476	0.00431	0.00359	0.04452	0.00000	0.00000	0.01095	0.01095	0.00000	0.00257	0.00257	—	11.0715	11.0715	0.00023	0.00043	0.01500	11.2196
Vendor	0.00013	0.00006	0.00219	0.00103	0.00001	0.00002	0.00047	0.00050	0.00002	0.00013	0.00016	—	1.73434	1.73434	0.00007	0.00025	0.00153	1.81186
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00087	0.00079	0.00066	0.00813	0.00000	0.00000	0.00200	0.00200	0.00000	0.00047	0.00047	—	1.83302	1.83302	0.00004	0.00007	0.00248	1.85752
Vendor	0.00002	0.00001	0.00040	0.00019	< 0.0000 05	< 0.0000 05	0.00009	0.00009	< 0.0000 05	0.00002	0.00003	—	0.28714	0.28714	0.00001	0.00004	0.00025	0.29997
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.3. Phase 2 - Site Preparation (2030)

3.3.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.47350	2.91871	25.2092	28.4319	0.04889	1.06629	—	1.06629	0.98098	—	0.98098	—	5,295.67	5,295.67	0.21482	0.04296	—	5,313.84
Dust From Material Movement	—	—	—	—	—	—	7.66623	7.66623	—	3.93995	3.93995	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.47350	2.91871	25.2092	28.4319	0.04889	1.06629	—	1.06629	0.98098	—	0.98098	—	5,295.67	5,295.67	0.21482	0.04296	—	5,313.84
Dust From Material Movement	—	—	—	—	—	—	7.66623	7.66623	—	3.93995	3.93995	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.38066	0.31986	2.76265	3.11582	0.00536	0.11685	—	0.11685	0.10750	—	0.10750	—	580.347	580.347	0.02354	0.00471	—	582.339
Dust From Material Movement	—	—	—	—	—	—	0.84014	0.84014	—	0.43178	0.43178	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06947	0.05837	0.50418	0.56864	0.00098	0.02133	—	0.02133	0.01962	—	0.01962	—	96.0831	96.0831	0.00390	0.00078	—	96.4128

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Dust From Material Movement	—	—	—	—	—	—	0.15332	0.15332	—	0.07880	0.07880	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.3.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05630	0.05553	0.03735	0.60138	0.00000	0.00000	0.14800	0.14800	0.00000	0.03469	0.03469	—	151.799	151.799	0.00231	0.00578	0.37774	153.956
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05630	0.05515	0.04313	0.52680	0.00000	0.00000	0.14800	0.14800	0.00000	0.03469	0.03469	—	143.391	143.391	0.00270	0.00578	0.00977	145.190
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00609	0.00596	0.00418	0.05824	0.00000	0.00000	0.01622	0.01622	0.00000	0.00380	0.00380	—	15.8540	15.8540	0.00030	0.00063	0.01788	16.0679
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00111	0.00109	0.00076	0.01063	0.00000	0.00000	0.00296	0.00296	0.00000	0.00069	0.00069	—	2.62480	2.62480	0.00005	0.00010	0.00296	2.66022
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.4. Phase 1- Grading (2028)

3.4.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.85583	1.55941	13.7880	17.3209	0.02734	0.56820	—	0.56820	0.52275	—	0.52275	—	2,960.88	2,960.88	0.12011	0.02402	—	2,971.04
Dust From Material Movement	—	—	—	—	—	—	3.17580	3.17580	—	1.38031	1.38031	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04068	0.03418	0.30220	0.37964	0.00060	0.01245	—	0.01245	0.01146	—	0.01146	—	64.8960	64.8960	0.00263	0.00053	—	65.1187
Dust From Material Movement	—	—	—	—	—	—	0.06961	0.06961	—	0.03025	0.03025	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00742	0.00624	0.05515	0.06928	0.00011	0.00227	—	0.00227	0.00209	—	0.00209	—	10.7443	10.7443	0.00044	0.00009	—	10.7811
Dust From Material Movement	—	—	—	—	—	—	0.01270	0.01270	—	0.00552	0.00552	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.4.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05586	0.05058	0.04192	0.50898	0.00000	0.00000	0.12686	0.12686	0.00000	0.02974	0.02974	—	127.154	127.154	0.00265	0.00495	0.01042	128.706
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00121	0.00109	0.00091	0.01131	0.00000	0.00000	0.00278	0.00278	0.00000	0.00065	0.00065	—	2.81182	2.81182	0.00006	0.00011	0.00381	2.84941
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00022	0.00020	0.00017	0.00206	0.00000	0.00000	0.00051	0.00051	0.00000	0.00012	0.00012	—	0.46553	0.46553	0.00001	0.00002	0.00063	0.47175
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.5. Phase 2 - Grading (2030)

3.5.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.75769	1.47695	12.6160	17.3443	0.02732	0.51272	—	0.51272	0.47171	—	0.47171	—	2,958.97	2,958.97	0.12003	0.02401	—	2,969.13
Dust From Material Movement	—	—	—	—	—	—	3.17580	3.17580	—	1.38031	1.38031	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21670	0.18209	1.55539	2.13834	0.00337	0.06321	—	0.06321	0.05816	—	0.05816	—	364.805	364.805	0.01480	0.00296	—	366.057
Dust From Material Movement	—	—	—	—	—	—	0.39154	0.39154	—	0.17017	0.17017	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03955	0.03323	0.28386	0.39025	0.00061	0.01154	—	0.01154	0.01061	—	0.01061	—	60.3976	60.3976	0.00245	0.00049	—	60.6049

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Dust From Material Movement	—	—	—	—	—	—	0.07146	0.07146	—	0.03106	0.03106	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.5.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04826	0.04727	0.03697	0.45155	0.00000	0.00000	0.12686	0.12686	0.00000	0.02974	0.02974	—	122.907	122.907	0.00231	0.00495	0.00838	124.448
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00587	0.00575	0.00403	0.05616	0.00000	0.00000	0.01564	0.01564	0.00000	0.00367	0.00367	—	15.2878	15.2878	0.00029	0.00061	0.01724	15.4940
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00107	0.00105	0.00074	0.01025	0.00000	0.00000	0.00285	0.00285	0.00000	0.00067	0.00067	—	2.53106	2.53106	0.00005	0.00010	0.00285	2.56521

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.6. Phase 1- Building Construction (2028)

3.6.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18481	0.99143	8.92495	12.9352	0.02340	0.30024	—	0.30024	0.27622	—	0.27622	—	2,397.46	2,397.46	0.09725	0.01945	—	2,405.68
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18481	0.99143	8.92495	12.9352	0.02340	0.30024	—	0.30024	0.27622	—	0.27622	—	2,397.46	2,397.46	0.09725	0.01945	—	2,405.68
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Off-Road Equipment	0.69327	0.58011	5.22223	7.56877	0.01369	0.17568	—	0.17568	0.16162	—	0.16162	—	1,402.82	1,402.82	0.05690	0.01138	—	1,407.63
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12652	0.10587	0.95306	1.38130	0.00250	0.03206	—	0.03206	0.02950	—	0.02950	—	232.252	232.252	0.00942	0.00188	—	233.049
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.6.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.27532	0.25106	0.17952	2.84921	0.00000	0.00000	0.62161	0.62161	0.00000	0.14570	0.14570	—	659.671	659.671	0.01134	0.02426	1.97207	669.156
Vendor	0.05108	0.02356	0.82596	0.39368	0.00482	0.00965	0.18357	0.19322	0.00965	0.05072	0.06037	—	672.272	672.272	0.02562	0.09673	1.37298	703.111
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.27370	0.24782	0.20540	2.49399	0.00000	0.00000	0.62161	0.62161	0.00000	0.14570	0.14570	—	623.054	623.054	0.01296	0.02426	0.05104	630.657
Vendor	0.04855	0.02230	0.85790	0.40506	0.00482	0.00965	0.18357	0.19322	0.00965	0.05072	0.06037	—	672.762	672.762	0.02562	0.09673	0.03560	702.264
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15825	0.14311	0.11924	1.47910	0.00000	0.00000	0.36363	0.36363	0.00000	0.08523	0.08523	—	367.821	367.821	0.00759	0.01419	0.49824	372.738
Vendor	0.02915	0.01305	0.49791	0.23368	0.00282	0.00565	0.10739	0.11304	0.00565	0.02967	0.03532	—	393.487	393.487	0.01499	0.05660	0.34678	411.075
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02888	0.02612	0.02176	0.26994	0.00000	0.00000	0.06636	0.06636	0.00000	0.01555	0.01555	—	60.8969	60.8969	0.00126	0.00235	0.08249	61.7111
Vendor	0.00532	0.00238	0.09087	0.04265	0.00052	0.00103	0.01960	0.02063	0.00103	0.00541	0.00645	—	65.1463	65.1463	0.00248	0.00937	0.05741	68.0582
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.7. Phase 1- Building Construction (2029)

3.7.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.15336	0.96514	8.58166	12.9012	0.02340	0.27564	—	0.27564	0.25359	—	0.25359	—	2,396.83	2,396.83	0.09723	0.01945	—	2,405.06
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Off-Road Equipment	1.15336	0.96514	8.58166	12.9012	0.02340	0.27564	—	0.27564	0.25359	—	0.25359	—	2,396.83	2,396.83	0.09723	0.01945	—	2,405.06
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.71549	0.59873	5.32365	8.00331	0.01451	0.17100	—	0.17100	0.15732	—	0.15732	—	1,486.88	1,486.88	0.06031	0.01206	—	1,491.98
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13058	0.10927	0.97157	1.46060	0.00265	0.03121	—	0.03121	0.02871	—	0.02871	—	246.170	246.170	0.00999	0.00200	—	247.015
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.7.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.26560	0.24296	0.15851	2.68751	0.00000	0.00000	0.62161	0.62161	0.00000	0.14570	0.14570	—	648.348	648.348	0.00972	0.02426	1.77514	657.595
Vendor	0.04436	0.02293	0.78649	0.38213	0.00482	0.00965	0.18357	0.19322	0.00482	0.05072	0.05554	—	653.062	653.062	0.02562	0.09190	1.21430	682.304
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.26398	0.23810	0.18276	2.34358	0.00000	0.00000	0.62161	0.62161	0.00000	0.14570	0.14570	—	612.393	612.393	0.01296	0.02426	0.04604	619.992
Vendor	0.04373	0.02166	0.81907	0.38805	0.00482	0.00965	0.18357	0.19322	0.00482	0.05072	0.05554	—	653.578	653.578	0.02562	0.09190	0.03146	681.638
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16175	0.14570	0.11237	1.47584	0.00000	0.00000	0.38552	0.38552	0.00000	0.09036	0.09036	—	383.281	383.281	0.00704	0.01505	0.47490	388.417
Vendor	0.02752	0.01383	0.50341	0.24059	0.00299	0.00599	0.11385	0.11984	0.00299	0.03146	0.03445	—	405.262	405.262	0.01589	0.05701	0.32528	422.975
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02952	0.02659	0.02051	0.26934	0.00000	0.00000	0.07036	0.07036	0.00000	0.01649	0.01649	—	63.4566	63.4566	0.00116	0.00249	0.07862	64.3068
Vendor	0.00502	0.00252	0.09187	0.04391	0.00055	0.00109	0.02078	0.02187	0.00055	0.00574	0.00629	—	67.0958	67.0958	0.00263	0.00944	0.05385	70.0283
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.8. Phase 1- Paving (2029)

3.8.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.80047	0.67262	6.45817	9.91841	0.01395	0.23904	—	0.23904	0.21992	—	0.21992	—	1,510.63	1,510.63	0.06128	0.01226	—	1,515.81
Paving	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05326	0.04475	0.42970	0.65993	0.00093	0.01590	—	0.01590	0.01463	—	0.01463	—	100.511	100.511	0.00408	0.00082	—	100.856
Paving	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00972	0.00817	0.07842	0.12044	0.00017	0.00290	—	0.00290	0.00267	—	0.00267	—	16.6408	16.6408	0.00068	0.00014	—	16.6979
Paving	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.8.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05387	0.04859	0.03730	0.47828	0.00000	0.00000	0.12686	0.12686	0.00000	0.02974	0.02974	—	124.978	124.978	0.00265	0.00495	0.00940	126.529
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00354	0.00319	0.00246	0.03230	0.00000	0.00000	0.00844	0.00844	0.00000	0.00198	0.00198	—	8.38960	8.38960	0.00015	0.00033	0.01039	8.50201
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00065	0.00058	0.00045	0.00590	0.00000	0.00000	0.00154	0.00154	0.00000	0.00036	0.00036	—	1.38899	1.38899	0.00003	0.00005	0.00172	1.40760
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.9. Phase 1- Paving (2030)

3.9.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.76655	0.64411	6.28020	9.89564	0.01395	0.22035	—	0.22035	0.20272	—	0.20272	—	1,510.63	1,510.63	0.06128	0.01226	—	1,515.81
Paving	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01200	0.01008	0.09832	0.15492	0.00022	0.00345	—	0.00345	0.00317	—	0.00317	—	23.6497	23.6497	0.00096	0.00019	—	23.7309
Paving	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00219	0.00184	0.01794	0.02827	0.00004	0.00063	—	0.00063	0.00058	—	0.00058	—	3.91548	3.91548	0.00016	0.00003	—	3.92892
Paving	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.9.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04826	0.04727	0.03697	0.45155	0.00000	0.00000	0.12686	0.12686	0.00000	0.02974	0.02974	—	122.907	122.907	0.00231	0.00495	0.00838	124.448
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00075	0.00073	0.00051	0.00713	0.00000	0.00000	0.00199	0.00199	0.00000	0.00047	0.00047	—	1.94130	1.94130	0.00004	0.00008	0.00219	1.96749
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00014	0.00013	0.00009	0.00130	0.00000	0.00000	0.00036	0.00036	0.00000	0.00008	0.00008	—	0.32140	0.32140	0.00001	0.00001	0.00036	0.32574
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.10. Phase 1- Architectural Coating (2030)

3.10.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11905	0.09839	0.78473	1.10719	0.00173	0.01097	—	0.01097	0.01009	—	0.01009	—	133.513	133.513	0.00542	0.00108	—	133.971
Architectural Coatings	11.5908	11.5908	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00913	0.00755	0.06020	0.08493	0.00013	0.00084	—	0.00084	0.00077	—	0.00077	—	10.2421	10.2421	0.00042	0.00008	—	10.2772
Architectural Coatings	0.88916	0.88916	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00167	0.00138	0.01099	0.01550	0.00002	0.00015	—	0.00015	0.00014	—	0.00014	—	1.69569	1.69569	0.00007	0.00001	—	1.70151
Architectural Coatings	0.16227	0.16227	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.10.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04730	0.04632	0.03623	0.44251	0.00000	0.00000	0.12432	0.12432	0.00000	0.02914	0.02914	—	120.449	120.449	0.00227	0.00485	0.00821	121.959
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00358	0.00350	0.00246	0.03424	0.00000	0.00000	0.00953	0.00953	0.00000	0.00223	0.00223	—	9.32213	9.32213	0.00017	0.00037	0.01051	9.44790
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00065	0.00064	0.00045	0.00625	0.00000	0.00000	0.00174	0.00174	0.00000	0.00041	0.00041	—	1.54339	1.54339	0.00003	0.00006	0.00174	1.56421
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.11. Phase 2 - Architectural Coating (2031)

3.11.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11542	0.09539	0.77690	1.10346	0.00173	0.00943	—	0.00943	0.00867	—	0.00867	—	133.518	133.518	0.00542	0.00108	—	133.976
Architectural Coatings	11.5908	11.5908	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01328	0.01098	0.08940	0.12697	0.00020	0.00108	—	0.00108	0.00100	—	0.00100	—	15.3637	15.3637	0.00062	0.00012	—	15.4164
Architectural Coatings	1.33374	1.33374	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Off-Road Equipment	0.00242	0.00200	0.01631	0.02317	0.00004	0.00020	—	0.00020	0.00018	—	0.00018	—	2.54363	2.54363	0.00010	0.00002	—	2.55236
Architectural Coatings	0.24341	0.24341	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.11.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.12. Phase 1 - Utilities Undergrounding (2029)

3.12.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.13215	0.95132	8.19565	7.81995	0.01403	0.34881	—	0.34881	0.32091	—	0.32091	—	1,520.39	1,520.39	0.06167	0.01233	—	1,525.61
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03102	0.02606	0.22454	0.21425	0.00038	0.00956	—	0.00956	0.00879	—	0.00879	—	41.6546	41.6546	0.00169	0.00034	—	41.7975
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00566	0.00476	0.04098	0.03910	0.00007	0.00174	—	0.00174	0.00160	—	0.00160	—	6.89639	6.89639	0.00028	0.00006	—	6.92005
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.12.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01796	0.01620	0.01243	0.15943	0.00000	0.00000	0.04229	0.04229	0.00000	0.00991	0.00991	—	41.6594	41.6594	0.00088	0.00165	0.00313	42.1763
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00049	0.00044	0.00034	0.00443	0.00000	0.00000	0.00116	0.00116	0.00000	0.00027	0.00027	—	1.15151	1.15151	0.00002	0.00005	0.00143	1.16694
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Worker	0.00009	0.00008	0.00006	0.00081	0.00000	0.00000	0.00021	0.00021	0.00000	0.00005	0.00005	—	0.19065	0.19065	< 0.00005	0.00001	0.00024	0.19320
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.13. Phase 2 - Utilities Undergrounding (2030)

3.13.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.10722	0.93037	7.97376	7.93059	0.01403	0.34209	—	0.34209	0.31472	—	0.31472	—	1,520.28	1,520.28	0.06167	0.01233	—	1,525.50
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04550	0.03823	0.32769	0.32591	0.00058	0.01406	—	0.01406	0.01293	—	0.01293	—	62.4773	62.4773	0.00253	0.00051	—	62.6917
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00830	0.00698	0.05980	0.05948	0.00011	0.00257	—	0.00257	0.00236	—	0.00236	—	10.3438	10.3438	0.00042	0.00008	—	10.3793
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.13.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01609	0.01576	0.01232	0.15052	0.00000	0.00000	0.04229	0.04229	0.00000	0.00991	0.00991	—	40.9689	40.9689	0.00077	0.00165	0.00279	41.4828
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00065	0.00064	0.00045	0.00624	0.00000	0.00000	0.00174	0.00174	0.00000	0.00041	0.00041	—	1.69864	1.69864	0.00003	0.00007	0.00192	1.72156
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00012	0.00012	0.00008	0.00114	0.00000	0.00000	0.00032	0.00032	0.00000	0.00007	0.00007	—	0.28123	0.28123	0.00001	0.00001	0.00032	0.28502

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Phase 2 - Demolition	Demolition	7/3/2030	8/13/2030	5.00000	30.0000	—
Phase 1- Site Preparation	Site Preparation	1/19/2028	2/24/2028	5.00000	27.0000	—
Phase 2 - Site Preparation	Site Preparation	8/14/2030	10/8/2030	5.00000	40.0000	—
Phase 1- Grading	Grading	2/25/2028	3/7/2028	5.00000	8.00000	—
Phase 2 - Grading	Grading	10/9/2030	12/10/2030	5.00000	45.0000	—
Phase 1- Building Construction	Building Construction	3/8/2028	11/13/2029	5.00000	440.000	—
Phase 1- Paving	Paving	11/28/2029	1/8/2030	5.00000	30.0000	—
Phase 1- Architectural Coating	Architectural Coating	1/9/2030	2/16/2030	5.00000	28.0000	—
Phase 2 - Architectural Coating	Architectural Coating	1/1/2031	2/27/2031	5.00000	42.0000	—
Phase 1 - Utilities Undergrounding	Trenching	11/14/2029	11/27/2029	5.00000	10.00000	—
Phase 2 - Utilities Undergrounding	Trenching	12/11/2030	12/31/2030	5.00000	15.0000	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Phase 2 - Demolition	Concrete/Industrial Saws	Diesel	Average	1.000000	8.00000	33.0000	0.73000
Phase 2 - Demolition	Excavators	Diesel	Average	3.00000	8.00000	36.0000	0.38000
Phase 2 - Demolition	Rubber Tired Dozers	Diesel	Average	2.00000	8.00000	367.000	0.40000
Phase 1- Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00000	8.00000	367.000	0.40000
Phase 1- Site Preparation	Tractors/Loaders/ Backhoes	Diesel	Average	4.00000	8.00000	84.0000	0.37000
Phase 2 - Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00000	8.00000	367.000	0.40000
Phase 2 - Site Preparation	Tractors/Loaders/ Backhoes	Diesel	Average	4.00000	8.00000	84.0000	0.37000
Phase 1- Grading	Excavators	Diesel	Average	1.000000	8.00000	36.0000	0.38000
Phase 1- Grading	Graders	Diesel	Average	1.000000	8.00000	148.000	0.41000
Phase 1- Grading	Rubber Tired Dozers	Diesel	Average	1.000000	8.00000	367.000	0.40000
Phase 1- Grading	Tractors/Loaders/ Backhoes	Diesel	Average	3.00000	8.00000	84.0000	0.37000
Phase 2 - Grading	Excavators	Diesel	Average	1.000000	8.00000	36.0000	0.38000
Phase 2 - Grading	Graders	Diesel	Average	1.000000	8.00000	148.000	0.41000
Phase 2 - Grading	Rubber Tired Dozers	Diesel	Average	1.000000	8.00000	367.000	0.40000
Phase 2 - Grading	Tractors/Loaders/ Backhoes	Diesel	Average	3.00000	8.00000	84.0000	0.37000
Phase 1- Building Construction	Cranes	Diesel	Average	1.000000	7.00000	367.000	0.29000
Phase 1- Building Construction	Forklifts	Diesel	Average	3.00000	8.00000	82.0000	0.20000

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Phase 1- Building Construction	Generator Sets	Diesel	Average	1.000000	8.00000	14.0000	0.74000
Phase 1- Building Construction	Tractors/Loaders/ Backhoes	Diesel	Average	3.00000	7.00000	84.0000	0.37000
Phase 1- Building Construction	Welders	Diesel	Average	1.000000	8.00000	46.0000	0.45000
Phase 1- Paving	Pavers	Diesel	Average	2.00000	8.00000	81.0000	0.42000
Phase 1- Paving	Paving Equipment	Diesel	Average	2.00000	8.00000	89.0000	0.36000
Phase 1- Paving	Rollers	Diesel	Average	2.00000	8.00000	36.0000	0.38000
Phase 1- Architectural Coating	Air Compressors	Diesel	Average	1.000000	6.00000	37.0000	0.48000
Phase 2 - Architectural Coating	Air Compressors	Diesel	Average	1.000000	6.00000	37.0000	0.48000
Phase 1 - Utilities Undergrounding	Excavators	Diesel	Average	1.000000	8.00000	36.0000	0.38000
Phase 1 - Utilities Undergrounding	Rubber Tired Dozers	Diesel	Average	1.000000	8.00000	367.000	0.40000
Phase 2 - Utilities Undergrounding	Excavators	Diesel	Average	1.000000	8.00000	36.0000	0.38000
Phase 2 - Utilities Undergrounding	Rubber Tired Dozers	Diesel	Average	1.000000	8.00000	367.000	0.40000

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Phase 2 - Demolition	Worker	15.0000	11.9700	LDA,LDT1,LDT2
Phase 2 - Demolition	Vendor	2.00000	7.63000	HHDT,MHDT
Phase 2 - Demolition	Hauling	17.1000	20.0000	HHDT
Phase 2 - Demolition	Onsite truck	—	—	HHDT
Phase 1- Site Preparation	Worker	17.5000	11.9700	LDA,LDT1,LDT2
Phase 1- Site Preparation	Vendor	1.000000	7.63000	HHDT,MHDT
Phase 1- Site Preparation	Hauling	0.00000	20.0000	HHDT
Phase 1- Site Preparation	Onsite truck	—	—	HHDT
Phase 2 - Site Preparation	Worker	17.5000	11.9700	LDA,LDT1,LDT2
Phase 2 - Site Preparation	Vendor	—	7.63000	HHDT,MHDT
Phase 2 - Site Preparation	Hauling	0.00000	20.0000	HHDT
Phase 2 - Site Preparation	Onsite truck	—	—	HHDT
Phase 1- Grading	Worker	15.0000	11.9700	LDA,LDT1,LDT2
Phase 1- Grading	Vendor	—	7.63000	HHDT,MHDT
Phase 1- Grading	Hauling	0.00000	20.0000	HHDT
Phase 1- Grading	Onsite truck	—	—	HHDT
Phase 2 - Grading	Worker	15.0000	11.9700	LDA,LDT1,LDT2
Phase 2 - Grading	Vendor	—	7.63000	HHDT,MHDT
Phase 2 - Grading	Hauling	0.00000	20.0000	HHDT
Phase 2 - Grading	Onsite truck	—	—	HHDT
Phase 1- Building Construction	Worker	73.5000	11.9700	LDA,LDT1,LDT2

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Phase 1- Building Construction	Vendor	28.6825	7.63000	HHDT,MHDT
Phase 1- Building Construction	Hauling	0.00000	20.0000	HHDT
Phase 1- Building Construction	Onsite truck	—	—	HHDT
Phase 1- Paving	Worker	15.0000	11.9700	LDA,LDT1,LDT2
Phase 1- Paving	Vendor	—	7.63000	HHDT,MHDT
Phase 1- Paving	Hauling	0.00000	20.0000	HHDT
Phase 1- Paving	Onsite truck	—	—	HHDT
Phase 1- Architectural Coating	Worker	14.7000	11.9700	LDA,LDT1,LDT2
Phase 1- Architectural Coating	Vendor	—	7.63000	HHDT,MHDT
Phase 1- Architectural Coating	Hauling	0.00000	20.0000	HHDT
Phase 1- Architectural Coating	Onsite truck	—	—	HHDT
Phase 2 - Architectural Coating	Worker	—	11.9700	LDA,LDT1,LDT2
Phase 2 - Architectural Coating	Vendor	—	7.63000	HHDT,MHDT
Phase 2 - Architectural Coating	Hauling	0.00000	20.0000	HHDT
Phase 2 - Architectural Coating	Onsite truck	—	—	HHDT
Phase 1 - Utilities Undergrounding	Worker	5.00000	11.9700	LDA,LDT1,LDT2
Phase 1 - Utilities Undergrounding	Vendor	—	7.63000	HHDT,MHDT
Phase 1 - Utilities Undergrounding	Hauling	0.00000	20.0000	HHDT
Phase 1 - Utilities Undergrounding	Onsite truck	—	—	HHDT
Phase 2 - Utilities Undergrounding	Worker	5.00000	11.9700	LDA,LDT1,LDT2
Phase 2 - Utilities Undergrounding	Vendor	—	7.63000	HHDT,MHDT

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Phase 2 - Utilities Undergrounding	Hauling	0.00000	20.0000	HHDT
Phase 2 - Utilities Undergrounding	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Phase 1- Architectural Coating	0.00000	0.00000	105,000	35,000.0	—
Phase 2 - Architectural Coating	0.00000	0.00000	157,500	52,500.0	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Building Square Footage)	Acres Paved (acres)
Phase 2 - Demolition	0.00000	0.00000	0.00000	44,599.0	0.00000
Phase 1- Site Preparation	—	—	40.5000	0.00000	0.00000
Phase 2 - Site Preparation	—	—	60.0000	0.00000	0.00000

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Building Square Footage)	Acres Paved (acres)
Phase 1- Grading	—	—	8.00000	0.00000	0.00000
Phase 2 - Grading	—	—	45.0000	0.00000	0.00000
Phase 1- Paving	0.00000	0.00000	0.00000	0.00000	2.00000

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Phase Name	Land Use	Area Paved (acres)	% Asphalt
Phase 1- Paving	Health Club	2.00000	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2028	0.00000	588.983	0.03300	0.00400
2029	0.00000	588.983	0.03300	0.00400
2030	0.00000	588.983	0.03300	0.00400
2031	0.00000	588.983	0.03300	0.00400

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	7.50000	annual days of extreme heat

Climate Hazard	Result for Project Location	Unit
Extreme Precipitation	2.70000	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	3.64000	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	37.5731
AQ-PM	41.7424
AQ-DPM	80.7218
Drinking Water	28.9871
Lead Risk Housing	42.8986
Pesticides	0.00000
Toxic Releases	33.3083
Traffic	89.1500
Effect Indicators	—
CleanUp Sites	34.6211
Groundwater	50.8717
Haz Waste Facilities/Generators	46.8034
Impaired Water Bodies	12.4528
Solid Waste	40.0916
Sensitive Population	—
Asthma	54.1002
Cardio-vascular	17.4975
Low Birth Weights	46.7667
Socioeconomic Factor Indicators	—

Indicator	Result for Project Census Tract
Education	45.5834
Housing	71.5716
Linguistic	41.4400
Poverty	53.2663
Unemployment	73.4123

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	48.72321314
Employed	56.3839343
Median HI	30.15526755
Education	—
Bachelor's or higher	49.33915052
High school enrollment	100
Preschool enrollment	95.7141024
Transportation	—
Auto Access	18.88874631
Active commuting	53.20159117
Social	—

Indicator	Result for Project Census Tract
2-parent households	82.26613628
Voting	71.14076736
Neighborhood	—
Alcohol availability	60.33619915
Park access	42.92313615
Retail density	91.23572437
Supermarket access	78.60900808
Tree canopy	19.26087514
Housing	—
Homeownership	41.12665212
Housing habitability	44.15501091
Low-inc homeowner severe housing cost burden	31.75927114
Low-inc renter severe housing cost burden	25.11228025
Uncrowded housing	56.30694213
Health Outcomes	—
Insured adults	55.13922751
Arthritis	27.4
Asthma ER Admissions	30.8
High Blood Pressure	46.3
Cancer (excluding skin)	27.6
Asthma	55.1

Indicator	Result for Project Census Tract
Coronary Heart Disease	31.2
Chronic Obstructive Pulmonary Disease	33.2
Diagnosed Diabetes	48.6
Life Expectancy at Birth	39.9
Cognitively Disabled	13.7
Physically Disabled	7.5
Heart Attack ER Admissions	89.7
Mental Health Not Good	50.5
Chronic Kidney Disease	45.1
Obesity	63.1
Pedestrian Injuries	63.7
Physical Health Not Good	53.6
Stroke	34.3
Health Risk Behaviors	—
Binge Drinking	30.9
Current Smoker	47.6
No Leisure Time for Physical Activity	48.5
Climate Change Exposures	—
Wildfire Risk	14.9
SLR Inundation Area	0.0
Children	95.4

Indicator	Result for Project Census Tract
Elderly	22.5
English Speaking	43.4
Foreign-born	55.0
Outdoor Workers	81.3
Climate Change Adaptive Capacity	—
Impervious Surface Cover	11.8
Traffic Density	85.7
Traffic Access	87.4
Other Indices	—
Hardship	38.7
Other Decision Support	—
2016 Voting	68.8

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	50.0000
Healthy Places Index Score for Project Location (b)	60.0000
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

8.1. Justifications

Screen	Justification
Land Use	The land use and size were provided by the District Architect. The lot acreage was estimated using measurements on aerials maps, and the landscape area was estimated as 20% of the lot.
Construction: Construction Phases	The length of construction was provided by the District Architect in the SDCCD Program Schedule dated 5-9-2025. The lengths of individual phases of construction relied on CalEEMod defaults which were adjusted to fit the overall construction length.
Construction: Off-Road Equipment	Equipment was added to the utilities undergrounding phase based on similar project types and sizes.
Construction: Paving	It was assumed that approximately 20% of the total project area would including concrete paving.

8.3. Land Use

Model Parameter	Units	Default Value	New Value
Lot Area	acre	4.01745	10.00000
Landscape Area	sq. ft	—	87,120.0

8.4. Construction

8.4.9. Paving

Phase Name	Land Use	Model Parameter	Units	Default Value	New Value
Phase 1- Paving	Health Club	Area Paved	acres	0.00000	2.00000

CMP - Performing Arts/Parking Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

1.2. Land Use Types

1.3. User-Selected Emission Reduction Measures by Emissions Sector

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

2.2. Construction Emissions by Year

2.2.1. Total Construction Emissions by Year, Unmitigated

2.2.2. Onsite Construction Emissions by Year, Unmitigated

2.2.3. Offsite Construction Emissions by Year, Unmitigated

3. Construction Emissions Details

3.1. Phase 1 - Site Preparation (2027)

3.1.1. Onsite - Unmitigated

3.1.2. Offsite - Unmitigated

3.2. Phase 2 - Site Preparation (2028)

3.2.1. Onsite - Unmitigated

3.2.2. Offsite - Unmitigated

3.3. Phase 1 - Grading (2027)

3.3.1. Onsite - Unmitigated

3.3.2. Offsite - Unmitigated

3.4. Phase 2 - Grading (2028)

3.4.1. Onsite - Unmitigated

3.4.2. Offsite - Unmitigated

3.5. Phase 1 - Building Construction (2027)

3.5.1. Onsite - Unmitigated

3.5.2. Offsite - Unmitigated

3.6. Phase 1 - Building Construction (2028)

3.6.1. Onsite - Unmitigated

3.6.2. Offsite - Unmitigated

3.7. Phase 2 - Building Construction (2028)

3.7.1. Onsite - Unmitigated

3.7.2. Offsite - Unmitigated

3.8. Phase 2 - Building Construction (2029)

3.8.1. Onsite - Unmitigated

3.8.2. Offsite - Unmitigated

3.9. Phase 2 - Building Construction (2030)

3.9.1. Onsite - Unmitigated

3.9.2. Offsite - Unmitigated

3.10. Phase 1 - Paving (2028)

3.10.1. Onsite - Unmitigated

3.10.2. Offsite - Unmitigated

3.11. Phase 1 - Architectural Coating (2028)

3.11.1. Onsite - Unmitigated

3.11.2. Offsite - Unmitigated

3.12. Phase 2 - Architectural Coating (2030)

3.12.1. Onsite - Unmitigated

3.12.2. Offsite - Unmitigated

3.13. Phase 1 - Utilities Undergrounding (2028)

3.13.1. Onsite - Unmitigated

3.13.2. Offsite - Unmitigated

3.14. Phase 2 - Utilities Undergrounding (2030)

3.14.1. Onsite - Unmitigated

3.14.2. Offsite - Unmitigated

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

5. Activity Data

5.1. Construction Schedule

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

8.1. Justifications

8.3. Land Use

8.4. Construction

8.4.8. Architectural Coatings

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	CMP - Performing Arts/Parking
Construction Start Date	3/25/2027
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50000
Precipitation (days)	0.40000
Location	32.805657084285386, -117.17008811872128
County	San Diego
City	San Diego
Air District	San Diego County APCD
Air Basin	San Diego
TAZ	6330
EDFZ	12
Electric Utility	San Diego Gas & Electric
Gas Utility	San Diego Gas & Electric
App Version	2022.1.1.38

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Junior College (2yr)	140.000	1000sqft	0.00000	140,000	0.00000	0.00000	—	—
Enclosed Parking with Elevator	500.000	Space	2.50000	200,000	21,780.0	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	9.06034	9.03864	12.2970	18.3541	0.03249	0.53998	2.86598	3.40596	0.49686	1.36078	1.85764	—	4,845.55	4,845.55	0.20001	0.25292	7.21943	4,933.13
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	12.4119	12.1676	11.8876	17.6548	0.03249	0.51613	2.85318	3.36932	0.47487	1.35724	1.83211	—	4,773.94	4,773.94	0.20753	0.25606	0.18701	4,855.62
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.02957	1.82004	7.72518	12.1299	0.02321	0.22374	1.11712	1.31560	0.20667	0.27252	0.46179	—	3,336.18	3,336.18	0.11507	0.17396	1.79004	3,392.69
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.37040	0.33216	1.40985	2.21370	0.00424	0.04083	0.20387	0.24010	0.03772	0.04973	0.08428	—	552.343	552.343	0.01905	0.02880	0.29636	561.698

2.2. Construction Emissions by Year

2.2.1. Total Construction Emissions by Year, Unmitigated

Includes both onsite and offsite emissions.

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	2.00432	1.67901	12.2970	18.3541	0.03249	0.53998	2.86598	3.40596	0.49686	1.36078	1.85764	—	4,845.55	4,845.55	0.20001	0.25292	7.21943	4,933.13
2028	1.92854	1.61206	11.8371	17.9716	0.03249	0.51613	2.85318	3.36932	0.47487	1.35724	1.83211	—	4,789.19	4,789.19	0.16112	0.25292	6.49895	4,875.09
2029	1.85078	1.55698	10.7227	17.5701	0.03249	0.27788	1.56435	1.84223	0.24778	0.38162	0.62940	—	4,729.50	4,729.50	0.15795	0.24354	5.80804	4,811.83
2030	9.06034	9.03864	0.83493	1.91545	0.00173	0.01097	0.19891	0.20988	0.01009	0.04663	0.05672	—	337.531	337.531	0.00853	0.00885	0.50769	340.887
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	1.99119	1.66273	11.8876	17.6548	0.03249	0.38896	1.56435	1.90483	0.35784	0.38162	0.69636	—	4,773.94	4,773.94	0.20753	0.25606	0.18701	4,855.62
2028	12.4119	12.1676	11.8417	17.3036	0.03249	0.51613	2.85318	3.36932	0.47487	1.35724	1.83211	—	4,719.00	4,719.00	0.16427	0.25292	0.16832	4,798.64
2029	1.84640	1.54508	10.8331	16.9134	0.03249	0.27788	1.56435	1.84223	0.24778	0.38162	0.62940	—	4,660.65	4,660.65	0.16425	0.24354	0.15058	4,737.48
2030	9.06034	9.03813	10.5740	16.6101	0.03249	0.34209	1.56435	1.81687	0.31472	0.38162	0.61469	—	4,600.91	4,600.91	0.15173	0.24354	0.13337	4,677.41
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	1.04130	0.87023	6.35544	9.20743	0.01718	0.19586	0.82652	1.02237	0.18087	0.20984	0.39072	—	2,444.59	2,444.59	0.10393	0.11787	1.43359	2,483.75
2028	2.02957	1.82004	7.61897	11.4869	0.02124	0.22374	1.01372	1.23746	0.20667	0.25513	0.46179	—	3,008.19	3,008.19	0.10591	0.14406	1.60853	3,055.37
2029	1.31524	1.10001	7.72518	12.1299	0.02321	0.19849	1.11712	1.31560	0.17698	0.27252	0.44950	—	3,336.18	3,336.18	0.11507	0.17396	1.79004	3,392.69
2030	1.51307	1.47007	1.80241	2.73042	0.00501	0.04818	0.23098	0.27915	0.04442	0.05607	0.10049	—	704.613	704.613	0.02340	0.03324	0.31917	715.423
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.19004	0.15882	1.15987	1.68036	0.00313	0.03574	0.15084	0.18658	0.03301	0.03830	0.07131	—	404.730	404.730	0.01721	0.01951	0.23735	411.213
2028	0.37040	0.33216	1.39046	2.09637	0.00388	0.04083	0.18500	0.22584	0.03772	0.04656	0.08428	—	498.040	498.040	0.01754	0.02385	0.26631	505.852
2029	0.24003	0.20075	1.40985	2.21370	0.00424	0.03622	0.20387	0.24010	0.03230	0.04973	0.08203	—	552.343	552.343	0.01905	0.02880	0.29636	561.698
2030	0.27613	0.26829	0.32894	0.49830	0.00091	0.00879	0.04215	0.05095	0.00811	0.01023	0.01834	—	116.657	116.657	0.00387	0.00550	0.05284	118.446

2.2.2. Onsite Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	1.63491	1.37378	12.1813	13.8677	0.02508	0.53897	2.76221	3.30118	0.49585	1.33565	1.83150	—	2,715.88	2,715.88	0.11017	0.02203	0.00000	2,725.20
2028	1.60969	1.35258	11.7838	13.9071	0.02312	0.51580	2.76221	3.27801	0.47453	1.33565	1.81018	—	2,456.26	2,456.26	0.09964	0.01993	0.00000	2,464.69
2029	1.24858	1.04039	8.88672	11.6062	0.02312	0.25913	0.00000	0.25913	0.23840	0.00000	0.23840	—	2,201.04	2,201.04	0.08928	0.01786	0.00000	2,208.60
2030	8.98467	8.96401	0.78473	1.10719	0.00173	0.01097	0.00000	0.01097	0.01009	0.00000	0.01009	—	133.513	133.513	0.00542	0.00108	0.00000	133.971
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	1.35443	1.12848	9.69609	11.7033	0.02508	0.38896	0.62039	1.00935	0.35784	0.06699	0.42483	—	2,715.88	2,715.88	0.11017	0.02203	0.00000	2,725.20
2028	12.1712	11.9498	11.7838	13.9071	0.02681	0.51580	2.76221	3.27801	0.47453	1.33565	1.81018	—	2,849.11	2,849.11	0.11557	0.02311	0.00000	2,858.89
2029	1.24858	1.04039	8.88672	11.6062	0.02312	0.25913	0.00000	0.25913	0.23840	0.00000	0.23840	—	2,201.04	2,201.04	0.08928	0.01786	0.00000	2,208.60
2030	8.98467	8.96401	8.70495	11.5787	0.02312	0.34209	0.00000	0.34209	0.31472	0.00000	0.31472	—	2,201.04	2,201.04	0.08928	0.01786	0.00000	2,208.60
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.74880	0.62481	5.35936	6.43683	0.01289	0.18729	0.10643	0.29372	0.17230	0.03423	0.20653	—	1,258.25	1,258.25	0.05104	0.01021	0.00000	1,262.57
2028	1.66690	1.51644	6.47466	8.16822	0.01607	0.21341	0.10643	0.31984	0.19634	0.03423	0.23056	—	1,569.11	1,569.11	0.06365	0.01273	0.00000	1,574.49
2029	0.89184	0.74314	6.34766	8.29016	0.01651	0.18510	0.00000	0.18510	0.17029	0.00000	0.17029	—	1,572.17	1,572.17	0.06377	0.01275	0.00000	1,577.57
2030	1.43269	1.39652	1.55950	1.97307	0.00380	0.04697	0.00000	0.04697	0.04321	0.00000	0.04321	—	365.050	365.050	0.01481	0.00296	0.00000	366.303
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.13666	0.11403	0.97808	1.17472	0.00235	0.03418	0.01942	0.05360	0.03145	0.00625	0.03769	—	208.318	208.318	0.00845	0.00169	0.00000	209.033
2028	0.30421	0.27675	1.18163	1.49070	0.00293	0.03895	0.01942	0.05837	0.03583	0.00625	0.04208	—	259.783	259.783	0.01054	0.00211	0.00000	260.675
2029	0.16276	0.13562	1.15845	1.51295	0.00301	0.03378	0.00000	0.03378	0.03108	0.00000	0.03108	—	260.291	260.291	0.01056	0.00211	0.00000	261.185
2030	0.26147	0.25486	0.28461	0.36009	0.00069	0.00857	0.00000	0.00857	0.00789	0.00000	0.00789	—	60.4382	60.4382	0.00245	0.00049	0.00000	60.6456

2.2.3. Offsite Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.64989	0.55053	2.04270	6.65081	0.00937	0.01875	1.56435	1.58310	0.01875	0.38162	0.40037	—	2,644.66	2,644.66	0.11073	0.23506	7.21943	2,724.69
2028	0.63415	0.53356	1.95351	6.30047	0.00937	0.01875	1.56435	1.58310	0.01875	0.38162	0.40037	—	2,587.78	2,587.78	0.07182	0.23506	6.49895	2,666.12
2029	0.60220	0.51659	1.83600	5.96387	0.00937	0.01875	1.56435	1.58310	0.00937	0.38162	0.39099	—	2,528.45	2,528.45	0.06867	0.22569	5.80804	2,603.23
2030	0.07567	0.07464	0.05020	0.80826	0.00000	0.00000	0.19891	0.19891	0.00000	0.04663	0.04663	—	204.018	204.018	0.00311	0.00776	0.50769	206.916
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.63676	0.53425	2.19150	5.95146	0.00937	0.01875	1.56435	1.58310	0.01875	0.38162	0.40037	—	2,573.05	2,573.05	0.11826	0.23821	0.18701	2,647.18
2028	0.62609	0.52480	2.06585	5.63243	0.00937	0.01875	1.56435	1.58310	0.01875	0.38162	0.40037	—	2,517.59	2,517.59	0.07497	0.23506	0.16832	2,589.68
2029	0.59783	0.50469	1.94642	5.30718	0.00937	0.01875	1.56435	1.58310	0.00937	0.38162	0.39099	—	2,459.60	2,459.60	0.07497	0.22569	0.15058	2,528.88
2030	0.54317	0.49209	1.86906	5.03144	0.00937	0.00937	1.56435	1.57372	0.00937	0.38162	0.39099	—	2,399.87	2,399.87	0.06244	0.22569	0.13337	2,468.82
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.29250	0.24542	0.99608	2.77060	0.00429	0.00857	0.72008	0.72865	0.00857	0.17561	0.18418	—	1,186.34	1,186.34	0.05289	0.10766	1.43359	1,221.18
2028	0.36267	0.30360	1.14431	3.31873	0.00517	0.01033	0.90729	0.91762	0.01033	0.22090	0.23123	—	1,439.08	1,439.08	0.04226	0.13133	1.60853	1,480.88
2029	0.42340	0.35687	1.37752	3.83972	0.00670	0.01339	1.11712	1.13051	0.00670	0.27252	0.27921	—	1,764.01	1,764.01	0.05130	0.16120	1.79004	1,815.12
2030	0.08038	0.07355	0.24290	0.75734	0.00121	0.00121	0.23098	0.23219	0.00121	0.05607	0.05728	—	339.563	339.563	0.00859	0.03028	0.31917	349.120
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.05338	0.04479	0.18178	0.50564	0.00078	0.00156	0.13142	0.13298	0.00156	0.03205	0.03361	—	196.412	196.412	0.00876	0.01782	0.23735	202.180
2028	0.06619	0.05541	0.20884	0.60567	0.00094	0.00189	0.16558	0.16747	0.00189	0.04031	0.04220	—	238.257	238.257	0.00700	0.02174	0.26631	245.177
2029	0.07727	0.06513	0.25140	0.70075	0.00122	0.00244	0.20387	0.20632	0.00122	0.04973	0.05096	—	292.051	292.051	0.00849	0.02669	0.29636	300.513
2030	0.01467	0.01342	0.04433	0.13822	0.00022	0.00022	0.04215	0.04237	0.00022	0.01023	0.01045	—	56.2185	56.2185	0.00142	0.00501	0.05284	57.8008

3. Construction Emissions Details

3.1. Phase 1 - Site Preparation (2027)

3.1.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28950	1.08354	9.07446	10.7681	0.02508	0.38896	—	0.38896	0.35784	—	0.35784	—	2,715.88	2,715.88	0.11017	0.02203	—	2,725.20
Dust From Material Movemer	—	—	—	—	—	—	0.62039	0.62039	—	0.06699	0.06699	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28950	1.08354	9.07446	10.7681	0.02508	0.38896	—	0.38896	0.35784	—	0.35784	—	2,715.88	2,715.88	0.11017	0.02203	—	2,725.20
Dust From Material Movemer	—	—	—	—	—	—	0.62039	0.62039	—	0.06699	0.06699	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09539	0.08015	0.67126	0.79654	0.00186	0.02877	—	0.02877	0.02647	—	0.02647	—	200.900	200.900	0.00815	0.00163	—	201.590

Dust From Material Movemer	—	—	—	—	—	—	0.04589	0.04589	—	0.00496	0.00496	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.01741	0.01463	0.12251	0.14537	0.00034	0.00525	—	0.00525	0.00483	—	0.00483	—	33.2614	33.2614	0.00135	0.00027	—	33.3755
Dust From Material Movemer	—	—	—	—	—	—	0.00838	0.00838	—	0.00090	0.00090	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.1.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02892	0.02645	0.01848	0.30740	0.00000	0.00000	0.06343	0.06343	0.00000	0.01487	0.01487	—	68.5331	68.5331	0.00314	0.00248	0.22218	69.5713
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02842	0.02578	0.02310	0.27000	0.00000	0.00000	0.06343	0.06343	0.00000	0.01487	0.01487	—	64.7251	64.7251	0.00347	0.00264	0.00575	65.6044
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00209	0.00190	0.00170	0.02022	0.00000	0.00000	0.00469	0.00469	0.00000	0.00110	0.00110	—	4.83072	4.83072	0.00024	0.00018	0.00710	4.89848
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00038	0.00035	0.00031	0.00369	0.00000	0.00000	0.00086	0.00086	0.00000	0.00020	0.00020	—	0.79978	0.79978	0.00004	0.00003	0.00118	0.81100
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.2. Phase 2 - Site Preparation (2028)

3.2.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.24548	1.04655	8.41892	10.7072	0.02508	0.35834	—	0.35834	0.32967	—	0.32967	—	2,715.59	2,715.59	0.11016	0.02203	—	2,724.91
Dust From Material Movemer	—	—	—	—	—	—	0.62039	0.62039	—	0.06699	0.06699	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipmer	0.09213 t	0.07742	0.62277	0.79204	0.00186	0.02651	—	0.02651	0.02439	—	0.02439	—	200.879	200.879	0.00815	0.00163	—	201.569
Dust From Material Movemer	—	—	—	—	—	—	0.04589	0.04589	—	0.00496	0.00496	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.01681	0.01413	0.11366	0.14455	0.00034	0.00484	—	0.00484	0.00445	—	0.00445	—	33.2579	33.2579	0.00135	0.00027	—	33.3720
Dust From Material Movemer	—	—	—	—	—	—	0.00838	0.00838	—	0.00090	0.00090	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.2.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02793	0.02529	0.02096	0.25449	0.00000	0.00000	0.06343	0.06343	0.00000	0.01487	0.01487	—	63.5769	63.5769	0.00132	0.00248	0.00521	64.3528
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.00204	0.00185	0.00154	0.01908	0.00000	0.00000	0.00469	0.00469	0.00000	0.00110	0.00110	—	4.74494	4.74494	0.00010	0.00018	0.00643	4.80838
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00037	0.00034	0.00028	0.00348	0.00000	0.00000	0.00086	0.00086	0.00000	0.00020	0.00020	—	0.78558	0.78558	0.00002	0.00003	0.00106	0.79608
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.3. Phase 1 - Grading (2027)

3.3.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.63491	1.37378	12.1813	13.8677	0.02267	0.53897	—	0.53897	0.49585	—	0.49585	—	2,455.46	2,455.46	0.09960	0.01992	—	2,463.88
Dust From Material Movemer	—	—	—	—	—	—	2.76221	2.76221	—	1.33565	1.33565	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.03583	0.03011	0.26699	0.30395	0.00050	0.01181	—	0.01181	0.01087	—	0.01087	—	53.8182	53.8182	0.00218	0.00044	—	54.0029
Dust From Material Movemer	—	—	—	—	—	—	0.06054	0.06054	—	0.02927	0.02927	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00654	0.00550	0.04873	0.05547	0.00009	0.00216	—	0.00216	0.00198	—	0.00198	—	8.91022	8.91022	0.00036	0.00007	—	8.94080
Dust From Material Movemer	—	—	—	—	—	—	0.01105	0.01105	—	0.00534	0.00534	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.3.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03856	0.03526	0.02465	0.40987	0.00000	0.00000	0.08457	0.08457	0.00000	0.01982	0.01982	—	91.3775	91.3775	0.00418	0.00330	0.29623	92.7618
Vendor	0.00534	0.00253	0.09102	0.04295	0.00050	0.00101	0.01920	0.02021	0.00101	0.00530	0.00631	—	72.1272	72.1272	0.00275	0.01012	0.16092	75.3717
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00083	0.00075	0.00067	0.00799	0.00000	0.00000	0.00185	0.00185	0.00000	0.00043	0.00043	—	1.90843	1.90843	0.00010	0.00007	0.00280	1.93520
Vendor	0.00011	0.00005	0.00205	0.00095	0.00001	0.00002	0.00042	0.00044	0.00002	0.00012	0.00014	—	1.58131	1.58131	0.00006	0.00022	0.00152	1.65046
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00015	0.00014	0.00012	0.00146	0.00000	0.00000	0.00034	0.00034	0.00000	0.00008	0.00008	—	0.31596	0.31596	0.00002	0.00001	0.00046	0.32039
Vendor	0.00002	0.00001	0.00037	0.00017	< 0.000005	< 0.000005	0.00008	0.00008	< 0.000005	0.00002	0.00003	—	0.26180	0.26180	0.00001	0.00004	0.00025	0.27325
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.4. Phase 2 - Grading (2028)

3.4.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.60969	1.35258	11.7838	13.9071	0.02268	0.51580	—	0.51580	0.47453	—	0.47453	—	2,456.26	2,456.26	0.09964	0.01993	—	2,464.69
Dust From Material Movemer	—	—	—	—	—	—	2.76221	2.76221	—	1.33565	1.33565	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	1.60969	1.35258	11.7838	13.9071	0.02268	0.51580	—	0.51580	0.47453	—	0.47453	—	2,456.26	2,456.26	0.09964	0.01993	—	2,464.69
Dust From Material Movemer	—	—	—	—	—	—	2.76221	2.76221	—	1.33565	1.33565	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03528	0.02965	0.25828	0.30481	0.00050	0.01131	—	0.01131	0.01040	—	0.01040	—	53.8359	53.8359	0.00218	0.00044	—	54.0207
Dust From Material Movemer	—	—	—	—	—	—	0.06054	0.06054	—	0.02927	0.02927	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00644	0.00541	0.04714	0.05563	0.00009	0.00206	—	0.00206	0.00190	—	0.00190	—	8.91315	8.91315	0.00036	0.00007	—	8.94374
Dust From Material Movemer	—	—	—	—	—	—	0.01105	0.01105	—	0.00534	0.00534	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.4.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03746	0.03416	0.02443	0.38765	0.00000	0.00000	0.08457	0.08457	0.00000	0.01982	0.01982	—	89.7512	89.7512	0.00154	0.00330	0.26831	91.0416
Vendor	0.00178	0.00082	0.02880	0.01373	0.00017	0.00034	0.00640	0.00674	0.00034	0.00177	0.00210	—	23.4384	23.4384	0.00089	0.00337	0.04787	24.5136
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03724	0.03372	0.02795	0.33932	0.00000	0.00000	0.08457	0.08457	0.00000	0.01982	0.01982	—	84.7692	84.7692	0.00176	0.00330	0.00694	85.8037
Vendor	0.00169	0.00078	0.02991	0.01412	0.00017	0.00034	0.00640	0.00674	0.00034	0.00177	0.00210	—	23.4555	23.4555	0.00089	0.00337	0.00124	24.4840
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00081	0.00073	0.00061	0.00754	0.00000	0.00000	0.00185	0.00185	0.00000	0.00043	0.00043	—	1.87454	1.87454	0.00004	0.00007	0.00254	1.89961
Vendor	0.00004	0.00002	0.00065	0.00031	< 0.000005	0.00001	0.00014	0.00015	0.00001	0.00004	0.00005	—	0.51388	0.51388	0.00002	0.00007	0.00045	0.53685
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00015	0.00013	0.00011	0.00138	0.00000	0.00000	0.00034	0.00034	0.00000	0.00008	0.00008	—	0.31035	0.31035	0.00001	0.00001	0.00042	0.31450
Vendor	0.00001	< 0.000005	0.00012	0.00006	< 0.000005	< 0.000005	0.00003	0.00003	< 0.000005	0.00001	0.00001	—	0.08508	0.08508	< 0.000005	0.00001	0.00007	0.08888
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.5. Phase 1 - Building Construction (2027)

3.5.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipmer	1.35443 t	1.12848	9.69609	11.7033	0.02312	0.32173	—	0.32173	0.29600	—	0.29600	—	2,200.89	2,200.89	0.08928	0.01786	—	2,208.44
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	1.35443	1.12848	9.69609	11.7033	0.02312	0.32173	—	0.32173	0.29600	—	0.29600	—	2,200.89	2,200.89	0.08928	0.01786	—	2,208.44
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.61758	0.51455	4.42111	5.33634	0.01054	0.14670	—	0.14670	0.13496	—	0.13496	—	1,003.54	1,003.54	0.04071	0.00814	—	1,006.98
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.11271	0.09391	0.80685	0.97388	0.00192	0.02677	—	0.02677	0.02463	—	0.02463	—	166.147	166.147	0.00674	0.00135	—	166.717
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.5.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.55065	0.50352	0.35194	5.85292	0.00000	0.00000	1.20770	1.20770	0.00000	0.28308	0.28308	—	1,304.87	1,304.87	0.05972	0.04713	4.23021	1,324.64
Vendor	0.09924	0.04700	1.69076	0.79789	0.00937	0.01875	0.35666	0.37540	0.01875	0.09854	0.11729	—	1,339.79	1,339.79	0.05101	0.18793	2.98922	1,400.06
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.54121	0.49093	0.43990	5.14082	0.00000	0.00000	1.20770	1.20770	0.00000	0.28308	0.28308	—	1,232.37	1,232.37	0.06602	0.05028	0.10939	1,249.11
Vendor	0.09556	0.04332	1.75160	0.81063	0.00937	0.01875	0.35666	0.37540	0.01875	0.09854	0.11729	—	1,340.68	1,340.68	0.05224	0.18793	0.07761	1,398.07
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.24534	0.22241	0.19914	2.37259	0.00000	0.00000	0.55053	0.55053	0.00000	0.12904	0.12904	—	566.947	566.947	0.02867	0.02149	0.83297	574.901
Vendor	0.04413	0.02031	0.79251	0.36886	0.00427	0.00855	0.16259	0.17114	0.00855	0.04492	0.05347	—	611.072	611.072	0.02382	0.08569	0.58920	637.793
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04477	0.04059	0.03634	0.43300	0.00000	0.00000	0.10047	0.10047	0.00000	0.02355	0.02355	—	93.8646	93.8646	0.00475	0.00356	0.13791	95.1813
Vendor	0.00805	0.00371	0.14463	0.06732	0.00078	0.00156	0.02967	0.03123	0.00156	0.00820	0.00976	—	101.170	101.170	0.00394	0.01419	0.09755	105.594
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.6. Phase 1 - Building Construction (2028)

3.6.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	1.29438	1.07850	9.22917	11.6712	0.02312	0.28471	—	0.28471	0.26194	—	0.26194	—	2,201.41	2,201.41	0.08930	0.01786	—	2,208.97
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03040	0.02533	0.21673	0.27408	0.00054	0.00669	—	0.00669	0.00615	—	0.00615	—	51.6966	51.6966	0.00210	0.00042	—	51.8740
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00555	0.00462	0.03955	0.05002	0.00010	0.00122	—	0.00122	0.00112	—	0.00112	—	8.55897	8.55897	0.00035	0.00007	—	8.58834
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.6.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.53176	0.48149	0.39907	4.84546	0.00000	0.00000	1.20770	1.20770	0.00000	0.28308	0.28308	—	1,210.50	1,210.50	0.02519	0.04713	0.09915	1,225.28
Vendor	0.09433	0.04332	1.66678	0.78697	0.00937	0.01875	0.35666	0.37540	0.01875	0.09854	0.11729	—	1,307.08	1,307.08	0.04978	0.18793	0.06917	1,364.40
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.01234	0.01116	0.00930	0.11533	0.00000	0.00000	0.02835	0.02835	0.00000	0.00665	0.00665	—	28.6805	28.6805	0.00059	0.00111	0.03885	29.0640
Vendor	0.00227	0.00102	0.03882	0.01822	0.00022	0.00044	0.00837	0.00881	0.00044	0.00231	0.00275	—	30.6818	30.6818	0.00117	0.00441	0.02704	32.0533
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00225	0.00204	0.00170	0.02105	0.00000	0.00000	0.00517	0.00517	0.00000	0.00121	0.00121	—	4.74839	4.74839	0.00010	0.00018	0.00643	4.81187
Vendor	0.00041	0.00019	0.00709	0.00333	0.00004	0.00008	0.00153	0.00161	0.00008	0.00042	0.00050	—	5.07973	5.07973	0.00019	0.00073	0.00448	5.30678
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.7. Phase 2 - Building Construction (2028)

3.7.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.29438	1.07850	9.22917	11.6712	0.02312	0.28471	—	0.28471	0.26194	—	0.26194	—	2,201.41	2,201.41	0.08930	0.01786	—	2,208.97
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.29438	1.07850	9.22917	11.6712	0.02312	0.28471	—	0.28471	0.26194	—	0.26194	—	2,201.41	2,201.41	0.08930	0.01786	—	2,208.97
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipmer	0.68139 t	0.56774	4.85841	6.14392	0.01217	0.14988	—	0.14988	0.13789	—	0.13789	—	1,158.87	1,158.87	0.04701	0.00940	—	1,162.84
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.12435	0.10361	0.88666	1.12127	0.00222	0.02735	—	0.02735	0.02516	—	0.02516	—	191.864	191.864	0.00778	0.00156	—	192.522
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.7.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.53491	0.48778	0.34879	5.53561	0.00000	0.00000	1.20770	1.20770	0.00000	0.28308	0.28308	—	1,281.65	1,281.65	0.02204	0.04713	3.83144	1,300.07
Vendor	0.09924	0.04578	1.60472	0.76486	0.00937	0.01875	0.35666	0.37540	0.01875	0.09854	0.11729	—	1,306.13	1,306.13	0.04978	0.18793	2.66751	1,366.04
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.53176	0.48149	0.39907	4.84546	0.00000	0.00000	1.20770	1.20770	0.00000	0.28308	0.28308	—	1,210.50	1,210.50	0.02519	0.04713	0.09915	1,225.28
Vendor	0.09433	0.04332	1.66678	0.78697	0.00937	0.01875	0.35666	0.37540	0.01875	0.09854	0.11729	—	1,307.08	1,307.08	0.04978	0.18793	0.06917	1,364.40
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.27662	0.25015	0.20842	2.58534	0.00000	0.00000	0.63559	0.63559	0.00000	0.14898	0.14898	—	642.922	642.922	0.01326	0.02481	0.87089	651.517
Vendor	0.05095	0.02280	0.87031	0.40846	0.00493	0.00987	0.18771	0.19758	0.00987	0.05186	0.06173	—	687.785	687.785	0.02621	0.09893	0.60615	718.527
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05048	0.04565	0.03804	0.47183	0.00000	0.00000	0.11600	0.11600	0.00000	0.02719	0.02719	—	106.443	106.443	0.00220	0.00411	0.14419	107.866
Vendor	0.00930	0.00416	0.15883	0.07454	0.00090	0.00180	0.03426	0.03606	0.00180	0.00946	0.01127	—	113.871	113.871	0.00434	0.01638	0.10035	118.960
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.8. Phase 2 - Building Construction (2029)

3.8.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.24858	1.04039	8.88672	11.6062	0.02312	0.25913	—	0.25913	0.23840	—	0.23840	—	2,201.04	2,201.04	0.08928	0.01786	—	2,208.60
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.24858	1.04039	8.88672	11.6062	0.02312	0.25913	—	0.25913	0.23840	—	0.23840	—	2,201.04	2,201.04	0.08928	0.01786	—	2,208.60
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.89184	0.74314	6.34766	8.29016	0.01651	0.18510	—	0.18510	0.17029	—	0.17029	—	1,572.17	1,572.17	0.06377	0.01275	—	1,577.57

Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16276	0.13562	1.15845	1.51295	0.00301	0.03378	—	0.03378	0.03108	—	0.03108	—	260.291	260.291	0.01056	0.00211	—	261.185
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.8.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.51602	0.47204	0.30796	5.22145	0.00000	0.00000	1.20770	1.20770	0.00000	0.28308	0.28308	—	1,259.65	1,259.65	0.01889	0.04713	3.44884	1,277.61
Vendor	0.08618	0.04455	1.52804	0.74242	0.00937	0.01875	0.35666	0.37540	0.00937	0.09854	0.10791	—	1,268.81	1,268.81	0.04978	0.17856	2.35920	1,325.62
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.51287	0.46260	0.35509	4.55324	0.00000	0.00000	1.20770	1.20770	0.00000	0.28308	0.28308	—	1,189.79	1,189.79	0.02519	0.04713	0.08945	1,204.56
Vendor	0.08495	0.04209	1.59134	0.75394	0.00937	0.01875	0.35666	0.37540	0.00937	0.09854	0.10791	—	1,269.81	1,269.81	0.04978	0.17856	0.06112	1,324.32
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.36184	0.32593	0.25138	3.30152	0.00000	0.00000	0.86242	0.86242	0.00000	0.20215	0.20215	—	857.417	857.417	0.01574	0.03366	1.06236	868.905
Vendor	0.06156	0.03094	1.12614	0.53820	0.00670	0.01339	0.25470	0.26809	0.00670	0.07037	0.07707	—	906.589	906.589	0.03556	0.12754	0.72768	946.213
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06604	0.05948	0.04588	0.60253	0.00000	0.00000	0.15739	0.15739	0.00000	0.03689	0.03689	—	141.955	141.955	0.00261	0.00557	0.17589	143.857

Vendor	0.01123	0.00565	0.20552	0.09822	0.00122	0.00244	0.04648	0.04893	0.00122	0.01284	0.01406	—	150.096	150.096	0.00589	0.02112	0.12048	156.656
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.9. Phase 2 - Building Construction (2030)

3.9.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.21101	1.00914	8.70495	11.5787	0.02312	0.24315	—	0.24315	0.22369	—	0.22369	—	2,201.04	2,201.04	0.08928	0.01786	—	2,208.60
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15641	0.13034	1.12432	1.49549	0.00299	0.03140	—	0.03140	0.02889	—	0.02889	—	284.284	284.284	0.01153	0.00231	—	285.259
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02855	0.02379	0.20519	0.27293	0.00054	0.00573	—	0.00573	0.00527	—	0.00527	—	47.0664	47.0664	0.00191	0.00038	—	47.2279
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.9.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.45945	0.45000	0.35194	4.29871	0.00000	0.00000	1.20770	1.20770	0.00000	0.28308	0.28308	—	1,170.07	1,170.07	0.02204	0.04713	0.07975	1,184.75
Vendor	0.08373	0.04209	1.51712	0.73273	0.00937	0.00937	0.35666	0.36603	0.00937	0.09854	0.10791	—	1,229.79	1,229.79	0.04041	0.17856	0.05362	1,284.07
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05853	0.05731	0.04018	0.56006	0.00000	0.00000	0.15594	0.15594	0.00000	0.03655	0.03655	—	152.470	152.470	0.00285	0.00609	0.17191	154.527
Vendor	0.01097	0.00559	0.19526	0.09321	0.00121	0.00121	0.04606	0.04727	0.00121	0.01272	0.01394	—	158.759	158.759	0.00522	0.02306	0.11531	165.878
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01068	0.01046	0.00733	0.10221	0.00000	0.00000	0.02846	0.02846	0.00000	0.00667	0.00667	—	25.2431	25.2431	0.00047	0.00101	0.02846	25.5837
Vendor	0.00200	0.00102	0.03563	0.01701	0.00022	0.00022	0.00841	0.00863	0.00022	0.00232	0.00254	—	26.2844	26.2844	0.00086	0.00382	0.01909	27.4630
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.10. Phase 1 - Paving (2028)

3.10.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.73039	0.61281	5.53389	8.17802	0.01181	0.20197	—	0.20197	0.18581	—	0.18581	—	1,243.79	1,243.79	0.05045	0.01009	—	1,248.05
Paving	0.36389	0.36389	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03602	0.03022	0.27290	0.40330	0.00058	0.00996	—	0.00996	0.00916	—	0.00916	—	61.3374	61.3374	0.00249	0.00050	—	61.5479
Paving	0.01795	0.01795	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00657	0.00552	0.04981	0.07360	0.00011	0.00182	—	0.00182	0.00167	—	0.00167	—	10.1551	10.1551	0.00041	0.00008	—	10.1900
Paving	0.00328	0.00328	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.10.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05586	0.05058	0.04192	0.50898	0.00000	0.00000	0.12686	0.12686	0.00000	0.02974	0.02974	—	127.154	127.154	0.00265	0.00495	0.01042	128.706
Vendor	0.00169	0.00078	0.02991	0.01412	0.00017	0.00034	0.00640	0.00674	0.00034	0.00177	0.00210	—	23.4555	23.4555	0.00089	0.00337	0.00124	24.4840
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00272	0.00246	0.00205	0.02544	0.00000	0.00000	0.00625	0.00625	0.00000	0.00147	0.00147	—	6.32659	6.32659	0.00013	0.00024	0.00857	6.41117
Vendor	0.00009	0.00004	0.00146	0.00069	0.00001	0.00002	0.00032	0.00033	0.00002	0.00009	0.00010	—	1.15623	1.15623	0.00004	0.00017	0.00102	1.20791
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00050	0.00045	0.00037	0.00464	0.00000	0.00000	0.00114	0.00114	0.00000	0.00027	0.00027	—	1.04744	1.04744	0.00002	0.00004	0.00142	1.06144
Vendor	0.00002	0.00001	0.00027	0.00013	< 0.000005	< 0.000005	0.00006	0.00006	< 0.000005	0.00002	0.00002	—	0.19143	0.19143	0.00001	0.00003	0.00017	0.19998
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.11. Phase 1 - Architectural Coating (2028)

3.11.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12985	0.10731	0.80814	1.11833	0.00173	0.01536	—	0.01536	0.01413	—	0.01413	—	133.517	133.517	0.00542	0.00108	—	133.975

Architect Coatings	10.7959	10.7959	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00889	0.00735	0.05535	0.07660	0.00012	0.00105	—	0.00105	0.00097	—	0.00097	—	9.14500	9.14500	0.00037	0.00007	—	9.17639
Architectural Coatings	0.73945	0.73945	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00162	0.00134	0.01010	0.01398	0.00002	0.00019	—	0.00019	0.00018	—	0.00018	—	1.51406	1.51406	0.00006	0.00001	—	1.51926
Architectural Coatings	0.13495	0.13495	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.11.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.21271	0.19259	0.15963	1.93818	0.00000	0.00000	0.48308	0.48308	0.00000	0.11323	0.11323	—	484.202	484.202	0.01007	0.01885	0.03966	490.111
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01440	0.01302	0.01085	0.13455	0.00000	0.00000	0.03308	0.03308	0.00000	0.00775	0.00775	—	33.4606	33.4606	0.00069	0.00129	0.04533	33.9080
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00263	0.00238	0.00198	0.02456	0.00000	0.00000	0.00604	0.00604	0.00000	0.00142	0.00142	—	5.53979	5.53979	0.00011	0.00021	0.00750	5.61385
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.12. Phase 2 - Architectural Coating (2030)

3.12.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11905	0.09839	0.78473	1.10719	0.00173	0.01097	—	0.01097	0.01009	—	0.01009	—	133.513	133.513	0.00542	0.00108	—	133.971
Architectural Coatings	8.86562	8.86562	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11905	0.09839	0.78473	1.10719	0.00173	0.01097	—	0.01097	0.01009	—	0.01009	—	133.513	133.513	0.00542	0.00108	—	133.971
Architectural Coatings	8.86562	8.86562	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01631	0.01348	0.10750	0.15167	0.00024	0.00150	—	0.00150	0.00138	—	0.00138	—	18.2894	18.2894	0.00074	0.00015	—	18.3522
Architectural Coatings	1.21447	1.21447	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00298	0.00246	0.01962	0.02768	0.00004	0.00027	—	0.00027	0.00025	—	0.00025	—	3.02802	3.02802	0.00012	0.00002	—	3.03842
Architectural Coatings	0.22164	0.22164	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.12.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07567	0.07464	0.05020	0.80826	0.00000	0.00000	0.19891	0.19891	0.00000	0.04663	0.04663	—	204.018	204.018	0.00311	0.00776	0.50769	206.916
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07567	0.07412	0.05797	0.70802	0.00000	0.00000	0.19891	0.19891	0.00000	0.04663	0.04663	—	192.718	192.718	0.00363	0.00776	0.01314	195.135
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01022	0.01001	0.00702	0.09784	0.00000	0.00000	0.02724	0.02724	0.00000	0.00639	0.00639	—	26.6347	26.6347	0.00050	0.00106	0.03003	26.9940
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00187	0.00183	0.00128	0.01785	0.00000	0.00000	0.00497	0.00497	0.00000	0.00117	0.00117	—	4.40967	4.40967	0.00008	0.00018	0.00497	4.46916
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.13. Phase 1 - Utilities Undergrounding (2028)

3.13.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.15906	0.97393	8.67852	7.91468	0.01404	0.36587	—	0.36587	0.33660	—	0.33660	—	1,521.39	1,521.39	0.06171	0.01234	—	1,526.61
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02540	0.02135	0.19021	0.17347	0.00031	0.00802	—	0.00802	0.00738	—	0.00738	—	33.3455	33.3455	0.00135	0.00027	—	33.4599
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00464	0.00390	0.03471	0.03166	0.00006	0.00146	—	0.00146	0.00135	—	0.00135	—	5.52072	5.52072	0.00022	0.00004	—	5.53967
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.13.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01862	0.01686	0.01397	0.16966	0.00000	0.00000	0.04229	0.04229	0.00000	0.00991	0.00991	—	42.3846	42.3846	0.00088	0.00165	0.00347	42.9019
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00040	0.00036	0.00030	0.00377	0.00000	0.00000	0.00093	0.00093	0.00000	0.00022	0.00022	—	0.93727	0.93727	0.00002	0.00004	0.00127	0.94980
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00007	0.00007	0.00006	0.00069	0.00000	0.00000	0.00017	0.00017	0.00000	0.00004	0.00004	—	0.15518	0.15518	< 0.000005	0.00001	0.00021	0.15725
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.14. Phase 2 - Utilities Undergrounding (2030)

3.14.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.10722	0.93037	7.97376	7.93059	0.01403	0.34209	—	0.34209	0.31472	—	0.31472	—	1,520.28	1,520.28	0.06167	0.01233	—	1,525.50

Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04550	0.03823	0.32769	0.32591	0.00058	0.01406	—	0.01406	0.01293	—	0.01293	—	62.4773	62.4773	0.00253	0.00051	—	62.6917
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00830	0.00698	0.05980	0.05948	0.00011	0.00257	—	0.00257	0.00236	—	0.00236	—	10.3438	10.3438	0.00042	0.00008	—	10.3793
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.14.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01609	0.01576	0.01232	0.15052	0.00000	0.00000	0.04229	0.04229	0.00000	0.00991	0.00991	—	40.9689	40.9689	0.00077	0.00165	0.00279	41.4828
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00065	0.00064	0.00045	0.00624	0.00000	0.00000	0.00174	0.00174	0.00000	0.00041	0.00041	—	1.69864	1.69864	0.00003	0.00007	0.00192	1.72156
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00012	0.00012	0.00008	0.00114	0.00000	0.00000	0.00032	0.00032	0.00000	0.00007	0.00007	—	0.28123	0.28123	0.00001	0.00001	0.00032	0.28502
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Phase 1 - Site Preparation	Site Preparation	3/25/2027	4/30/2027	5.00000	27.0000	—
Phase 2 - Site Preparation	Site Preparation	2/18/2028	3/27/2028	5.00000	27.0000	—
Phase 1 - Grading	Grading	5/1/2027	5/12/2027	5.00000	8.00000	—
Phase 2 - Grading	Grading	3/28/2028	4/6/2028	5.00000	8.00000	—
Phase 1 - Building Construction	Building Construction	5/13/2027	1/12/2028	5.00000	175.000	—

Phase 2 - Building Construction	Building Construction	4/7/2028	3/7/2030	5.00000	500.000	—
Phase 1 - Paving	Paving	1/25/2028	2/17/2028	5.00000	18.0000	—
Phase 1 - Architectural Coating	Architectural Coating	2/18/2028	3/23/2028	5.00000	25.0000	—
Phase 2 - Architectural Coating	Architectural Coating	3/29/2030	6/6/2030	5.00000	50.0000	—
Phase 1 - Utilities Undergrounding	Trenching	1/13/2028	1/24/2028	5.00000	8.00000	—
Phase 2 - Utilities Undergrounding	Trenching	3/8/2030	3/28/2030	5.00000	15.0000	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Phase 1 - Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	1.000000	7.00000	84.0000	0.37000
Phase 1 - Site Preparation	Graders	Diesel	Average	1.000000	8.00000	148.000	0.41000
Phase 1 - Site Preparation	Scrapers	Diesel	Average	1.000000	8.00000	423.000	0.48000
Phase 2 - Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	1.000000	7.00000	84.0000	0.37000
Phase 2 - Site Preparation	Graders	Diesel	Average	1.000000	8.00000	148.000	0.41000
Phase 2 - Site Preparation	Scrapers	Diesel	Average	1.000000	8.00000	423.000	0.48000
Phase 1 - Grading	Graders	Diesel	Average	1.000000	8.00000	148.000	0.41000
Phase 1 - Grading	Rubber Tired Dozers	Diesel	Average	1.000000	8.00000	367.000	0.40000
Phase 1 - Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00000	7.00000	84.0000	0.37000
Phase 2 - Grading	Graders	Diesel	Average	1.000000	8.00000	148.000	0.41000

Phase 2 - Grading	Rubber Tired Dozers	Diesel	Average	1.000000	8.00000	367.000	0.40000
Phase 2 - Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00000	7.00000	84.0000	0.37000
Phase 1 - Building Construction	Cranes	Diesel	Average	1.000000	8.00000	367.000	0.29000
Phase 1 - Building Construction	Forklifts	Diesel	Average	2.00000	7.00000	82.0000	0.20000
Phase 1 - Building Construction	Generator Sets	Diesel	Average	1.000000	8.00000	14.0000	0.74000
Phase 1 - Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	1.000000	6.00000	84.0000	0.37000
Phase 1 - Building Construction	Welders	Diesel	Average	3.00000	8.00000	46.0000	0.45000
Phase 2 - Building Construction	Cranes	Diesel	Average	1.000000	8.00000	367.000	0.29000
Phase 2 - Building Construction	Forklifts	Diesel	Average	2.00000	7.00000	82.0000	0.20000
Phase 2 - Building Construction	Generator Sets	Diesel	Average	1.000000	8.00000	14.0000	0.74000
Phase 2 - Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	1.000000	6.00000	84.0000	0.37000
Phase 2 - Building Construction	Welders	Diesel	Average	3.00000	8.00000	46.0000	0.45000
Phase 1 - Paving	Cement and Mortar Mixers	Diesel	Average	1.000000	8.00000	10.00000	0.56000
Phase 1 - Paving	Pavers	Diesel	Average	1.000000	8.00000	81.0000	0.42000
Phase 1 - Paving	Paving Equipment	Diesel	Average	1.000000	8.00000	89.0000	0.36000
Phase 1 - Paving	Rollers	Diesel	Average	2.00000	8.00000	36.0000	0.38000
Phase 1 - Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.000000	8.00000	84.0000	0.37000
Phase 1 - Architectural Coating	Air Compressors	Diesel	Average	1.000000	6.00000	37.0000	0.48000
Phase 2 - Architectural Coating	Air Compressors	Diesel	Average	1.000000	6.00000	37.0000	0.48000

Phase 1 - Utilities Undergrounding	Rubber Tired Dozers	Diesel	Average	1.000000	8.00000	367.000	0.40000
Phase 1 - Utilities Undergrounding	Excavators	Diesel	Average	1.000000	8.00000	36.0000	0.38000
Phase 2 - Utilities Undergrounding	Excavators	Diesel	Average	1.000000	8.00000	36.0000	0.38000
Phase 2 - Utilities Undergrounding	Rubber Tired Dozers	Diesel	Average	1.000000	8.00000	367.000	0.40000

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Phase 1 - Site Preparation	Worker	7.50000	11.9700	LDA,LDT1,LDT2
Phase 1 - Site Preparation	Vendor	0.00000	7.63000	HHDT,MHDT
Phase 1 - Site Preparation	Hauling	0.00000	20.0000	HHDT
Phase 1 - Site Preparation	Onsite truck	—	—	HHDT
Phase 2 - Site Preparation	Worker	7.50000	11.9700	LDA,LDT1,LDT2
Phase 2 - Site Preparation	Vendor	0.00000	7.63000	HHDT,MHDT
Phase 2 - Site Preparation	Hauling	0.00000	20.0000	HHDT
Phase 2 - Site Preparation	Onsite truck	—	—	HHDT
Phase 1 - Grading	Worker	10.00000	11.9700	LDA,LDT1,LDT2
Phase 1 - Grading	Vendor	3.00000	7.63000	HHDT,MHDT
Phase 1 - Grading	Hauling	0.00000	20.0000	HHDT
Phase 1 - Grading	Onsite truck	—	—	HHDT
Phase 2 - Grading	Worker	10.00000	11.9700	LDA,LDT1,LDT2
Phase 2 - Grading	Vendor	1.000000	7.63000	HHDT,MHDT
Phase 2 - Grading	Hauling	0.00000	20.0000	HHDT
Phase 2 - Grading	Onsite truck	—	—	HHDT
Phase 1 - Building Construction	Worker	142.800	11.9700	LDA,LDT1,LDT2

Phase 1 - Building Construction	Vendor	55.7260	7.63000	HHDT,MHDT
Phase 1 - Building Construction	Hauling	0.00000	20.0000	HHDT
Phase 1 - Building Construction	Onsite truck	—	—	HHDT
Phase 2 - Building Construction	Worker	142.800	11.9700	LDA,LDT1,LDT2
Phase 2 - Building Construction	Vendor	55.7260	7.63000	HHDT,MHDT
Phase 2 - Building Construction	Hauling	0.00000	20.0000	HHDT
Phase 2 - Building Construction	Onsite truck	—	—	HHDT
Phase 1 - Paving	Worker	15.0000	11.9700	LDA,LDT1,LDT2
Phase 1 - Paving	Vendor	1.000000	7.63000	HHDT,MHDT
Phase 1 - Paving	Hauling	0.00000	20.0000	HHDT
Phase 1 - Paving	Onsite truck	—	—	HHDT
Phase 1 - Architectural Coating	Worker	57.1200	11.9700	LDA,LDT1,LDT2
Phase 1 - Architectural Coating	Vendor	—	7.63000	HHDT,MHDT
Phase 1 - Architectural Coating	Hauling	0.00000	20.0000	HHDT
Phase 1 - Architectural Coating	Onsite truck	—	—	HHDT
Phase 2 - Architectural Coating	Worker	23.5200	11.9700	LDA,LDT1,LDT2
Phase 2 - Architectural Coating	Vendor	—	7.63000	HHDT,MHDT
Phase 2 - Architectural Coating	Hauling	0.00000	20.0000	HHDT
Phase 2 - Architectural Coating	Onsite truck	—	—	HHDT
Phase 1 - Utilities Undergrounding	Worker	5.00000	11.9700	LDA,LDT1,LDT2
Phase 1 - Utilities Undergrounding	Vendor	—	7.63000	HHDT,MHDT
Phase 1 - Utilities Undergrounding	Hauling	0.00000	20.0000	HHDT
Phase 1 - Utilities Undergrounding	Onsite truck	—	—	HHDT
Phase 2 - Utilities Undergrounding	Worker	5.00000	11.9700	LDA,LDT1,LDT2
Phase 2 - Utilities Undergrounding	Vendor	—	7.63000	HHDT,MHDT
Phase 2 - Utilities Undergrounding	Hauling	0.00000	20.0000	HHDT
Phase 2 - Utilities Undergrounding	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Phase 1 - Architectural Coating	0.00000	0.00000	69,320.4	23,106.8	12,000.0
Phase 2 - Architectural Coating	0.00000	0.00000	143,962	47,258.0	0.00000

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Phase 1 - Site Preparation	—	—	40.5000	0.00000	0.00000
Phase 2 - Site Preparation	—	—	40.5000	0.00000	0.00000
Phase 1 - Grading	—	—	8.00000	0.00000	0.00000
Phase 2 - Grading	—	—	8.00000	0.00000	0.00000
Phase 1 - Paving	0.00000	0.00000	0.00000	0.00000	2.50000

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

5.7. Construction Paving

Phase Name	Land Use	Area Paved (acres)	% Asphalt

Phase 1 - Paving	Junior College (2yr)	0.00000	0%
Phase 1 - Paving	Enclosed Parking with Elevator	2.50000	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2027	0.00000	588.983	0.03300	0.00400
2028	0.00000	588.983	0.03300	0.00400
2029	0.00000	588.983	0.03300	0.00400
2030	0.00000	588.983	0.03300	0.00400

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	7.50000	annual days of extreme heat
Extreme Precipitation	2.70000	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	3.64000	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	37.5731

AQ-PM	41.7424
AQ-DPM	80.7218
Drinking Water	28.9871
Lead Risk Housing	42.8986
Pesticides	0.00000
Toxic Releases	33.3083
Traffic	89.1500
Effect Indicators	—
CleanUp Sites	34.6211
Groundwater	50.8717
Haz Waste Facilities/Generators	46.8034
Impaired Water Bodies	12.4528
Solid Waste	40.0916
Sensitive Population	—
Asthma	54.1002
Cardio-vascular	17.4975
Low Birth Weights	46.7667
Socioeconomic Factor Indicators	—
Education	45.5834
Housing	71.5716
Linguistic	41.4400
Poverty	53.2663
Unemployment	73.4123

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—

Above Poverty	48.72321314
Employed	56.3839343
Median HI	30.15526755
Education	—
Bachelor's or higher	49.33915052
High school enrollment	100
Preschool enrollment	95.7141024
Transportation	—
Auto Access	18.88874631
Active commuting	53.20159117
Social	—
2-parent households	82.26613628
Voting	71.14076736
Neighborhood	—
Alcohol availability	60.33619915
Park access	42.92313615
Retail density	91.23572437
Supermarket access	78.60900808
Tree canopy	19.26087514
Housing	—
Homeownership	41.12665212
Housing habitability	44.15501091
Low-inc homeowner severe housing cost burden	31.75927114
Low-inc renter severe housing cost burden	25.11228025
Uncrowded housing	56.30694213
Health Outcomes	—
Insured adults	55.13922751
Arthritis	27.4

Asthma ER Admissions	30.8
High Blood Pressure	46.3
Cancer (excluding skin)	27.6
Asthma	55.1
Coronary Heart Disease	31.2
Chronic Obstructive Pulmonary Disease	33.2
Diagnosed Diabetes	48.6
Life Expectancy at Birth	39.9
Cognitively Disabled	13.7
Physically Disabled	7.5
Heart Attack ER Admissions	89.7
Mental Health Not Good	50.5
Chronic Kidney Disease	45.1
Obesity	63.1
Pedestrian Injuries	63.7
Physical Health Not Good	53.6
Stroke	34.3
Health Risk Behaviors	—
Binge Drinking	30.9
Current Smoker	47.6
No Leisure Time for Physical Activity	48.5
Climate Change Exposures	—
Wildfire Risk	14.9
SLR Inundation Area	0.0
Children	95.4
Elderly	22.5
English Speaking	43.4
Foreign-born	55.0

Outdoor Workers	81.3
Climate Change Adaptive Capacity	—
Impervious Surface Cover	11.8
Traffic Density	85.7
Traffic Access	87.4
Other Indices	—
Hardship	38.7
Other Decision Support	—
2016 Voting	68.8

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	50.0000
Healthy Places Index Score for Project Location (b)	60.0000
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

8.1. Justifications

Screen	Justification
Land Use	The land use and size were provided by the District Architect. The lot acreage was estimated using measurements on aerials maps, and the landscape area was estimated as 20% of the lot.
Construction: Construction Phases	The length of construction was provided by the District Architect in the SDCCD Program Schedule dated 5-9-2025. The lengths of individual phases of construction relied on CalEEMod defaults which were adjusted to fit the overall construction length.
Construction: Off-Road Equipment	Equipment was added to the utilities undergrounding phases based on similar project types and sizes.
Construction: Architectural Coatings	The coated area for the parking lot (Phase 1) was calculated based on the CalEEMod assumption that 6% of the parking area (200,000 SF) would be coated.

8.3. Land Use

Model Parameter	Units	Default Value	New Value
Lot Area	acre	3.21396	0.00000
Landscape Area	sq. ft	—	0.00000
Lot Area	acre	4.50000	2.50000
Landscape Area	sq. ft	—	21,780.0

8.4. Construction

8.4.8. Architectural Coatings

Phase Name	Model Parameter	Units	Default Value	New Value
Phase 1 - Architectural Coating	Non-Residential Interior Area	sq ft	70,938.0	69,320.4
Phase 1 - Architectural Coating	Non-Residential Exterior Area	sq ft	23,286.5	23,106.8
Phase 1 - Architectural Coating	Parking Area	sq ft	2,156.85	12,000.0
Phase 2 - Architectural Coating	Parking Area	sq ft	4,377.15	0.00000

Appendix C

CMP Full Buildout CalEEMod Output

In response to Public Laws 119-15, 119-16, and 119-17, CARB developed off-model adjustment factors that remove the estimated emissions benefits attributed to California's Advanced Clean Trucks, Zero-Emission Airport Shuttle, Heavy-Duty Vehicle and Engine Emission Warranty and Maintenance Provisions, and Heavy-Duty Omnibus regulations from EMFAC2021, which were approved by the USEPA in November 2025. To apply these adjustment factors to the CalEEMod output data, a weighted adjustment factor was calculated for each pollutant or GHG based on the fleet mix and CARB adjustment factors for each vehicle type. The weighted adjustment factors are shown below.

	Weighted Adjustment Factors						
Year	NOx (exh)	Total PM2.5 (exh, bw, and tw)	Total PM10 (exh, bw, and tw)	Total ROG (exh and evap)	CO2 (exh)	CH4 (exh)	N2O (exh)
2045	1.023998	1.025635	1.026269	1.016728	1.021467	1.020657	1.0219763

The weighted adjustment factors were applied to the exhaust portion of the maximum daily mobile source emissions calculated in CalEEMod for each respective pollutant or GHG, as shown below. The additional adjusted emissions for each pollutant or GHG were then added to the total maximum daily mobile source emissions presented in the following CalEEMod output file.

	ROG	NOx	PM10E	PM2.5E	PM10D	PM2.5D	PM10TOT	PM2.5TOT	CO_2	CH_4	N_2O	CO_2e
CMP Mobile Source Exhaust (pounds/day)	38.79	21.98	0.364	0.34	95.12	24.11	95.49	24.45	88,698	2.963	3.109	89,720
Adjustment Factor	1.01672826	1.023998	1.02626913	1.0256355	1.02626913	1.0256355			1.021467145	1.02065683	1.02197634	
Additional Adjusted Emissions	**0.64888921**	**0.52747602**	**0.00956196**	**0.00871607**	**2.49871958**	**0.61807182**	**2.508281541**	**0.626787884**	**1904.092832**	**0.06120618**	**0.06832444**	**1925.98367**

CMP - Full Buildout Detailed Report

Table of Contents

1. Basic Project Information
   1.1. Basic Project Information
   1.2. Land Use Types
   1.3. User-Selected Emission Reduction Measures by Emissions Sector
2. Emissions Summary
   2.3. Operations Emissions Compared Against Thresholds
   2.4. Operations Emissions by Sector, Unmitigated
4. Operations Emissions Details
   4.1. Mobile Emissions by Land Use
      4.1.1. Unmitigated
   4.2. Energy
      4.2.1. Electricity Emissions By Land Use - Unmitigated
      4.2.3. Natural Gas Emissions By Land Use - Unmitigated
   4.3. Area Emissions by Source
      4.3.1. Unmitigated
   4.4. Water Emissions by Land Use
      4.4.1. Unmitigated
   4.5. Waste Emissions by Land Use

4.5.1. Unmitigated
4.6. Refrigerant Emissions by Land Use
4.6.1. Unmitigated
4.7. Offroad Emissions By Equipment Type
4.7.1. Unmitigated
4.8. Stationary Emissions By Equipment Type
4.8.1. Unmitigated
4.9. User Defined Emissions By Equipment Type
4.9.1. Unmitigated
4.10. Soil Carbon Accumulation By Vegetation Type
4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated
4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated
4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated
5. Activity Data
5.9. Operational Mobile Sources
5.9.1. Unmitigated
5.10. Operational Area Sources
5.10.1. Hearths
5.10.2. Architectural Coatings
5.10.3. Landscape Equipment
5.11. Operational Energy Consumption
5.11.1. Unmitigated

5.12. Operational Water and Wastewater Consumption
5.12.1. Unmitigated
5.13. Operational Waste Generation
5.13.1. Unmitigated
5.14. Operational Refrigeration and Air Conditioning Equipment
5.14.1. Unmitigated
5.15. Operational Off-Road Equipment
5.15.1. Unmitigated
5.16. Stationary Sources
5.16.1. Emergency Generators and Fire Pumps
5.16.2. Process Boilers
5.17. User Defined
5.18. Vegetation
5.18.1. Land Use Change
5.18.1.1. Unmitigated
5.18.1. Biomass Cover Type
5.18.1.1. Unmitigated
5.18.2. Sequestration
5.18.2.1. Unmitigated
6. Climate Risk Detailed Report
6.1. Climate Risk Summary
6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores
6.4. Climate Risk Reduction Measures
7. Health and Equity Details
7.1. CalEnviroScreen 4.0 Scores
7.2. Healthy Places Index Scores
7.3. Overall Health & Equity Scores
7.4. Health & Equity Measures
7.5. Evaluation Scorecard
7.6. Health & Equity Custom Measures
8. User Changes to Default Data
8.1. Justifications
8.3. Land Use
8.5. Operations
8.5.1. Mobile Sources
8.5.1.1. Vehicle Data
8.5.3. Energy Usage
8.5.4. Water and Waste Water

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	CMP - Full Buildout
Operational Year	2045
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50000
Precipitation (days)	0.40000
Location	32.80520787850037, -117.16852467678811
County	San Diego
City	San Diego
Air District	San Diego County APCD
Air Basin	San Diego
TAZ	6330
EDFZ	12
Electric Utility	San Diego Gas & Electric
Gas Utility	San Diego Gas & Electric
App Version	2022.1.1.45

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Apartments Mid Rise	800.000	Dwelling Unit	0.00000	265,000	0.00000	—	800.000	—
Junior College (2yr)	919.788	1000sqft	104.000	919,788	871,200	871,200	—	—
Day-Care Center	12.0000	1000sqft	0.00000	12,000.0	0.00000	—	—	—
Enclosed Parking with Elevator	340.015	1000sqft	0.00000	340,015	0.00000	—	—	—
Health Club	175.000	1000sqft	0.00000	175,000	0.00000	—	—	—
High School	25.7010	1000sqft	0.00000	25,701.0	0.00000	0.00000	—	—
Medical Office Building	14.0000	1000sqft	0.00000	14,000.0	0.00000	—	—	—
Enclosed Parking with Elevator	700.000	Space	0.00000	280,000	0.00000	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.3. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	98.6442	112.001	42.5140	498.681	0.99009	1.95731	95.1221	97.0794	1.89567	24.1086	26.0043	1,439.87	115,727	117,167	152.838	3.34634	27.9074	122,013
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	80.6757	95.2983	43.7404	355.987	0.94339	1.80074	95.1221	96.9229	1.77732	24.1086	25.8859	1,439.87	111,229	112,669	152.971	3.52849	7.34191	117,552
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	72.5653	70.0523	34.8931	279.735	0.70569	1.65283	67.9269	69.5797	1.61725	17.2161	18.8333	1,439.87	86,297.2	87,737.0	149.125	2.56285	13.3062	92,242.2
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	13.2432	12.7845	6.36798	51.0517	0.12879	0.30164	12.3967	12.6983	0.29515	3.14193	3.43708	238.387	14,287.5	14,525.9	24.6893	0.42431	2.20299	15,271.7

2.4. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	41.8874	38.7896	21.9832	300.376	0.87231	0.36362	95.1221	95.4858	0.34021	24.1086	24.4488	—	88,698.3	88,698.3	2.96280	3.10935	21.1130	89,720.1
Area	49.9626	48.6873	1.06549	122.446	0.00655	0.15675	—	0.15675	0.11852	—	0.11852	—	437.283	437.283	0.01833	0.00372	—	438.849
Energy	1.89147	0.94573	17.1951	14.4439	0.10317	1.30683	—	1.30683	1.30683	—	1.30683	—	24,996.2	24,996.2	2.68714	0.14426	—	25,106.4
Water	—	—	—	—	—	—	—	—	—	—	—	35.6815	88.3499	124.031	3.67591	0.08901	—	242.455

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Waste	—	—	—	—	—	—	—	—	—	—	—	1,404.19	0.00000	1,404.19	140.344	0.00000	—	4,912.78
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.79440	6.79440
Stationary	4.90282	23.5787	2.27014	61.4144	0.00805	0.13010	0.00000	0.13010	0.13010	0.00000	0.13010	0.00000	1,506.45	1,506.45	3.14986	0.00000	0.00000	1,585.20
Total	98.6442	112.001	42.5140	498.681	0.99009	1.95731	95.1221	97.0794	1.89567	24.1086	26.0043	1,439.87	115,727	117,167	152.838	3.34634	27.9074	122,013
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	41.7648	38.6572	24.2751	280.128	0.83217	0.36380	95.1221	95.4859	0.34039	24.1086	24.4490	—	84,637.9	84,637.9	3.11436	3.29522	0.54751	85,698.3
Area	32.1166	32.1166	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	1.89147	0.94573	17.1951	14.4439	0.10317	1.30683	—	1.30683	1.30683	—	1.30683	—	24,996.2	24,996.2	2.68714	0.14426	—	25,106.4
Water	—	—	—	—	—	—	—	—	—	—	—	35.6815	88.3499	124.031	3.67591	0.08901	—	242.455
Waste	—	—	—	—	—	—	—	—	—	—	—	1,404.19	0.00000	1,404.19	140.344	0.00000	—	4,912.78
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.79440	6.79440
Stationary	4.90282	23.5787	2.27014	61.4144	0.00805	0.13010	0.00000	0.13010	0.13010	0.00000	0.13010	0.00000	1,506.45	1,506.45	3.14986	0.00000	0.00000	1,585.20
Total	80.6757	95.2983	43.7404	355.987	0.94339	1.80074	95.1221	96.9229	1.77732	24.1086	25.8859	1,439.87	111,229	112,669	152.971	3.52849	7.34191	117,552
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	29.4206	27.2031	17.0170	200.701	0.59874	0.25978	67.9269	68.1867	0.24306	17.2161	17.4591	—	60,893.7	60,893.7	2.19351	2.32775	6.51175	61,648.8
Area	40.9174	40.2885	0.52545	60.3843	0.00323	0.07730	—	0.07730	0.05845	—	0.05845	—	215.646	215.646	0.00904	0.00183	—	216.419
Energy	1.89147	0.94573	17.1951	14.4439	0.10317	1.30683	—	1.30683	1.30683	—	1.30683	—	24,996.2	24,996.2	2.68714	0.14426	—	25,106.4
Water	—	—	—	—	—	—	—	—	—	—	—	35.6815	88.3499	124.031	3.67591	0.08901	—	242.455
Waste	—	—	—	—	—	—	—	—	—	—	—	1,404.19	0.00000	1,404.19	140.344	0.00000	—	4,912.78

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.79440	6.79440
Stationary	0.33581	1.61498	0.15549	4.20647	0.00055	0.00891	0.00000	0.00891	0.00891	0.00000	0.00891	0.00000	103.182	103.182	0.21574	0.00000	0.00000	108.575
Total	72.5653	70.0523	34.8931	279.735	0.70569	1.65283	67.9269	69.5797	1.61725	17.2161	18.8333	1,439.87	86,297.2	87,737.0	149.125	2.56285	13.3062	92,242.2
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	5.36927	4.96457	3.10560	36.6279	0.10927	0.04741	12.3967	12.4441	0.04436	3.14193	3.18629	—	10,081.7	10,081.7	0.36316	0.38539	1.07810	10,206.7
Area	7.46742	7.35264	0.09589	11.0201	0.00059	0.01411	—	0.01411	0.01067	—	0.01067	—	35.7027	35.7027	0.00150	0.00030	—	35.8306
Energy	0.34519	0.17260	3.13811	2.63602	0.01883	0.23850	—	0.23850	0.23850	—	0.23850	—	4,138.41	4,138.41	0.44489	0.02388	—	4,156.65
Water	—	—	—	—	—	—	—	—	—	—	—	5.90747	14.6273	20.5348	0.60859	0.01474	—	40.1412
Waste	—	—	—	—	—	—	—	—	—	—	—	232.479	0.00000	232.479	23.2355	0.00000	—	813.367
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.12489	1.12489
Stationary	0.06129	0.29473	0.02838	0.76768	0.00010	0.00163	0.00000	0.00163	0.00163	0.00000	0.00163	0.00000	17.0829	17.0829	0.03572	0.00000	0.00000	17.9759
Total	13.2432	12.7845	6.36798	51.0517	0.12879	0.30164	12.3967	12.6983	0.29515	3.14193	3.43708	238.387	14,287.5	14,525.9	24.6893	0.42431	2.20299	15,271.7

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Junior College (2yr)	41.8874	38.7896	21.9832	300.376	0.87231	0.36362	95.1221	95.4858	0.34021	24.1086	24.4488	—	88,698.3	88,698.3	2.96280	3.10935	21.1130	89,720.1
Day-Care Center	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Enclosed Parking with Elevator	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Health Club	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
High School	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Medical Office Building	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Total	41.8874	38.7896	21.9832	300.376	0.87231	0.36362	95.1221	95.4858	0.34021	24.1086	24.4488	—	88,698.3	88,698.3	2.96280	3.10935	21.1130	89,720.1
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Junior College (2yr)	41.7648	38.6572	24.2751	280.128	0.83217	0.36380	95.1221	95.4859	0.34039	24.1086	24.4490	—	84,637.9	84,637.9	3.11436	3.29522	0.54751	85,698.3
Day-Care Center	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Enclosed Parking with Elevator	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Health Club	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
High School	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Medical Office Building	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Total	41.7648	38.6572	24.2751	280.128	0.83217	0.36380	95.1221	95.4859	0.34039	24.1086	24.4490	—	84,637.9	84,637.9	3.11436	3.29522	0.54751	85,698.3
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Junior College (2yr)	5.36927	4.96457	3.10560	36.6279	0.10927	0.04741	12.3967	12.4441	0.04436	3.14193	3.18629	—	10,081.7	10,081.7	0.36316	0.38539	1.07810	10,206.7
Day-Care Center	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Enclosed Parking with Elevator	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Health Club	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
High School	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Medical Office Building	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Total	5.36927	4.96457	3.10560	36.6279	0.10927	0.04741	12.3967	12.4441	0.04436	3.14193	3.18629	—	10,081.7	10,081.7	0.36316	0.38539	1.07810	10,206.7

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Junior College (2yr)	—	—	—	—	—	—	—	—	—	—	—	—	4,479.56	4,479.56	0.87143	0.10563	—	4,532.82

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Day-Care Center	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Health Club	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
High School	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	—	4,479.56	4,479.56	0.87143	0.10563	—	4,532.82
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Junior College (2yr)	—	—	—	—	—	—	—	—	—	—	—	—	4,479.56	4,479.56	0.87143	0.10563	—	4,532.82
Day-Care Center	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Health Club	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
High School	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	—	4,479.56	4,479.56	0.87143	0.10563	—	4,532.82
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Junior College (2yr)	—	—	—	—	—	—	—	—	—	—	—	—	741.642	741.642	0.14427	0.01749	—	750.460
Day-Care Center	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Health Club	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
High School	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	—	741.642	741.642	0.14427	0.01749	—	750.460

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Junior College (2yr)	1.89147	0.94573	17.1951	14.4439	0.10317	1.30683	—	1.30683	1.30683	—	1.30683	—	20,516.7	20,516.7	1.81572	0.03863	—	20,573.6
Day-Care Center	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Enclosed Parking with Elevator	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Health Club	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
High School	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Medical Office Building	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	1.89147	0.94573	17.1951	14.4439	0.10317	1.30683	—	1.30683	1.30683	—	1.30683	—	20,516.7	20,516.7	1.81572	0.03863	—	20,573.6
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Junior College (2yr)	1.89147	0.94573	17.1951	14.4439	0.10317	1.30683	—	1.30683	1.30683	—	1.30683	—	20,516.7	20,516.7	1.81572	0.03863	—	20,573.6
Day-Care Center	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Enclosed Parking with Elevator	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Health Club	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
High School	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Medical Office Building	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Total	1.89147	0.94573	17.1951	14.4439	0.10317	1.30683	—	1.30683	1.30683	—	1.30683	—	20,516.7	20,516.7	1.81572	0.03863	—	20,573.6
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Junior College (2yr)	0.34519	0.17260	3.13811	2.63602	0.01883	0.23850	—	0.23850	0.23850	—	0.23850	—	3,396.77	3,396.77	0.30061	0.00640	—	3,406.19
Day-Care Center	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Enclosed Parking with Elevator	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Health Club	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
High School	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Medical Office Building	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	0.34519	0.17260	3.13811	2.63602	0.01883	0.23850	—	0.23850	0.23850	—	0.23850	—	3,396.77	3,396.77	0.30061	0.00640	—	3,406.19

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	30.2059	30.2059	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.91073	1.91073	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	17.8460	16.5707	1.06549	122.446	0.00655	0.15675	—	0.15675	0.11852	—	0.11852	—	437.283	437.283	0.01833	0.00372	—	438.849
Total	49.9626	48.6873	1.06549	122.446	0.00655	0.15675	—	0.15675	0.11852	—	0.11852	—	437.283	437.283	0.01833	0.00372	—	438.849
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	30.2059	30.2059	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.91073	1.91073	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	32.1166	32.1166	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	5.51257	5.51257	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.34871	0.34871	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Landscape Equipment	1.60614	1.49137	0.09589	11.0201	0.00059	0.01411	—	0.01411	0.01067	—	0.01067	—	35.7027	35.7027	0.00150	0.00030	—	35.8306
Total	7.46742	7.35264	0.09589	11.0201	0.00059	0.01411	—	0.01411	0.01067	—	0.01067	—	35.7027	35.7027	0.00150	0.00030	—	35.8306

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Junior College (2yr)	—	—	—	—	—	—	—	—	—	—	—	35.6815	88.3499	124.031	3.67591	0.08901	—	242.455
Day-Care Center	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Health Club	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
High School	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	35.6815	88.3499	124.031	3.67591	0.08901	—	242.455
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Junior College (2yr)	—	—	—	—	—	—	—	—	—	—	—	35.6815	88.3499	124.031	3.67591	0.08901	—	242.455
Day-Care Center	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Health Club	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
High School	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Total	—	—	—	—	—	—	—	—	—	—	—	35.6815	88.3499	124.031	3.67591	0.08901	—	242.455
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Junior College (2yr)	—	—	—	—	—	—	—	—	—	—	—	5.90747	14.6273	20.5348	0.60859	0.01474	—	40.1412
Day-Care Center	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Health Club	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
High School	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	5.90747	14.6273	20.5348	0.60859	0.01474	—	40.1412

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	114.273	0.00000	114.273	11.4212	0.00000	—	399.803
Junior College (2yr)	—	—	—	—	—	—	—	—	—	—	—	644.422	0.00000	644.422	64.4077	0.00000	—	2,254.61
Day-Care Center	—	—	—	—	—	—	—	—	—	—	—	8.40745	0.00000	8.40745	0.84029	0.00000	—	29.4148
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Health Club	—	—	—	—	—	—	—	—	—	—	—	537.591	0.00000	537.591	53.7303	0.00000	—	1,880.85
High School	—	—	—	—	—	—	—	—	—	—	—	18.0066	0.00000	18.0066	1.79970	0.00000	—	62.9991
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	81.4875	0.00000	81.4875	8.14439	0.00000	—	285.097
Total	—	—	—	—	—	—	—	—	—	—	—	1,404.19	0.00000	1,404.19	140.344	0.00000	—	4,912.78
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	114.273	0.00000	114.273	11.4212	0.00000	—	399.803
Junior College (2yr)	—	—	—	—	—	—	—	—	—	—	—	644.422	0.00000	644.422	64.4077	0.00000	—	2,254.61
Day-Care Center	—	—	—	—	—	—	—	—	—	—	—	8.40745	0.00000	8.40745	0.84029	0.00000	—	29.4148
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Health Club	—	—	—	—	—	—	—	—	—	—	—	537.591	0.00000	537.591	53.7303	0.00000	—	1,880.85
High School	—	—	—	—	—	—	—	—	—	—	—	18.0066	0.00000	18.0066	1.79970	0.00000	—	62.9991
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	81.4875	0.00000	81.4875	8.14439	0.00000	—	285.097
Total	—	—	—	—	—	—	—	—	—	—	—	1,404.19	0.00000	1,404.19	140.344	0.00000	—	4,912.78
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	18.9192	0.00000	18.9192	1.89091	0.00000	—	66.1919
Junior College (2yr)	—	—	—	—	—	—	—	—	—	—	—	106.691	0.00000	106.691	10.6634	0.00000	—	373.277

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Day-Care Center	—	—	—	—	—	—	—	—	—	—	—	1.39195	0.00000	1.39195	0.13912	0.00000	—	4.86995
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Health Club	—	—	—	—	—	—	—	—	—	—	—	89.0044	0.00000	89.0044	8.89567	0.00000	—	311.396
High School	—	—	—	—	—	—	—	—	—	—	—	2.98121	0.00000	2.98121	0.29796	0.00000	—	10.4302
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	13.4912	0.00000	13.4912	1.34840	0.00000	—	47.2011
Total	—	—	—	—	—	—	—	—	—	—	—	232.479	0.00000	232.479	23.2355	0.00000	—	813.367

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.89793	1.89793

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Junior College (2yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.55300	3.55300
Day-Care Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04635	0.04635
Health Club	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.84011	0.84011
High School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.09928	0.09928
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.35773	0.35773
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.79440	6.79440
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.89793	1.89793
Junior College (2yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.55300	3.55300
Day-Care Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04635	0.04635
Health Club	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.84011	0.84011
High School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.09928	0.09928

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.35773	0.35773
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.79440	6.79440
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.31422	0.31422
Junior College (2yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.58824	0.58824
Day-Care Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00767	0.00767
Health Club	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.13909	0.13909
High School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01644	0.01644
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.05923	0.05923
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.12489	1.12489

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	4.90282	23.5787	2.27014	61.4144	0.00805	0.13010	0.00000	0.13010	0.13010	0.00000	0.13010	0.00000	1,506.45	1,506.45	3.14986	0.00000	0.00000	1,585.20
Total	4.90282	23.5787	2.27014	61.4144	0.00805	0.13010	0.00000	0.13010	0.13010	0.00000	0.13010	0.00000	1,506.45	1,506.45	3.14986	0.00000	0.00000	1,585.20
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Emergency Generator	4.90282	23.5787	2.27014	61.4144	0.00805	0.13010	0.00000	0.13010	0.13010	0.00000	0.13010	0.00000	1,506.45	1,506.45	3.14986	0.00000	0.00000	1,585.20
Total	4.90282	23.5787	2.27014	61.4144	0.00805	0.13010	0.00000	0.13010	0.13010	0.00000	0.13010	0.00000	1,506.45	1,506.45	3.14986	0.00000	0.00000	1,585.20
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.06129	0.29473	0.02838	0.76768	0.00010	0.00163	0.00000	0.00163	0.00163	0.00000	0.00163	0.00000	17.0829	17.0829	0.03572	0.00000	0.00000	17.9759
Total	0.06129	0.29473	0.02838	0.76768	0.00010	0.00163	0.00000	0.00163	0.00163	0.00000	0.00163	0.00000	17.0829	17.0829	0.03572	0.00000	0.00000	17.9759

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Apartments Mid Rise	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Junior College (2yr)	17,661.7	0.00000	0.00000	4,604,656	134,916	0.00000	0.00000	35,174,432
Day-Care Center	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Enclosed Parking with Elevator	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Health Club	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
High School	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Medical Office Building	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Enclosed Parking with Elevator	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

5.10. Operational Area Sources

5.10.1. Hearths

Land Use	Hearth Type	Unmitigated (number)	Mitigated (number)
Apartments Mid Rise	Wood Fireplaces	0	0
Apartments Mid Rise	Gas Fireplaces	0	0
Apartments Mid Rise	Propane Fireplaces	0	0
Apartments Mid Rise	Electric Fireplaces	0	0
Apartments Mid Rise	No Fireplaces	0	0
Apartments Mid Rise	Conventional Wood Stoves	0	0

Land Use	Hearth Type	Unmitigated (number)	Mitigated (number)
Apartments Mid Rise	Catalytic Wood Stoves	0	0
Apartments Mid Rise	Non-Catalytic Wood Stoves	0	0
Apartments Mid Rise	Pellet Wood Stoves	0	0
Junior College (2yr)	Wood Fireplaces	0	0
Junior College (2yr)	Gas Fireplaces	0	0
Junior College (2yr)	Propane Fireplaces	0	0
Junior College (2yr)	Electric Fireplaces	0	0
Junior College (2yr)	No Fireplaces	0	0
Junior College (2yr)	Conventional Wood Stoves	0	0
Junior College (2yr)	Catalytic Wood Stoves	0	0
Junior College (2yr)	Non-Catalytic Wood Stoves	0	0
Junior College (2yr)	Pellet Wood Stoves	0	0
Day-Care Center	Wood Fireplaces	0	0
Day-Care Center	Gas Fireplaces	0	0
Day-Care Center	Propane Fireplaces	0	0
Day-Care Center	Electric Fireplaces	0	0
Day-Care Center	No Fireplaces	0	0
Day-Care Center	Conventional Wood Stoves	0	0
Day-Care Center	Catalytic Wood Stoves	0	0
Day-Care Center	Non-Catalytic Wood Stoves	0	0
Day-Care Center	Pellet Wood Stoves	0	0

Land Use	Hearth Type	Unmitigated (number)	Mitigated (number)
Enclosed Parking with Elevator	Wood Fireplaces	0	0
Enclosed Parking with Elevator	Gas Fireplaces	0	0
Enclosed Parking with Elevator	Propane Fireplaces	0	0
Enclosed Parking with Elevator	Electric Fireplaces	0	0
Enclosed Parking with Elevator	No Fireplaces	0	0
Enclosed Parking with Elevator	Conventional Wood Stoves	0	0
Enclosed Parking with Elevator	Catalytic Wood Stoves	0	0
Enclosed Parking with Elevator	Non-Catalytic Wood Stoves	0	0
Enclosed Parking with Elevator	Pellet Wood Stoves	0	0
Health Club	Wood Fireplaces	0	0
Health Club	Gas Fireplaces	0	0
Health Club	Propane Fireplaces	0	0
Health Club	Electric Fireplaces	0	0
Health Club	No Fireplaces	0	0
Health Club	Conventional Wood Stoves	0	0
Health Club	Catalytic Wood Stoves	0	0
Health Club	Non-Catalytic Wood Stoves	0	0
Health Club	Pellet Wood Stoves	0	0
High School	Wood Fireplaces	0	0
High School	Gas Fireplaces	0	0
High School	Propane Fireplaces	0	0

Land Use	Hearth Type	Unmitigated (number)	Mitigated (number)
High School	Electric Fireplaces	0	0
High School	No Fireplaces	0	0
High School	Conventional Wood Stoves	0	0
High School	Catalytic Wood Stoves	0	0
High School	Non-Catalytic Wood Stoves	0	0
High School	Pellet Wood Stoves	0	0
Medical Office Building	Wood Fireplaces	0	0
Medical Office Building	Gas Fireplaces	0	0
Medical Office Building	Propane Fireplaces	0	0
Medical Office Building	Electric Fireplaces	0	0
Medical Office Building	No Fireplaces	0	0
Medical Office Building	Conventional Wood Stoves	0	0
Medical Office Building	Catalytic Wood Stoves	0	0
Medical Office Building	Non-Catalytic Wood Stoves	0	0
Medical Office Building	Pellet Wood Stoves	0	0
Enclosed Parking with Elevator	Wood Fireplaces	0	0
Enclosed Parking with Elevator	Gas Fireplaces	0	0
Enclosed Parking with Elevator	Propane Fireplaces	0	0
Enclosed Parking with Elevator	Electric Fireplaces	0	0
Enclosed Parking with Elevator	No Fireplaces	0	0
Enclosed Parking with Elevator	Conventional Wood Stoves	0	0

Land Use	Hearth Type	Unmitigated (number)	Mitigated (number)
Enclosed Parking with Elevator	Catalytic Wood Stoves	0	0
Enclosed Parking with Elevator	Non-Catalytic Wood Stoves	0	0
Enclosed Parking with Elevator	Pellet Wood Stoves	0	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
536,625	178,875	1,719,735	573,245	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00000
Summer Days	day/yr	180.000

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Apartments Mid Rise	0.00000	169.636	0.0330	0.0040	0.00000
Junior College (2yr)	9,638,517	169.636	0.0330	0.0040	64,017,537
Day-Care Center	0.00000	169.636	0.0330	0.0040	0.00000

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Enclosed Parking with Elevator	0.00000	169.636	0.0330	0.0040	0.00000
Health Club	0.00000	169.636	0.0330	0.0040	0.00000
High School	0.00000	169.636	0.0330	0.0040	0.00000
Medical Office Building	0.00000	169.636	0.0330	0.0040	0.00000
Enclosed Parking with Elevator	0.00000	169.636	0.0330	0.0040	0.00000

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Apartments Mid Rise	0.00000	0.00000
Junior College (2yr)	18,620,600	11,936,282
Day-Care Center	0.00000	0.00000
Enclosed Parking with Elevator	0.00000	0.00000
Health Club	0.00000	0.00000
High School	0.00000	0.00000
Medical Office Building	0.00000	0.00000
Enclosed Parking with Elevator	0.00000	0.00000

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Mid Rise	212.034	0.00000
Junior College (2yr)	1,195.72	0.00000
Day-Care Center	15.6000	0.00000
Enclosed Parking with Elevator	0.00000	0.00000
Health Club	997.500	0.00000
High School	33.4113	0.00000
Medical Office Building	151.200	0.00000
Enclosed Parking with Elevator	0.00000	0.00000

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Apartments Mid Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088.00	0.00225	2.50000	2.50000	10.00000
Apartments Mid Rise	Household refrigerators and/or freezers	R-134a	1,430.00	0.11538	0.60000	0.00000	1.000000
Junior College (2yr)	Household refrigerators and/or freezers	R-134a	1,430.00	0.01679	0.60000	0.00000	1.000000
Junior College (2yr)	Other commercial A/C and heat pumps	R-410A	2,088.00	0.00180	4.00000	4.00000	18.0000

Land Use	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Junior College (2yr)	Stand-alone retail refrigerators and freezers	R-134a	1,430.00	0.00004	1.000000	0.00000	1.000000
Junior College (2yr)	Walk-in refrigerators and freezers	R-404A	3,922.00	0.00040	7.50000	7.50000	20.0000
Day-Care Center	Household refrigerators and/or freezers	R-134a	1,430.00	0.01679	0.60000	0.00000	1.000000
Day-Care Center	Other commercial A/C and heat pumps	R-410A	2,088.00	0.00180	4.00000	4.00000	18.0000
Day-Care Center	Stand-alone retail refrigerators and freezers	R-134a	1,430.00	0.00004	1.000000	0.00000	1.000000
Day-Care Center	Walk-in refrigerators and freezers	R-404A	3,922.00	0.00040	7.50000	7.50000	20.0000
Health Club	Other commercial A/C and heat pumps	R-410A	2,088.00	0.00180	4.00000	4.00000	18.0000
Health Club	Stand-alone retail refrigerators and freezers	R-134a	1,430.00	0.03750	1.000000	0.00000	1.000000
High School	Household refrigerators and/or freezers	R-134a	1,430.00	0.01679	0.60000	0.00000	1.000000
High School	Other commercial A/C and heat pumps	R-410A	2,088.00	0.00180	4.00000	4.00000	18.0000
High School	Stand-alone retail refrigerators and freezers	R-134a	1,430.00	0.00004	1.000000	0.00000	1.000000
High School	Walk-in refrigerators and freezers	R-404A	3,922.00	0.00040	7.50000	7.50000	20.0000

Land Use	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Medical Office Building	Household refrigerators and/or freezers	R-134a	1,430.00	0.45455	0.60000	0.00000	1.000000
Medical Office Building	Other commercial A/C and heat pumps	R-410A	2,088.00	0.00230	4.00000	4.00000	18.0000

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	CNG	1.000000	8.00000	200.000	335.000	0.73000

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	7.50000	annual days of extreme heat
Extreme Precipitation	2.70000	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	3.64000	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk

reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	37.5731
AQ-PM	41.7424
AQ-DPM	80.7218
Drinking Water	28.9871
Lead Risk Housing	42.8986
Pesticides	0.00000
Toxic Releases	33.3083
Traffic	89.1500
Effect Indicators	—
CleanUp Sites	34.6211
Groundwater	50.8717
Haz Waste Facilities/Generators	46.8034
Impaired Water Bodies	12.4528
Solid Waste	40.0916
Sensitive Population	—
Asthma	54.1002
Cardio-vascular	17.4975
Low Birth Weights	46.7667
Socioeconomic Factor Indicators	—

Indicator	Result for Project Census Tract
Education	45.5834
Housing	71.5716
Linguistic	41.4400
Poverty	53.2663
Unemployment	73.4123

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	48.72321314
Employed	56.3839343
Median HI	30.15526755
Education	—
Bachelor's or higher	49.33915052
High school enrollment	100
Preschool enrollment	95.7141024
Transportation	—
Auto Access	18.88874631
Active commuting	53.20159117
Social	—

Indicator	Result for Project Census Tract
2-parent households	82.26613628
Voting	71.14076736
Neighborhood	—
Alcohol availability	60.33619915
Park access	42.92313615
Retail density	91.23572437
Supermarket access	78.60900808
Tree canopy	19.26087514
Housing	—
Homeownership	41.12665212
Housing habitability	44.15501091
Low-inc homeowner severe housing cost burden	31.75927114
Low-inc renter severe housing cost burden	25.11228025
Uncrowded housing	56.30694213
Health Outcomes	—
Insured adults	55.13922751
Arthritis	27.4
Asthma ER Admissions	30.8
High Blood Pressure	46.3
Cancer (excluding skin)	27.6
Asthma	55.1

Indicator	Result for Project Census Tract
Coronary Heart Disease	31.2
Chronic Obstructive Pulmonary Disease	33.2
Diagnosed Diabetes	48.6
Life Expectancy at Birth	39.9
Cognitively Disabled	13.7
Physically Disabled	7.5
Heart Attack ER Admissions	89.7
Mental Health Not Good	50.5
Chronic Kidney Disease	45.1
Obesity	63.1
Pedestrian Injuries	63.7
Physical Health Not Good	53.6
Stroke	34.3
Health Risk Behaviors	—
Binge Drinking	30.9
Current Smoker	47.6
No Leisure Time for Physical Activity	48.5
Climate Change Exposures	—
Wildfire Risk	14.9
SLR Inundation Area	0.0
Children	95.4

Indicator	Result for Project Census Tract
Elderly	22.5
English Speaking	43.4
Foreign-born	55.0
Outdoor Workers	81.3
Climate Change Adaptive Capacity	—
Impervious Surface Cover	11.8
Traffic Density	85.7
Traffic Access	87.4
Other Indices	—
Hardship	38.7
Other Decision Support	—
2016 Voting	68.8

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	50.0000
Healthy Places Index Score for Project Location (b)	60.0000
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

8.1. Justifications

Screen	Justification
Land Use	The land uses and building sizes that would comprise the buildout of the CMP are based off the existing Building Report minus the square footage that is proposed for demolition plus the proposed new development which were each provided by the District Architect.
Operations: Vehicle Data	Existing trips were modeled based on the trip rate of 1.15 trips per student (LLG 2026), which was multiplied by the Mesa College enrollment for 2045 (15,358 students) and then applied to the Junior College land use ((1.15*15,358)/919.788).
Operations: Energy Use	The electricity and natural gas consumption for existing buildings that will remain under full buildout was calculated based on rates from District energy bills. The same methodology was used to calculate consumption for new buildings, but natural gas was converted to the equivalent energy in electricity based on the methods described in CAPCOA's Handbook for Analyzing GHG Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity for measure E-15, Require All-Electric Development (CAPCOA 2024) and added to the electricity consumption as new buildings would be all electric.

Screen	Justification
Operations: Water and Waste Water	Water consumption for full buildout was calculated using water consumption rates calculated using water bills from the District for October 2024 through September 2025. The indoor/ outdoor split was determined using a ratio of 1.56 indoor:1 outdoor based on CalEEMod defaults.

8.3. Land Use

Model Parameter	Units	Default Value	New Value
Lot Area	acre	21.0526	0.00000
Building Area	sq. ft	768,000	265,000
Landscape Area	sq. ft	—	0.00000
Population	people	2,232.00	800.000
Lot Area	acre	21.1154	104.000
Landscape Area	sq. ft	—	871,200
Lot Area	acre	0.27548	0.00000
Landscape Area	sq. ft	—	0.00000
Lot Area	acre	7.80567	0.00000
Landscape Area	sq. ft	—	0.00000
Lot Area	acre	4.01745	0.00000
Landscape Area	sq. ft	—	0.00000
Lot Area	acre	0.59001	0.00000
Landscape Area	sq. ft	—	0.00000
Lot Area	acre	0.32140	0.00000
Landscape Area	sq. ft	—	0.00000

Model Parameter	Units	Default Value	New Value
Lot Area	acre	6.30000	0.00000
Landscape Area	sq. ft	—	0.00000

8.5. Operations

8.5.1. Mobile Sources

8.5.1.1. Vehicle Data

Land Use	Model Parameter	Units	Default Value	New Value
Apartments Mid Rise	Weekday Trip Rate	size/day	5.44000	0.00000
Apartments Mid Rise	Saturday Trip Rate	size/day	4.91000	0.00000
Apartments Mid Rise	Sunday Trip Rate	size/day	4.09000	0.00000
Junior College (2yr)	Weekday Trip Rate	size/day	20.2500	19.2019
Junior College (2yr)	Saturday Trip Rate	size/day	11.2300	0.00000
Junior College (2yr)	Sunday Trip Rate	size/day	1.21000	0.00000
Day-Care Center	Weekday Trip Rate	size/day	47.6200	0.00000
Day-Care Center	Saturday Trip Rate	size/day	6.22000	0.00000
Day-Care Center	Sunday Trip Rate	size/day	5.84000	0.00000
Health Club	Weekday Trip Rate	size/day	32.9300	0.00000
Health Club	Saturday Trip Rate	size/day	20.8700	0.00000
Health Club	Sunday Trip Rate	size/day	26.7300	0.00000
High School	Weekday Trip Rate	size/day	14.0700	0.00000

Land Use	Model Parameter	Units	Default Value	New Value
High School	Saturday Trip Rate	size/day	3.98000	0.00000
High School	Sunday Trip Rate	size/day	1.71000	0.00000
Medical Office Building	Weekday Trip Rate	size/day	34.8000	0.00000
Medical Office Building	Saturday Trip Rate	size/day	8.57000	0.00000
Medical Office Building	Sunday Trip Rate	size/day	1.42000	0.00000

8.5.3. Energy Usage

Land Use	Model Parameter	Units	Default Value	New Value
Apartments Mid Rise	Electricity	kWh/yr	2,712,696	0.00000
Apartments Mid Rise	Electricity (Subject to Title 24)	kWh/yr	717,838	0.00000
Apartments Mid Rise	Electricity (Not Subject to Title 24)	kWh/yr	1,994,858	0.00000
Apartments Mid Rise	Natural Gas	kBTU/yr	5,662,749	0.00000
Apartments Mid Rise	Natural Gas (Subject to Title 24)	kBTU/yr	5,133,010	0.00000
Apartments Mid Rise	Natural Gas (Not Subject to Title 24)	kBTU/yr	529,739	0.00000
Junior College (2yr)	Electricity	kWh/yr	12,033,030	9,638,517
Junior College (2yr)	Electricity (Subject to Title 24)	kWh/yr	9,430,348	7,553,756
Junior College (2yr)	Electricity (Not Subject to Title 24)	kWh/yr	2,602,681	2,084,761
Junior College (2yr)	Natural Gas	kBTU/yr	57,113,940	64,017,537
Junior College (2yr)	Natural Gas (Subject to Title 24)	kBTU/yr	52,160,396	58,465,238
Junior College (2yr)	Natural Gas (Not Subject to Title 24)	kBTU/yr	4,953,544	5,552,299
Day-Care Center	Electricity	kWh/yr	80,951.2	0.00000

Land Use	Model Parameter	Units	Default Value	New Value
Day-Care Center	Electricity (Subject to Title 24)	kWh/yr	68,020.1	0.00000
Day-Care Center	Electricity (Not Subject to Title 24)	kWh/yr	12,931.1	0.00000
Day-Care Center	Natural Gas	kBTU/yr	188,992	0.00000
Day-Care Center	Natural Gas (Subject to Title 24)	kBTU/yr	104,546	0.00000
Day-Care Center	Natural Gas (Not Subject to Title 24)	kBTU/yr	84,446.0	0.00000
Enclosed Parking with Elevator	Electricity	kWh/yr	1,255,142	0.00000
Enclosed Parking with Elevator	Electricity (Subject to Title 24)	kWh/yr	1,190,539	0.00000
Enclosed Parking with Elevator	Electricity (Not Subject to Title 24)	kWh/yr	64,602.8	0.00000
Health Club	Electricity	kWh/yr	1,570,357	0.00000
Health Club	Electricity (Subject to Title 24)	kWh/yr	1,298,489	0.00000
Health Club	Electricity (Not Subject to Title 24)	kWh/yr	271,869	0.00000
Health Club	Natural Gas	kBTU/yr	7,063,786	0.00000
Health Club	Natural Gas (Subject to Title 24)	kBTU/yr	3,623,341	0.00000
Health Club	Natural Gas (Not Subject to Title 24)	kBTU/yr	3,440,445	0.00000
High School	Electricity	kWh/yr	173,377	0.00000
High School	Electricity (Subject to Title 24)	kWh/yr	145,682	0.00000
High School	Electricity (Not Subject to Title 24)	kWh/yr	27,695.2	0.00000
High School	Natural Gas	kBTU/yr	404,773	0.00000
High School	Natural Gas (Subject to Title 24)	kBTU/yr	223,911	0.00000
High School	Natural Gas (Not Subject to Title 24)	kBTU/yr	180,862	0.00000
Medical Office Building	Electricity	kWh/yr	232,324	0.00000

Land Use	Model Parameter	Units	Default Value	New Value
Medical Office Building	Electricity (Subject to Title 24)	kWh/yr	181,471	0.00000
Medical Office Building	Electricity (Not Subject to Title 24)	kWh/yr	50,852.9	0.00000
Medical Office Building	Natural Gas	kBTU/yr	448,322	0.00000
Medical Office Building	Natural Gas (Subject to Title 24)	kBTU/yr	392,384	0.00000
Medical Office Building	Natural Gas (Not Subject to Title 24)	kBTU/yr	55,938.7	0.00000
Enclosed Parking with Elevator	Electricity	kWh/yr	1,033,601	0.00000
Enclosed Parking with Elevator	Electricity (Subject to Title 24)	kWh/yr	980,401	0.00000
Enclosed Parking with Elevator	Electricity (Not Subject to Title 24)	kWh/yr	53,200.0	0.00000

8.5.4. Water and Waste Water

Land Use	Model Parameter	Units	Default Value	New Value
Apartments Mid Rise	Indoor Water	gal/year	28,106,460	0.00000
Junior College (2yr)	Indoor Water	gal/year	45,114,712	18,620,600
Junior College (2yr)	Outdoor Water	gal/year	28,931,901	11,936,282
Day-Care Center	Indoor Water	gal/year	514,675	0.00000
Health Club	Indoor Water	gal/year	10,350,050	0.00000
High School	Indoor Water	gal/year	853,392	0.00000
Medical Office Building	Indoor Water	gal/year	1,756,728	0.00000

Appendix C

Biological Resources Technical Report

Mesa College Comprehensive Master Plan

Biological Resources Technical Report

August 2026 | 01737.00004.003

Prepared for:

San Diego Community College District
1450 Frazee Road, Suite 500
San Diego, CA 92108

Prepared by:

HELIX Environmental Planning, Inc.
7578 El Cajon Boulevard
La Mesa, CA 91942

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TABLE OF CONTENTS

Section **Page**

1.0 INTRODUCTION 1

1.1 Purpose of the Report 1
1.2 Project Location 1
1.3 Project Background 1
1.4 Project Description 2
1.4.1 Near-Term Projects 3
1.5 Environmental Setting 4
1.5.1 Land Use 4
1.5.2 Topography and Soils 4

2.0 METHODS 4

2.1 Literature Review 4
2.2 General Biological Survey 4
2.3 Focused Species Surveys 5
2.3.1 Sensitive Plant Survey 5
2.3.2 Crotch's Bumble Bee 5
2.4 Survey Limitations 5
2.5 Nomenclature 6

3.0 RESULTS 6

3.1 Vegetation Communities 6
3.1.1 Disturbed Southern Willow Scrub 6
3.1.2 Disturbed Wetland 7
3.1.3 Scrub Oak Chaparral 7
3.1.4 Diegan Coastal Sage Scrub (including disturbed) 7
3.1.5 Eucalyptus Woodland 7
3.1.6 Disturbed Land 8
3.1.7 Developed Land 8
3.2 Jurisdictional Wetlands and Waters 8
3.3 Plant Species 8
3.4 Animal Species 8
3.5 Sensitive Resources 8
3.5.1 Sensitive Vegetation Communities 8
3.5.2 Sensitive Plant Species 9
3.5.3 Special-Status Animal Species 10
3.5.4 Nesting Birds 11
3.6 Wildlife Corridors and Linkages 12

4.0 REGIONAL CONTEXT AND APPLICABLE REGULATIONS 12

4.1 Natural Communities Conservation Planning 12
4.2 Federal and State Regulations 13
4.2.1 Federal Government 13

TABLE OF CONTENTS (cont.)

4.2.2 State of California 14

5.0 THRESHOLDS OF SIGNIFICANCE 15

6.0 IMPACTS 16

6.1 Direct Impacts 16
6.1.1 Sensitive Plant Species 16
6.1.2 Sensitive Animal Species 17
6.1.3 Nesting Birds 18
6.1.4 Vegetation Communities and Federally Protected Wetlands 18
6.1.5 Wildlife Corridors and Linkages 19
6.1.6 Local Policies and Ordinances 19
6.1.7 Regional Conservation Planning 19
6.2 Indirect Impacts 20
6.2.1 Water Quality 20
6.2.2 Fugitive Dust 20
6.2.3 Non-Native Plant Species 21
6.2.4 Edge Effects/Human Activity 21
6.2.5 Construction Noise/Animal Behavioral Changes 21
6.2.6 Roadkill 22
6.2.7 Night Lighting 22
6.2.8 Errant Construction Impacts 22
6.2.9 Invasive Insect Pests 22
6.2.10 Brush Management 23
6.3 Cumulative Impacts 23
6.3.1 Cumulative Impacts to Biological Resources on Mesa College Campus 23
6.3.2 Cumulative Impacts to Biological Resources in the San Diego Region 24

7.0 MITIGATION PROGRAM FRAMEWORK 25

7.1 Minimization and Mitigation Measures for Construction Impacts 25
7.1.1 Sensitive Vegetation Communities 25
7.1.2 Jurisdictional Waters and Wetlands 28
7.1.3 Sensitive Plant Species 28
7.1.4 Sensitive Animal Species 29
7.1.5 Nesting Birds 30
7.1.6 General Impact Minimization Measures 30
7.2 Minimization of Operational (Post-Construction) Impacts 33
7.2.1 Runoff and Water Quality 33
7.2.2 Landscaping/Non-Native Plant Species 33
7.2.3 Operational Lighting 33
7.2.4 Human Activity 34
7.3 Level Of Significance After Mitigation 34

8.0 LIST OF PREPARERS 35

9.0 REFERENCES 36

TABLE OF CONTENTS (cont.)

LIST OF APPENDICES

A 2025 Crotch's Bumble Bee Survey Report
B Plant Species Observed
C Animal Species Observed or Detected
D Special-Status Plant Species Potential to Occur
E Special-Status Animal Species Potential to Occur

LIST OF FIGURES

No.	Title	Follows Page
1	Regional Location	2
2	USGS Topography	2
3	Aerial Photograph	2
4	Vegetation and Special-Status Species	6
5	Potential Jurisdictional Features	8
6	Existing Campus Facilities	16
7	Comprehensive Master Plan Facility Overview	16

LIST OF TABLES

No.	Title	Page
1	HELIX Survey Information	5
2	Existing Vegetation Communities/Land Use Types	6
3	Sensitive Communities/Land Use Types and Mitigation Ratios	19
4	Mitigation Ratios for Impacts to Sensitive Vegetation Communities	27

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ACRONYMS AND ABBREVIATIONS

AMSL	above mean sea level
Cal-IPC	California Invasive Plant Council
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFG Code	California Fish and Game Code
City	City of San Diego
CMP	Mesa College Comprehensive Master Plan
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
County	San Diego County
CRPR	California Rare Plant Rank
CWA	Clean Water Act
dBA	A-weighted decibel
District	San Diego Community College District
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
ELAC	English Language Acquisition
FESA	Federal Endangered Species Act
FR	Federal Register
GSF	gross square foot/feet
HCP	Habitat Conservation Plan
HELIX	HELIX Environmental Planning, Inc.
IP	Individual Permit
L_{EQ}	hourly equivalent sound level
MBTA	Migratory Bird Treaty Act
MHPA	Multi-Habitat Planning Area
MSCP	Multiple Species Conservation Program
NCCP	Natural Communities Conservation Planning
NPPA	Native Plant Protection Act
NWP	Nationwide Permit

ACRONYMS AND ABBREVIATIONS (cont.)

project	Mesa College Comprehensive Master Plan
ROW	right(s)-of-way
RWQCB	Regional Water Quality Control Board
SAA	Streambed Alteration Agreement
SHB	shot hole borers
SSC	Species of Special Concern
USACE	U.S. Army Corps of Engineers
USC	United States Code
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WL	Watch List

1.0 INTRODUCTION

1.1 PURPOSE OF THE REPORT

At the request of the San Diego Community College District (District), HELIX Environmental Planning, Inc. (HELIX) has prepared this Biological Resources Technical Report for the Mesa College Comprehensive Master Plan (CMP or project). The CMP, approved by the District Board of Trustees on May 13, 2021, is the 10-year educational and facilities master plan for Mesa College. The CMP includes an analysis of Mesa College's effectiveness in meeting its mission, projected demographics and economic changes, and feedback from internal and external campus communities. This information provides for the development of two long-term guides for future decisions: Mesa2030 Goals and Facilities Planning Principles. Based on the guiding goals and principles, Chapter 5 of the CMP describes a series of site improvement and facility projects for the campus. The designs and concepts presented in the CMP are conceptual and intended to serve as a framework for the future detailed design of campus improvements as funding becomes available. This report provides information on the baseline biological resources found on the Mesa College campus and presents a program-level analysis of potential impacts to sensitive biological resources from future development on the campus anticipated in the CMP. The analysis was prepared in accordance with the California Environmental Quality Act (CEQA) of 1970 and the State CEQA Guidelines (as amended).

1.2 PROJECT LOCATION

The project site, Mesa College, is in the Clairemont Community Plan Area of the City of San Diego (City), San Diego County (County), California (Figure 1, *Regional Location*). Mesa College is generally located west of Interstate 805 and State Route 163, east of Genesee Avenue, and south of Balboa Avenue, in an unsectioned portion of the Pueblo Lands of San Diego, within Township 16 South, Range 3 West, on the U.S. Geological Survey (USGS) 7.5-minute *La Jolla, California* quadrangle (Figure 2, *USGS Topography*). The approximately 135.0-acre study area is located within Assessor's Parcel Numbers 420-510-18-00, 420-574-12-00, 427-010-31-00, 427-020-23-00, 427-020-29-00, 427-020-30-00, 427-020-33-00, and 427-020-35-00. It is bordered by Beagle Street and Marlesta Drive to the north, Genesee Avenue to the west, Mesa College Drive to the south, and Armstrong Street to the east (Figure 3, *Aerial Photograph*).

The study area includes the Mesa College property boundary plus a 100-foot buffer. The study area occurs within the boundary of the City's Multiple Species Conservation Plan (MSCP) Subarea Plan and the campus itself is outside of, but adjacent to, the City's Multi-Habitat Planning Area (MHPA) within the study area (Figure 3). The study area is not within any lands identified as critical habitat by the U.S Fish and Wildlife Service (USFWS; 2025a), and it is not located inside the Coastal Zone.

1.3 PROJECT BACKGROUND

The District is a community college district serving the City in central San Diego County. The District includes three credit colleges (San Diego City College, Mesa College, and Miramar College) and the state's only free-standing noncredit college (San Diego College of Continuing Education). The District is the third largest public community college district in California, serving approximately 90,000 students annually across these colleges.

Mesa College is a public, accredited, and comprehensive community college. Mesa College is the largest college in the District and offers more than 195 associate degree and certificate programs from its seven schools: Arts and Languages; Business Technology; Health Sciences and Public Service; Humanities; Mathematics and Natural Sciences; Exercise Science, Health Education, and Athletics; and Social/Behavioral Sciences and Multicultural Studies. The campus' Student Services programs promote student learning, achievement, and engagement by providing services directly or by connecting students to associated resources. A total of 24 Student Services are organized into three schools: Student Affairs, Student Development, and Student Success and Equity.

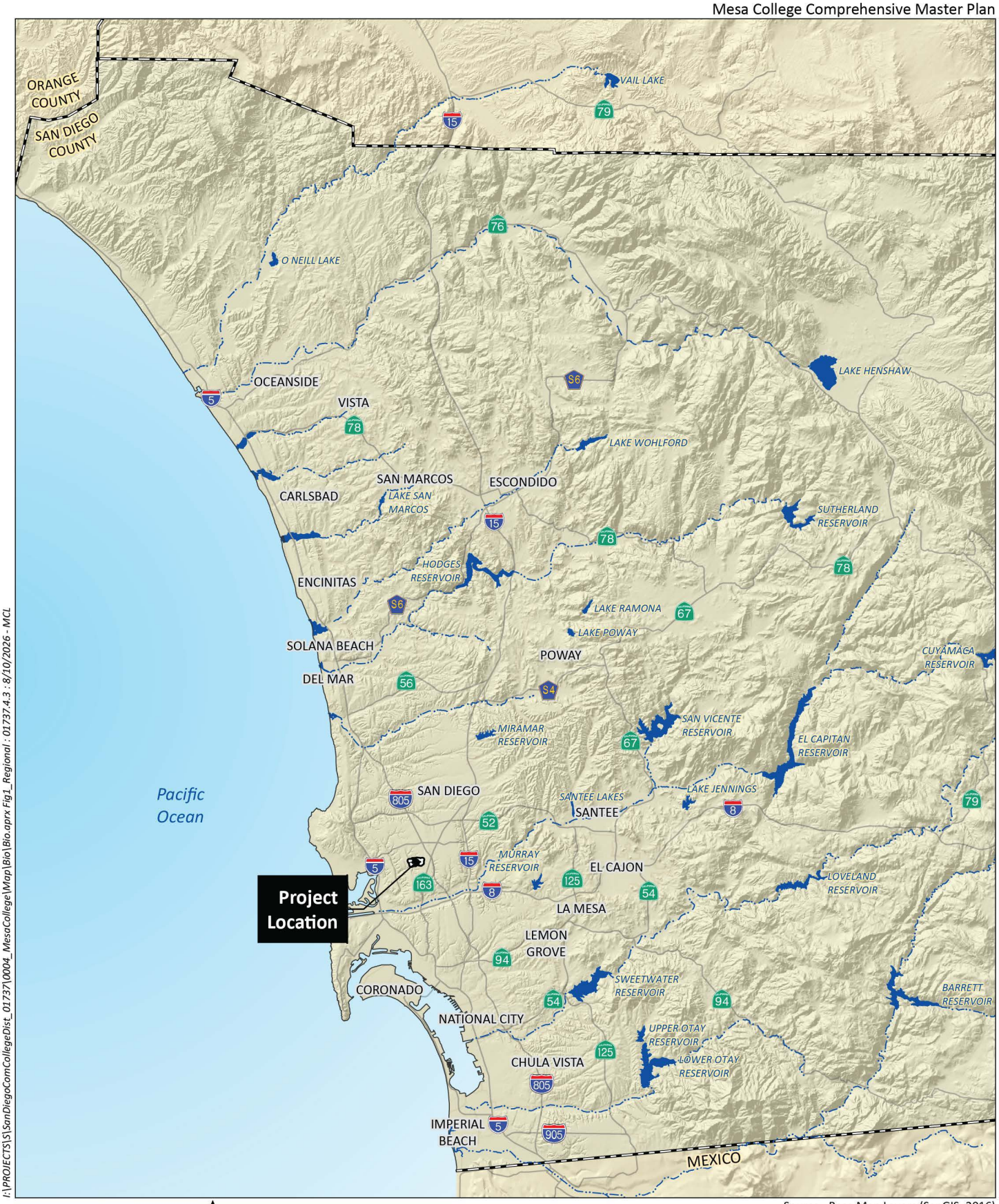
On November 5, 2024, San Diego voters approved Measure HH, authorizing the District to issue $3.5 billion in bonds for district facility upgrades. Based on the campus facility needs and potential improvements described in the master plan for each campus, certain projects have been prioritized to move forward with initial funding from Measure HH bond sales. Two of these projects would be constructed at Mesa College. Future bond sales authorized by Measure HH would fund additional improvements described in the CMP as well as the master plans for the other campuses.

1.4 PROJECT DESCRIPTION

Based on current campus challenges and anticipated growth, the CMP recommends a series of physical improvements across the Mesa College campus. The projects would generally demolish existing aging facilities on the campus and replace them with more modern facilities that accommodate existing programming. The CMP is conceptual in nature and describes potential projects for the campus that would assist Mesa College in meeting its educational and programming goals. Specific project designs, building footprints, architectural details, circulation and parking improvements, infrastructure alignments, and operational characteristics are expected to be refined during future planning and design phases. Specific projects identified for development under the CMP include:

- Athletics Complex
- Performing Arts and Administration Center and Parking Structure
- English/English Language Acquisition (ELAC)/Student Resource Center replacement building
- Conference Center
- On-Campus Housing
- High School relocation
- Facilities Services relocation to dedicated area with loading and storage space
- New Welcome Center near eastern entrance
- Child Development Center relocation and expansion
- New Community Clinic
- West Entrance reconfiguration (Genesee Avenue and Marlesta Drive)

Campus-wide improvements related to utility infrastructure and circulation are also part of the CMP and could be implemented in coordination with the projects listed above or undertaken as campus-wide efforts. Interior renovations, continued maintenance, and other minor construction could also occur throughout existing campus buildings. The Athletics Complex and Performing Arts and Administration Center and Parking Structure projects are anticipated to be designed and constructed in the near term. No specific timing or phasing is identified for the remaining projects or campus-wide improvements.



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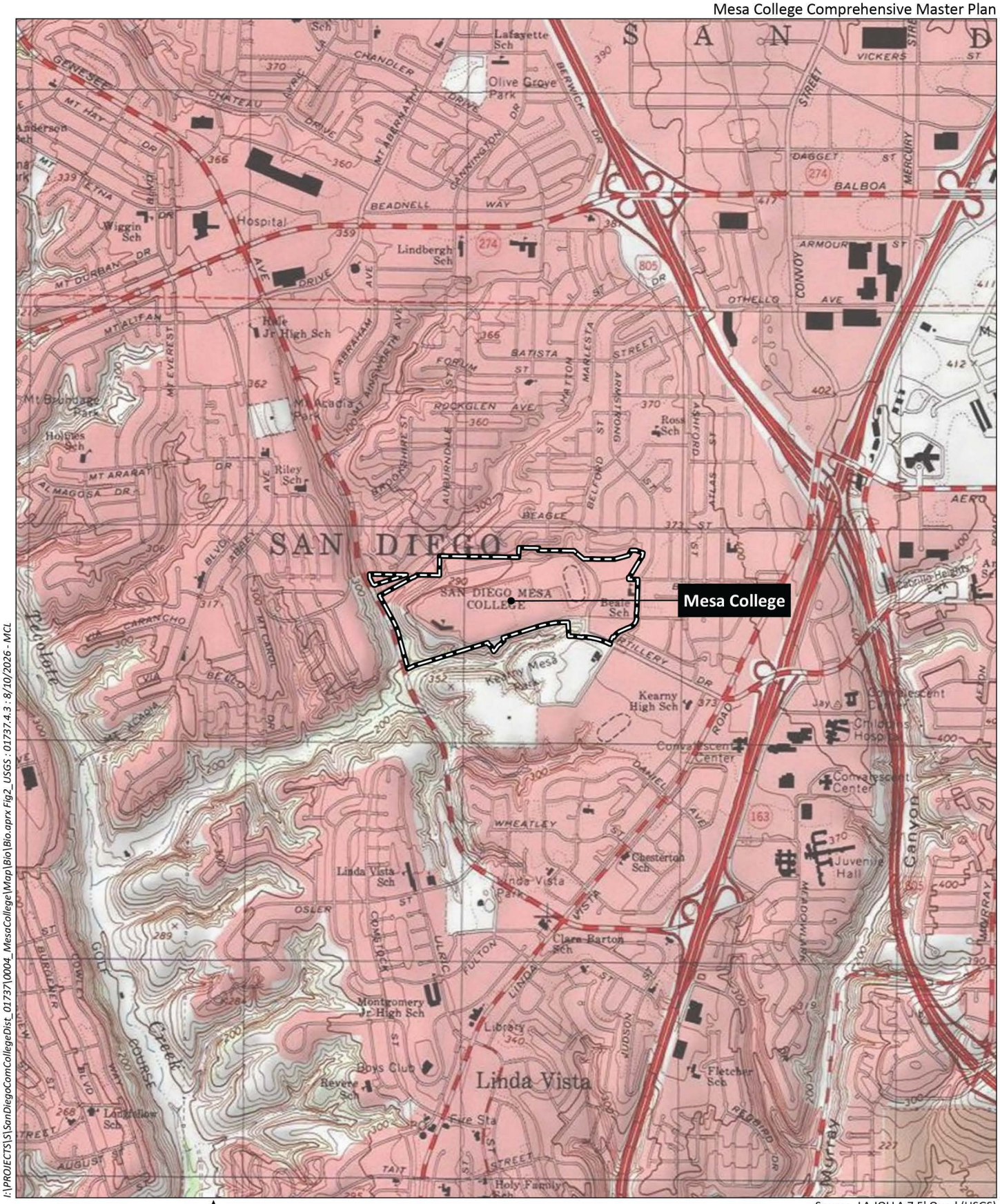
0 8 Miles

Source: Base Map Layers (SanGIS, 2016)

HELIX Environmental Planning

Regional Location

Figure 1



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0 2,000 Feet

Source: LA JOLLA 7.5' Quad (USGS)

HELIX Environmental Planning

USGS Topography

Figure 2



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Source: Aerial (SanGIS 2023)

HELIX Environmental Planning

Aerial Photograph

Figure 3

1.4.1 Near-Term Projects

Athletics Complex

A series of improvements are proposed to replace and reconfigure existing athletic, exercise science, and dance instructional and support spaces to improve connectivity and facility quality. The existing Pool, Upper Athletic Field, gym, and Physical Education building (L1) would be demolished.

The proposed reconfiguration would place a new three-court gym at the eastern end of the mesa top with two options for hillside extensions along the baseball field and stadium. In addition to court space, the approximately 175,000-gross-square-foot (GSF) complex would include dance studios, athletic training spaces, offices, study areas, locker rooms, team rooms, weight rooms, classrooms, press boxes, ticketing/concessions and restrooms, stadium seating, and equipment storage space. Relocated and expanded pool complex, beach volleyball, softball field, and practice fields are proposed on the west side of the new gym building. These facilities would be accessible via the pedestrian network of pathways across campus. The existing baseball field would also be reconfigured, remaining generally in its existing location, and the field house located between the baseball field and stadium would be replaced.

Track and field event spaces (including spaces for javelin and hammer throw events) currently located on and adjacent to the Upper Athletic Field, are proposed to be relocated to the area east of the stadium where high fencing would be provided to address safety concerns related to pedestrian movement.

Performing Arts and Administration Center and Parking Structure

A new multi-story 140,000-GSF building is proposed on the north side of the mesa top and adjacent to the I-400 Student Services Center. The building would be constructed into the hillside and would therefore be accessible from both Lot 1 and the mesa level. A large main stage theater would occupy a portion of the building, with ground floor entry available from Lot 1. Theater support spaces would be constructed into the hillside while instructional labs and offices for Administration services would occur on the upper floors and be accessible from the active plaza on the mesa level of campus. Programs in the proposed Performing Arts and Administration Center would be relocated from their location in original campus buildings on the west side of campus, and would be demolished or re-purposed when future construction in this area occurs.

A multi-story parking structure is proposed adjacent to the Performing Arts and Administration Center on the east. The structure would replace all parking displaced by the construction of the new Performing Arts Center and Administration Building and would similarly be constructed into the hillside, improving access to large events at the Performing Arts and Administration Center and athletic fields.

1.5 ENVIRONMENTAL SETTING

1.5.1 Land Use

The Mesa College campus is located within an urbanized area characterized by a mix of educational, residential, commercial, and institutional land uses. Mesa College sits at an elevated position relative to the surrounding canyon systems and neighborhoods. The study area consists of buildings, athletic and recreational facilities, structured and surface parking lots, and landscaped open areas associated with the Mesa College campus. An area of open space occurs to the west and southwest of Mesa College, consisting of a west-facing slope that decreases in elevation from the campus towards Genesee Avenue. The construction of Mesa College campus was initiated in 1963, and several improvements and additions have been completed since it was originally built, with most of the work occurring in the 1960s and 1980s (NETR Online 2025). One Open Space Easement occurs in the southwest corner of the Mesa College property, which would prohibit any alteration of the landforms, removal of vegetation, or erection of structures of any type (Figure 3).

1.5.2 Topography and Soils

Mesa College is located within a broad, elevated mesa characterized by gently sloping to generally flat topography, with moderate slopes along campus edges where the mesa transitions into surrounding canyon systems. The elevation in the study area ranges from approximately 220 feet above mean sea level (AMSL) in the west to 370 feet AMSL in the east. Seven soil types were mapped in the study area: Carlsbad-Urban land complex, 2 to 9 percent slopes (CcC); Chesterton fine sandy loam, 2 to 5 percent slopes (CfB); Chesterton-Urban land complex, 2 to 9 percent slopes (CgC); Gaviota fine sandy loam, 30 to 50 percent slopes (GaF); Olivenhain cobbly loam, 30 to 50 percent slopes (OhF); Olivenhain-Urban land complex, 9 to 30 percent slopes (OkE); and Terrace escarpments (TeF). None of these are considered hydric soils (U.S. Department of Agriculture [USDA] 2019).

2.0 METHODS

2.1 LITERATURE REVIEW

Prior to conducting biological field surveys, HELIX performed a review of aerial imagery, a search of sensitive species databases for information regarding sensitive species known to occur within five miles of the project site, including the USFWS species records (USFWS 2025b), California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB; CDFW 2025a), and California Native Plant Society (CNPS) Electronic Inventory (CNPS 2025). Recent aerial imagery, topographic maps, soils maps (USDA 2019; Bowman 1973), and other maps of the project site and vicinity were acquired and reviewed to obtain updated information on the natural environmental setting.

2.2 GENERAL BIOLOGICAL SURVEY

HELIX biologist Mandy Mathews conducted a biological constraints assessment of the study area on February 20, 2025, to map existing vegetation communities, evaluate the potential for sensitive plant and animal species to occur, and identify other sensitive biological constraints associated with the study area, such as potential waters and wetlands. Table 1, *HELIX Survey Information*, summarizes all biological surveys conducted on the campus, which are described further below.

Table 1
HELIX SURVEY INFORMATION

Survey Date	Biologist	Purpose	Survey Times	Weather Conditions
2/20/25	Mandy Mathews	General biological survey	0900/1430	Clear
7/23/25	Jonathan Mercado	Summer rare plant survey	0640/1330	N/A
7/22/25	Shawn Carroll	Crotch's bumble bee (*Bombus crotchii*) habitat assessment; Crotch's bumble bee first survey	0900/1200	Mostly cloudy and clearing
8/5/25	Shawn Carroll	Crotch's bumble bee second survey	1130/1400	Clear
8/21/25	Shawn Carroll	Crotch's bumble bee third survey	1000/1200	Partially cloudy and clearing
3/10/26	Taylor Chase	Spring rare plant survey	1000/1330	Cloudy

2.3 FOCUSED SPECIES SURVEYS

2.3.1 Sensitive Plant Survey

HELIX biologist Jonathan Mercado conducted a summer sensitive plant survey on July 23, 2025. HELIX biologist Taylor Chase conducted a spring rare plant survey on March 10, 2026. Opportunistic inspections for target sensitive plant species were also made during the general biological survey (Table 1). Searches were made for those species that are listed as threatened or endangered by the USFWS or CDFW; and those with a California Rare Plant Rank (CRPR) 1 through 4 designated by the CNPS. The surveys were conducted on foot with the aid of vegetation maps and aerial imagery. Sensitive plant species encountered were mapped using a hand-held Global Positioning System unit and/or on an aerial map.

2.3.2 Crotch's Bumble Bee

HELIX conducted focused surveys for Crotch's bumble bee (*Bombus crotchii*; Appendix A, *2025 Crotch's Bumble Bee Survey Report*). HELIX Senior Scientist Shawn Carroll conducted surveys of the project site on July 22 and August 5 and 21, 2025. A habitat assessment conducted on July 22, 2025, included mapping the vegetation on-site according to the Manual of California Vegetation (CNPS 2024), determining the species composition within vegetation alliances, and collecting a list of flowering species. HELIX's survey method is based on the CDFW *Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species* issued June 6, 2023, which calls for an initial Crotch's bumble bee habitat assessment followed by three bumble bee surveys (CDFW 2023). The three surveys were spaced two to four weeks apart during the colony active period (April through August). The survey focused on 12.3 acres of suitable habitat within the study area. Bumble bee species observed during the survey were identified but were not captured or handled to avoid potential take.

2.4 SURVEY LIMITATIONS

Noted animal species were identified by direct observation, vocalizations, or the observance of scat, tracks, or other signs. However, the lists of species identified are not necessarily comprehensive accounts of all species that utilize the site as species that are nocturnal, secretive, or seasonally restricted may not have been observed.

2.5 NOMENCLATURE

Nomenclature used in this report generally comes from Holland (1986) and Oberbauer et al. (2008) for vegetation; Baldwin et al. (2012) for plants; Society for the Study of Amphibians and Reptiles (2025) for reptiles; American Ornithological Society (2025) for birds; and Tremor et al. (2017) for mammals. Plant species status is from the CNPS (2025) and CDFW (2025b). Animal species status is from CDFW (2025c).

3.0 RESULTS

The results presented below reflect information gathered during all biological surveys conducted on the Mesa College campus to date.

3.1 VEGETATION COMMUNITIES

Seven vegetation communities or land use types were mapped in the study area during the February 20, 2025, site assessment: disturbed southern willow scrub, disturbed wetland, scrub oak chaparral, Diegan coastal sage scrub (including disturbed), eucalyptus woodland, disturbed land, and developed land (Table 2, *Existing Vegetation Communities/Land Use Types*; Figure 4, *Vegetation and Special-Status Species*). Disturbed southern willow scrub, disturbed wetland, scrub oak chaparral, and Diegan coastal sage scrub (including disturbed) are considered sensitive habitats and would require mitigation for project-related impacts.

Table 2
EXISTING VEGETATION COMMUNITIES/LAND USE TYPES

Vegetation Community/Land Use Type	Acreage[1]
Wetlands	
Disturbed Southern Willow Scrub	2.23
Disturbed Wetland	0.76
Wetlands Subtotal	**2.99**
Uplands	
Scrub Oak Chaparral	2.67
Diegan Coastal Sage Scrub (including disturbed)	7.09
Eucalyptus Woodland	3.75
Disturbed Land	8.02
Developed	110.49
Uplands Subtotal	**132.02**
Total	**135.01**

[1] Habitat rounded to the nearest 0.01 acre; total reflects rounding.
[2] Includes 100-foot buffer around the 106-acre campus.

3.1.1 Disturbed Southern Willow Scrub

Southern willow scrub consists of dense, broad-leaved, winter-deciduous stands of trees dominated by shrubby willows (*Salix* spp.) in association with mule fat (*Baccharis salicifolia*). This vegetation community typically occurs on loose, sandy, or fine gravelly alluvium deposited near stream channels during flood flows. Arroyo willow (*Salix lasiolepis*) is the dominant species in this vegetation community on campus. It also had a large proportion of Brazilian pepper (*Schinus terebinthifolia*) and Mexican fan

Mesa College
Study Area
Open Space Easements

Vegetation

Diegan Coastal Sage Scrub
Disturbed Diegan Coastal Sage Scrub
Disturbed Land
Disturbed Southern Willow Scrub
Eucalyptus Woodland
Scrub Oak Chaparral*
Disturbed Wetland
Developed

Animals

Coastal California Gnatcatcher (Polioptila californica californica)

Plants

San Diego Barrel Cactus (Ferocactus viridescens) - Planted
Shaw's Agave (Agave shawii) - Planted
Torrey Pine (Pinus torreyana ssp. torreyana) - Ornamental
Ashy Spikemoss (Selaginella cinerascens)
San Diego County Sunflower (Bahiopsis laciniata)
Nuttall's Scrub Oak (Quercua dumosa)

* Nuttall's Scrub Oak found throughout scrub oak chaparral habitat in the southwestern portion of the study area.



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Source: Aerial (SanGIS 2023)

HELIX Environmental Planning

Vegetation and Special-Status Species

Figure 4

palm (*Washingtonia robusta*). The disturbed southern willow scrub occurs west of campus, east of Genesee Avenue. A total of 2.23 acres of disturbed southern willow scrub was mapped in the study area.

3.1.2 Disturbed Wetland

Disturbed wetland is dominated by exotic wetland species that invade areas that have been previously altered or undergone periodic disturbances. These non-natives become established more readily following natural or human-induced habitat disturbance than the native wetland flora. Characteristic species of disturbed wetlands include giant reed (*Arundo donax*) and tamarisk (*Tamarix* sp.). A total of 0.76 acre of disturbed wetland was mapped in the study area.

3.1.3 Scrub Oak Chaparral

Scrub oak chaparral is a dense, evergreen chaparral up to 20 feet tall, dominated by scrub oak (*Quercus dumosa*) with considerable mountain mahogany (*Cercocarpus betuloides*). Scrub oak chaparral occurs in somewhat more mesic areas than many other chaparrals, such as north facing slopes, and recovers more rapidly from fires than other chaparrals due to resprouting capabilities of scrub oak (Holland 1986; Keeley and Keeley 1988). This vegetation community often occurs at slightly higher elevations (to 5,000 feet) and where substantial leaf litter accumulates. Approximately 2.67 acres of scrub oak chaparral occur within the western portion of the study area.

3.1.4 Diegan Coastal Sage Scrub (including disturbed)

Coastal sage scrub is one of the two major shrub types that occur in southern California, occupying xeric sites characterized by shallow soils (the other is chaparral). Four distinct coastal sage scrub geographical associations (northern, central, Venturan, and Diegan) are recognized along the California coast. Diegan coastal sage scrub may be dominated by a variety of species depending upon soil type, slope, and aspect. Typical species found within Diegan coastal sage scrub include California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum*), laurel sumac (*Malosma laurina*), lemonadeberry (*Rhus integrifolia*), white sage (*Salvia apiana*), and black sage (*Salvia mellifera*). Disturbed Diegan coastal sage scrub contains many of the same shrub species as undisturbed Diegan coastal sage scrub but is sparser and has a higher proportion of non-native, annual species. This vegetation community occurs in the southern portion of the study area. A disturbed stand was present in the northern portion of the study area. A total of 7.09 acres of Diegan coastal sage scrub (including 1.97 acres of disturbed) were mapped in the study area.

3.1.5 Eucalyptus Woodland

Eucalyptus woodland is dominated by eucalyptus (*Eucalyptus* spp.), an introduced species that has often been planted purposely for wind-blocking, ornamental, and hardwood production purposes. Most groves are monotypic, with the most common species being either the blue gum (*Eucalyptus gunnii*) or red gum (*E. camaldulensis*). The understory within well-established groves is usually very sparse due to the closed canopy and allelopathic nature of the abundant leaf and bark litter. If sufficient moisture is available, this species becomes naturalized and can reproduce and expand its range. The sparse understory offers only limited wildlife habitat; however, these woodlands can provide excellent nesting sites for a variety of raptors, including red-shouldered hawk (*Buteo lineatus*). Approximately 3.75 acres of eucalyptus woodland were mapped along the periphery of the north, west, and south sides of campus, within the study area.

3.1.6 Disturbed Land

Disturbed land includes land cleared of vegetation (e.g., dirt roads), land containing a preponderance of non-native plant species such as ornamentals or ruderal exotic species that take advantage of disturbance (previously cleared or abandoned landscaping), or land showing signs of past or present animal usage that removes any capability of providing viable habitat. Disturbed land occupies 8.02 acres in the study area.

3.1.7 Developed Land

Developed land includes areas of development and redevelopment (locations of existing manufactured structures), roadways, parking lots, pedestrian paths, horticultural open spaces, landscape buffers and courtyards, plazas, gardens, and recreation fields on the Mesa College campus. Developed land occupies a total of 110.49 acres in the study area.

3.2 JURISDICTIONAL WETLANDS AND WATERS

A jurisdictional delineation was not conducted as part of the CMP survey effort. However, wetlands and waters potentially subject to the regulatory jurisdiction of the U.S. Army Corps of Engineers (USACE) pursuant to Section 404 of the Clean Water Act (CWA; 33 United States Code [USC] 1344), the Regional Water Quality Control Board (RWQCB) pursuant to Section 401 of the CWA and/or the State Porter-Cologne Water Quality Control Act, and the CDFW pursuant to Sections 1600 *et seq.* of the California Fish and Game Code (CFG Code) occur on campus. Wetland vegetation communities (i.e., disturbed southern willow scrub and disturbed wetland) occur within the study area (Figure 5, *Potential Jurisdictional Features*). Future projects with the potential to impact wetlands and/or non-wetland waters would require site-specific jurisdictional delineations to define the type and extent of jurisdictional features.

3.3 PLANT SPECIES

HELIX identified a total of 152 plant species in the study area during the surveys conducted in 2025 and 2026, of which 74 (48 percent) are non-native species (Appendix B, *Plant Species Observed*).

3.4 ANIMAL SPECIES

A total of 33 animal species were observed or otherwise detected in the study area during the surveys conducted in 2025, including five invertebrates, two reptiles, 25 birds, and one mammal (Appendix C, *Animal Species Observed or Detected*).

3.5 SENSITIVE RESOURCES

3.5.1 Sensitive Vegetation Communities

Sensitive vegetation communities are defined as land that supports unique vegetation communities or the habitats of rare or endangered species or subspecies of animals or plants as defined by Section 15380 of the State CEQA Guidelines.

Of the seven identified vegetation communities and land use types on campus, a total of four are sensitive vegetation communities: disturbed southern willow scrub, disturbed wetland, scrub oak



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Source: Aerial (SanGIS 2023)

HELIX Environmental Planning

Potential Jurisdictional Features

Figure 5

chaparral, and Diegan coastal sage scrub (including disturbed). Eucalyptus woodland, disturbed land, and developed land do not meet the definition of sensitive vegetation community.

3.5.2 Sensitive Plant Species

Sensitive plant species, also known as special-status species, are considered uncommon or limited in that they (1) are only found in the San Diego region, (2) are a local representative of a species or association of species not otherwise found in the region, or (3) are severely depleted within their ranges or within the region. Special-status plants include those that are listed as threatened or endangered by the USFWS or CDFW, and those afforded a CRPR designation of 1 or 2 by the CNPS. CRPR 3 and 4 species are considered watch list species. They are not afforded special status or recognition by the USFWS or CDFW but may be considered sensitive by local jurisdictions.

Six special-status plant species were observed during the surveys conducted in 2025 and 2026: Nuttall's scrub oak, Torrey pine, San Diego barrel cactus, Shaw's agave, ashy spike moss, and San Diego sunflower. These species are described in detail below. Sensitive plant species that were not observed but may have potential to occur on campus are listed in Appendix D, *Special-Status Plant Species Potential to Occur*. No additional special-status plant species presented in Appendix D have moderate or high potential to occur within the study area.

Nuttall's Scrub Oak (*Quercus dumosa*)
Listing: --/--; CNPS List 1B.1
Distribution: San Diego, Orange, and Santa Barbara counties; Baja California, Mexico.
Habitat: Occurs in chaparral with a relatively open canopy in flat terrain (also found in coastal scrub). On north-facing slopes, may grow in dense monotypic stands. Found on sandy or clay loam soils.
Status on Site: Nuttall's scrub oak is widely distributed throughout the scrub oak chaparral habitat mapped in the study area.

Torrey Pine (*Pinus torreyana* ssp. *torreyana*)
Listing: --/--; CNPS List 1B.2; City MSCP Covered; City MSCP Narrow Endemic
Distribution: Occurs in only two locations: along the coast near Del Mar (*Pinus torreyana* ssp. *torreyana*) and on Santa Rosa Island (*P. t.* ssp. *insularis*).
Habitat: Found in Torrey pine woodlands and southern maritime chaparral.
Status on Site: Multiple Torrey pines have been planted on the Mesa College campus.

San Diego Barrel Cactus (*Ferocactus viridescens*)
Listing: --/--; CNPS List 2.1; City MCSP Covered
Distribution: San Diego County; Baja California, Mexico.
Habitat: Optimal habitat for this cactus appears to be Diegan coastal sage scrub hillsides, often at the crest of slopes where it is found growing among cobbles. Occasionally found on vernal pool periphery and mima mound topography in Otay Mesa.
Status on Site: Multiple individuals of San Diego barrel cactus have been planted on the Mesa College campus.

Shaw's Agave (*Agave shawii*)
Listing: --/--; CNPS List 2.1; City MSCP Covered; City Narrow Endemic
Distribution: Coastal San Diego County; Baja California, Mexico.
Habitat: Occurs on coastal sage scrub and maritime succulent scrub, often on volcanic soils.

Status on Site: Multiple individuals of Shaw's agave have been planted on the Mesa College campus.

Ashy Spike Moss (*Selaginella cinerascens*)
Listing: --/--; CNPS List 4.1
Distribution: Orange and San Diego counties; northwestern Baja California, Mexico.
Habitat: Found on flat mesas in coastal sage scrub and chaparral. This species is a good indicator of site degradation, as it rarely inhabits disturbed soils.
Status on Site: This species was observed growing within Diegan coastal sage scrub in the study area.

San Diego Sunflower (*Bahiopsis laciniata*)
Listing: --/--; CNPS List 4.2
Distribution: San Diego and Orange counties; Baja California, Mexico.
Habitat: Occurs within Diegan coastal sage scrub where shrub cover is more open than at mesic, and coastal locales supporting sage scrub. Occurs on a variety of soil types.
Status on Site: Multiple individuals of San Diego sunflower have been planted on the Mesa College campus.

3.5.3 Special-Status Animal Species

Special-status animal species include those that have been afforded special status and/or recognition by the USFWS, CDFW, and/or the City. In general, the principal reason an individual taxon (species or subspecies) is given such recognition is the documented or perceived decline or limitations of its population size or geographical extent and/or distribution, resulting in many cases from habitat loss.

One special-status animal species was observed during the February 2025 general biological survey: coastal California gnatcatcher (*Polioptila californica californica*). This species is described in detail below.

Coastal California Gnatcatcher (*Polioptila californica californica*)
Status: Federally Threatened/Species of Special Concern (SSC); MSCP Covered
Distribution: Year-round resident of California occurring from Ventura County south to San Diego County, and east to the western portions of San Bernardino and Riverside counties.
Habitat(s): Typically occurs in arid, open sage scrub habitats on gently sloping hillsides to relatively flat areas at elevations below 3,000 feet. Composition of sage scrub in which gnatcatchers are found varies though California sagebrush is usually present as a dominant or co-dominant species. Mostly absent from areas dominated by black sage, white sage, or lemonadeberry, though may occur more regularly in inland regions dominated by black sage.
Status on Site: This species was observed within the Diegan coastal sage scrub habitat in the study area.

One additional special-status species, osprey (*Pandion haliaetus*), a CDFW Watch List species has been documented nesting on campus previously (District 2026). This species was not observed during the surveys conducted by HELIX in 2025; however, Mesa College staff have previously documented its presence on campus.

Osprey (*Pandion haliaetus*)
Status: --/Watch List (WL)
Distribution: Within California, breeding populations reside in the Cascade and Sierra Nevada ranges, though small numbers of the species also breed within San Diego County. Although widely seen on the coast, rare transients can occur in the interior portions of southern California.

Habitat(s): Restricted to large water bodies such as rivers, lakes, and reservoirs supporting fish with suitable nesting habitat such as rocky pinnacles or large trees and snags. Build their large nests often in dead tops of older trees and artificial structures.
Status on Site: Has previously been documented nesting on campus.

Special-Status Animal Species with Potential to Occur

A total of nine special-status animal species were analyzed in Appendix E, *Special-Status Animal Species Potential to Occur*, for their potential to occur within the study area. Three of these species have high potential to occur within the study area: Cooper's hawk (*Astur cooperii*), Belding's orange-throated whiptail (*Aspidoscelis hyperythrus beldingi*), and San Diegan legless lizard (listed in CNDDB as Southern California legless lizard; *Anniella stebbinsi*). No species had moderate potential to occur. Species with high potential to occur are discussed in detail below.

Cooper's Hawk (*Astur cooperii*)
Status: --/WL; MSCP Covered
Distribution: In California, this species breeds from Siskiyou County south to San Diego County and eastwards to Owens Valley at elevations below 9,000 feet.
Habitat(s): Found in forests, riparian areas, suburban, and urban areas. Nests within dense woodlands and forests and in isolated trees in open areas.
Status on Site: The study area contains an urban area and has mature eucalyptus woodland that could potentially support nesting by this species.

Belding's Orange-Throated Whiptail (*Aspidoscelis hyperythrus beldingi*)
Status: --/SSC; MSCP Covered
Distribution: Southern Orange County and southern San Bernardino County, south through Baja California, Mexico.
Habitat: Occurs in coastal sage scrub, chaparral, edges of riparian woodlands, and washes. Also found in weedy, disturbed areas adjacent to these habitats. Important habitat requirements include open, sunny areas, shaded areas, and abundant insect prey base, particularly termites (*Reticulitermes* sp.).
Status on Site: Coastal sage scrub and disturbed land occur in the study area and provide suitable habitat for this species.

San Diegan Legless Lizard (*Anniella stebbinsi*)
Status: --/SSC
Distribution: Occurs from the Bay Area south through the Coast and Peninsular Ranges to northern Baja California, Mexico. Occurrences scattered through the San Joaquin Valley and southern Sierra Nevada.
Habitat: Occurs in areas with loose soil, particularly in sand dunes and or otherwise sandy soil. Generally found in leaf litter, under rocks, logs, or driftwood in oak woodland, chaparral, and desert scrub.
Status on site: The study area contains suitable coastal sage scrub and chaparral habitats that this species prefers. Furthermore, this species has been previously reported from within the study area.

3.5.4 Nesting Birds

The campus contains suitable nesting habitat for several bird species, including raptors, protected under the Migratory Bird Treaty Act (MBTA) and CFG Code. Raptors observed on campus include red-tailed hawk (*Buteo jamaicensis*) and red-shouldered hawk.

3.6 WILDLIFE CORRIDORS AND LINKAGES

Wildlife corridors connect otherwise isolated pieces of habitat and allow movement and dispersal of plants and animals. Local wildlife corridors allow animals access to resources such as food, water, and shelter within the framework of their daily routine. Regional corridors provide these functions over a larger scale and link two or more large habitat areas, allowing the dispersal of organisms and the consequent mixing of genes between populations. A corridor is a specific route that is used for the movement and migration of species and may be different from a linkage in that it represents a smaller or narrower avenue for movement. A linkage is an area of land that supports or contributes to the long-term movement of animals and genetic exchange by providing live-in habitat that connects to other habitat areas. Many linkages occur as stepping-stone linkages which are made up of a fragmented archipelago arrangement of habitat over a linear distance.

The study area does not fall within an identified local or regional wildlife corridor or habitat linkage outlined in the MSCP. The Mesa College campus is largely dominated by the presence of buildings, recreational areas, parking, internal circulation, lighting, and human activity, which limit its ability to support wildlife movement. Natural habitat occurs to the south and west of the campus outside of the overall development footprint. While these open space areas are generally constrained by existing campus development and adjacent roadways (Genesee Avenue and Marlesta Drive; see Figure 3), undeveloped areas and perimeter slopes may provide limited foraging or transient use for common wildlife, as well as a stopover for migrating birds. Thus, this area may provide some habitat connectivity to larger undeveloped areas south of campus that fall within the City's MHPA; however, the campus does not function as a through-movement corridor.

4.0 REGIONAL CONTEXT AND APPLICABLE REGULATIONS

4.1 NATURAL COMMUNITIES CONSERVATION PLANNING

The Mesa College campus is within the City but is not included within the City's Multiple Species Conservation Program (City 1997), nor is the District an enrolled agency in the Natural Communities Conservation Planning (NCCP) program. Preserve areas designated by the City's MSCP (i.e., MHPA) are not located on Mesa College property; however, the MHPA does occur south and west of the campus. A portion of the MHPA south of the campus appears to be mapped on campus property. However, because the District is not an enrolled agency, inclusion of these lands in the City's MHPA does not constitute any obligation on the part of Mesa College to comply with the City's MSCP preservation goals or objectives. The closest MHPA to the Mesa College campus occurs south of the southeast corner of campus (Figure 3). The MHPA to the west of campus is separated from the study area by Genesee Avenue.

Coastal sage scrub is afforded special protection because it provides habitat for multiple sensitive species, including the federally listed threatened coastal California gnatcatcher. The NCCP Act of 1991 (CFG Code Section 2800 et. seq.) provided the framework for regional resource planning to address impacts to sensitive vegetation communities. The Coastal Sage Scrub NCCP Process Guidelines (CDFW and California Resources Agency 1993) explain the roles of local, state, and federal governments for planning for the conservation of coastal sage scrub. Under this program, jurisdictions that are enrolled in the planning process are bound to follow certain guidelines regarding development of this vegetation community. The District is not an enrolled jurisdiction and, as such, the rules of the NCCP program do

not apply. However, non-enrolled jurisdictions still must address impacts to threatened and endangered species as required by the Endangered Species Act (both state and federal), and impacts to all species and vegetation communities considered sensitive by state and federal resource agencies are required to be disclosed under CEQA.

4.2 FEDERAL AND STATE REGULATIONS

Biological resources on campus are subject to regulation by both federal and state agencies. The federal government administers non-marine plant and wildlife regulations through the USFWS, while waters of the U.S. fall under the jurisdiction of the USACE. At the State level, wetland, water-related, and wildlife resources are regulated by the CDFW. Under CEQA, impacts associated with a proposed project or program are assessed with regard to significance criteria determined by the CEQA Lead Agency (in this case, the District) pursuant to the State CEQA Guidelines. Biological resources-related laws and regulations that apply to the project include the Federal Endangered Species Act (FESA), MBTA, CWA, CEQA, CESA, and CFG Code, as summarized below.

4.2.1 Federal Government

Federal Endangered Species Act

Administered by the USFWS, the FESA provides the legal framework for the listing and protection of species (and their habitats) that are identified as being endangered or threatened with extinction. Actions that jeopardize endangered or threatened species and the habitats upon which they rely are considered a "take" under the FESA. Section 9(a) of the FESA defines take as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct." "Harm" and "harass" are further defined in federal regulations and case law to include actions that adversely impair or disrupt a listed species' behavioral patterns.

The USFWS designates critical habitat for endangered and threatened species. Critical habitat is defined as areas of land that are considered necessary for endangered or threatened species to recover. The ultimate goal is to restore healthy populations of listed species within their native habitats, so they can be removed from the list of threatened or endangered species. Once an area is designated as critical habitat pursuant to the FESA, all federal agencies must consult with the USFWS to ensure that any action they authorize, fund, or carry out is not likely to result in destruction or adverse modification of the critical habitat. No designated critical habitat occurs on or adjacent to the campus.

Sections 7 and 10(a) of the FESA regulate actions that could jeopardize endangered or threatened species. Section 7 describes a process of federal interagency consultation for use when federal actions may adversely affect listed species. In this case, take can be authorized via a letter of biological opinion issued by the USFWS for non-marine related listed species issues. A Section 7 consultation (formal or informal) is required when there is a nexus between endangered species' use of a site and impacts to USACE jurisdictional areas, or to other areas for which a federal action is required. Section 7 consultations with the USFWS are initiated by the federal agency that will be taking a federal action on a project (e.g., USACE initiates the consultation if they are reviewing a 404 application that results in impacts to occupied listed species habitat). Section 10(a) allows issuance of permits for incidental take of endangered or threatened species with preparation of a Habitat Conservation Plan (HCP) when there is no federal nexus. The term "incidental" applies if the taking of a listed species is incidental to, and not the purpose of, an otherwise lawful activity. An HCP demonstrating how the take would be minimized

and how the project would be completed in a manner that would ensure the species' survival must be submitted for issuance of Section 10(a) permits.

Migratory Bird Treaty Act

All migratory bird species that are native to the United States or its territories are protected under the federal MBTA, as amended under the Migratory Bird Treaty Reform Act of 2004 (Federal Register [FR] Doc. 05-5127). The MBTA is generally protective of migratory birds but does not stipulate the type of protection required. In common practice, the MBTA is used to place restrictions on disturbance of active bird nests during the nesting season (generally February 15 to August 31). In addition, the USFWS commonly places restrictions on disturbances allowed near active raptor nests.

Clean Water Act and Rivers and Harbors Act

Federal wetland regulation (non-marine issues) is guided by the Rivers and Harbors Act of 1899 and the CWA. The Rivers and Harbors Act deals primarily with discharges into navigable waters, while the purpose of the CWA is to restore and maintain the chemical, physical, and biological integrity of all waters of the U.S. Permitting for projects filling waters of the U.S. is overseen by the USACE under Section 404 of the CWA. Most development projects are permitted using an Individual Permit (IP) or Nationwide Permit (NWP). IPs are assessed individually and approved based on the type of action, amount of fill, etc., and typically require substantial time for approval, as well as having a public review period. An IP is required when a project exceeds the allowable impact thresholds for NWPs. NWPs are pre-approved if a project conforms with the conditions of the specific NWP as well as the general conditions applied to all NWPs. Review by the USACE is still required for many NWPs but tends to be a more streamlined process than obtaining an IP. A California RWQCB Section 401 Water Quality Certification must also be obtained before any authorization from the USACE is received.

4.2.2 State of California

California Environmental Quality Act

Primary environmental legislation in California is found in CEQA and its implementing guidelines (State CEQA Guidelines), which require that projects with potential adverse effects (or impacts) on the environment undergo environmental review. With respect to biological resources, CEQA requires public agencies to consider whether a project would have a substantial adverse effect on species, habitats, or ecological functions—including special-status species, sensitive natural communities, wetlands, and wildlife movement—or conflict with applicable policies or conservation plans governing these resources. Where significant impacts are identified, CEQA requires avoidance, minimization, and/or mitigation measures to reduce those impacts to a less-than-significant level, where feasible.

California Endangered Species Act

The CESA established that it is state policy to conserve, protect, restore, and enhance state endangered species and their habitats. Under state law, plant and animal species may be formally designated rare, threatened, or endangered by the California Fish and Game Commission. The CESA authorizes that private entities may "take" plant or wildlife species listed as endangered or threatened under the FESA and CESA, pursuant to a federal Incidental Take Permit if the CDFW certifies that the incidental take is consistent with the CESA (CFG Code Section 2080.1[a]). For state-only listed species, Section 2081 of CFG

Code authorizes the CDFW to issue an Incidental Take Permit for state listed threatened and endangered species if specific criteria are met.

Native Plant Protection Act

Sections 1900–1913 of the CFG Code (Native Plant Protection Act; NPPA) direct the CDFW to carry out the state legislature's intent to "…preserve, protect, and enhance endangered or rare native plants of this state." The NPPA gives the California Fish and Game Commission the power to designate native plants as "endangered" or "rare" and protect endangered and rare plants from take.

California Fish and Game Code

The CFG Code provides specific protection and listing for several types of biological resources. Section 1600 of CFG Code requires a Streambed Alteration Agreement (SAA) for any activity that would alter the flow, change, or use any material from the bed, channel, or bank of any perennial, intermittent, or ephemeral river, stream, and/or lake. Typical activities that require an SAA include excavation or fill placed within a channel, vegetation clearing, structures for diversion of water, installation of culverts and bridge supports, cofferdams for construction dewatering, and bank reinforcement. Notification is required prior to any such activities.

Pursuant to CFG Code Section 3503, it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto. Raptors and owls and their active nests are protected by CFG Code Section 3503.5, which states that it is unlawful to take, possess, or destroy any birds of prey or to take, possess, or destroy the nest or eggs of any such bird unless authorized by the CDFW. Section 3513 states that it is unlawful to take or possess any migratory non-game bird as designated in the MBTA. These regulations could require that construction activities (particularly vegetation removal or construction near nests) be reduced or eliminated during critical phases of the nesting cycle unless surveys by a qualified biologist demonstrate that nests, eggs, or nesting birds will not be disturbed, subject to approval by CDFW and/or USFWS.

5.0 THRESHOLDS OF SIGNIFICANCE

Significance thresholds from Appendix G of the State CEQA Guidelines are identified below for biological resource issues. A significant adverse impact would occur if implantation of the CMP would result in any of the following:

1) Substantial adverse effect, either directly or through habitat modifications, on any plant or animal species identified as a candidate, sensitive, or special status species;

2) Substantial adverse effect on riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS;

3) Substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA;

4) Substantial interference with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;

5) Conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance; and/or

6) Conflict with the provisions of an adopted HCP, Natural Community Conservation Plan, or other applicable HCP.

6.0 IMPACTS

This section evaluates impacts from future development anticipated under the CMP. Development areas that have been identified are largely focused within the existing footprint of the campus and within areas that are considered developed (Figure 6, *Existing Campus Facilities*; Figure 7, *Comprehensive Master Plan Facility Overview*). The CMP largely proposes infill and redevelopment of existing urbanized areas on campus where there would be minimal potential to impact biological resources. Because of the programmatic nature of this analysis, it is anticipated that future development areas could vary due to the refinement of grading and building envelopes that can occur during project design; such future refinements would occur during project-level design at which time the development limits associated with those specific projects would be determined. In support of the proposed projects, it is anticipated that future development of stormwater quality structures may be required in drainages or other lower elevation areas on campus to comply with stormwater regulations. Thus, the ultimate impacts are difficult to predict with absolute certainty at this stage of the planning process and the following analysis describes potential impacts and prescribes mitigation for development in all locations within the Mesa College campus boundary. Project-level CEQA review would be conducted for future projects proposed under the CMP to ensure consistency with this analysis of project impacts when design details are available. In some cases, resource agency permitting may be required.

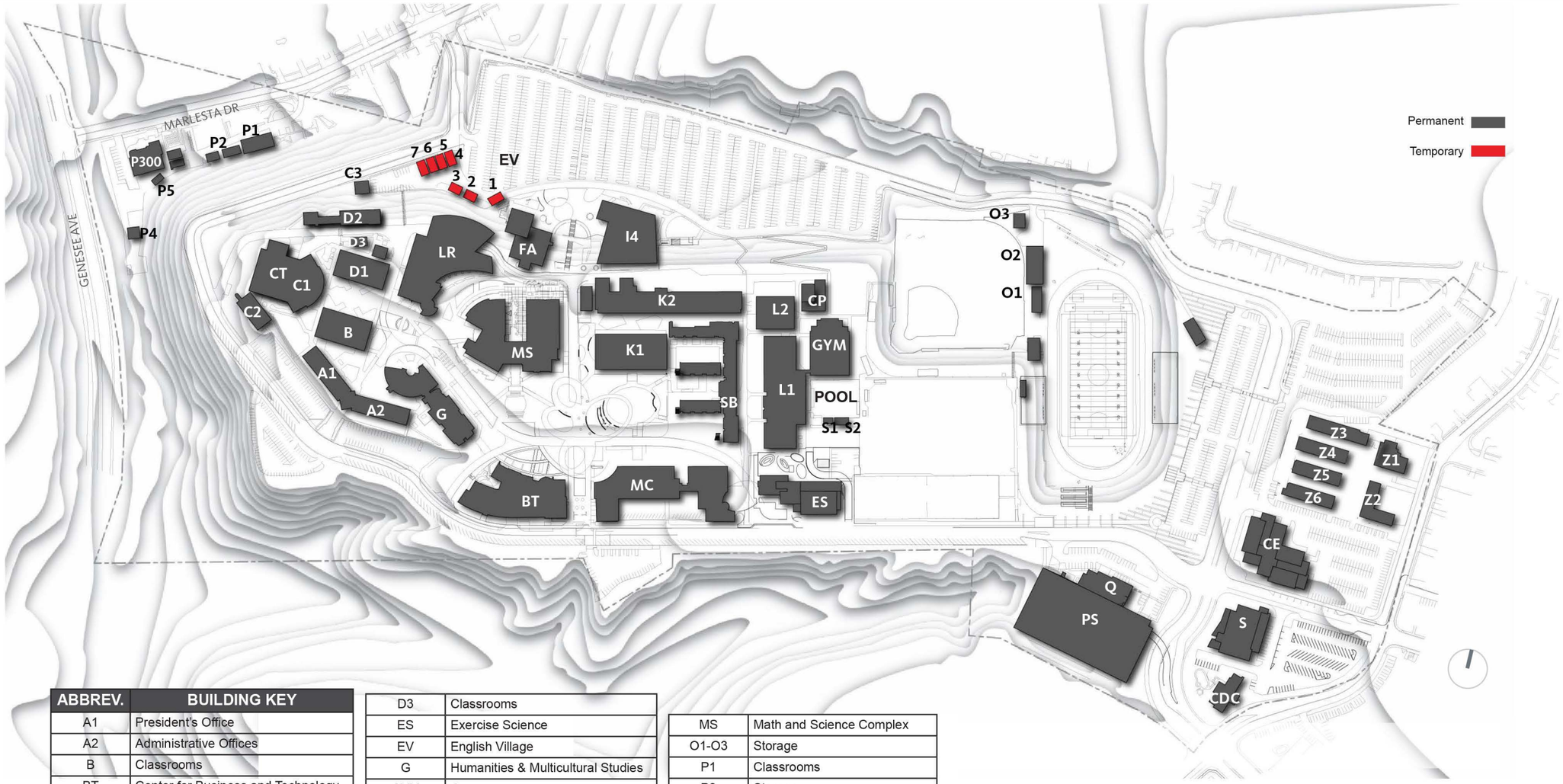
Impacts addressed in this section are classified as direct, indirect, or cumulative. A direct impact occurs when the primary effects of a project replace existing habitat with graded or urbanized areas. An indirect impact consists of secondary effects of a project, including, for example, water quality, lighting, noise, increased human intrusion, and invasive species. The magnitude of an indirect impact can be the same as a direct impact; however, the effect usually takes longer to become apparent. Cumulative impacts are those caused by numerous projects in the region and their additive effect of multiple direct and indirect impacts to biological resources over time. The significance of impacts is assessed based on the thresholds of significance presented in Section 5.0 of this report.

6.1 DIRECT IMPACTS

6.1.1 Sensitive Plant Species

As described in Section 3.5.2, six sensitive plant species have been observed within the study area: Nuttall's scrub oak, Torrey pine, San Diego barrel cactus, Shaw's agave, ashy spike moss, and San Diego sunflower (Figure 4). In some instances, these species are believed to have been planted on campus (i.e., within campus landscaping and not naturally occurring) and impacts to these individuals would not be considered significant. Impacts to these species outside of the developed campus areas, where they occur in natural communities and have not been planted, would be considered potentially significant.

Currently, it is not anticipated that the CMP would result in significant impacts to listed plant species given the majority of improvements would occur within the developed campus footprint. However, future construction proposed within natural communities could adversely affect the above-listed special-



ABBREV.	BUILDING KEY
A1	President's Office
A2	Administrative Offices
B	Classrooms
BT	Center for Business and Technology
C1-CT	Classrooms and Apolliad Theatre
C2	Classrooms
C3	Storage
CDC	Child Development Center
CE	Continuing Education Building
CP	Central Plant
D1	VRC,NextUP, Honors
D2	Fermentation

D3	Classrooms
ES	Exercise Science
EV	English Village
G	Humanities & Multicultural Studies
GYM	Gym
FA	Fine Arts
I4	Student Services Center
L1	Exercise Science
L2	Facilities
LR	Learning Resource Center
K1	Classrooms
K2	Met High School
MC	Mesa Commons

MS	Math and Science Complex
O1-O3	Storage
P1	Classrooms
P2	Storage
P300	Animal Health Technology
P4-P5	Animal Health
PS	Parking Structure
Q	Mesa College Police Offices
S	Allied Health Education
S1-S2	Pool Equipment / Storage
SB	Social and Behavioral Sciences
Z1-Z6	Design Center

Source: SD Mesa Collge 2025

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Existing Campus Facilities

Figure 6



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Source: Gensler 2025

HELIX Environmental Planning

Comprehensive Master Plan Facility Overview

Figure 7

status plant species, and impacts to non-planted individuals would be considered potentially significant under Significance Threshold 1.

6.1.2 Sensitive Animal Species

Sensitive Animal Species Observed on Campus

As described in Section 3.5.3, one special-status animal species was observed during the February 2025 general biological survey, coastal California gnatcatcher; and one additional sensitive species, osprey, has been previously documented nesting on campus. In addition, several sensitive animal species have been recorded on or adjacent to campus and some of these species could utilize habitats in or near future CMP development. Potential impacts to these species are further discussed below.

Coastal California Gnatcatcher

Coastal California gnatcatcher is a federal listed threatened species and state species of special concern. Coastal California gnatcatcher has not been observed within the anticipated CMP development areas (Figure 7); however, this species has been observed within the undeveloped southwestern part of the campus (Figure 4). As proposed, implementation of the CMP is not expected to directly impact gnatcatchers or suitable gnatcatcher habitat. If future construction is proposed within Diegan coastal sage scrub, direct impacts to gnatcatcher and/or occupied habitat would be significant under Significance Threshold 1.

Osprey

Osprey is a state watch list species. Osprey has been observed nesting within the developed portions of campus, specifically on the east side of the campus near the athletic fields; therefore, there is potential for direct impacts associated with implementing the CMP should trees and/or lighting fixtures that are being used for osprey nesting be removed during future development. As proposed, implementation of the CMP is expected to directly impact ospreys and/or suitable osprey habitat, as development of a gym has been identified within areas where they have been previously observed. If future construction would require removal of existing nests, or structures used for nesting direct impacts to osprey or occupied habitat would be significant under Significance Threshold 1.

Sensitive Animal Species Not Observed but with High Potential to Occur on Campus

An additional three sensitive animal species that were not observed during project surveys but that have high potential to occur on campus could use habitats in or near projects implemented under the CMP: Cooper's hawk, Belding's orange-throated whiptail, and San Diegan legless lizard. Potential impacts to these species are further discussed below.

Cooper's Hawk

Cooper's hawk is a CDFW watch list species. Implementation of the CMP could impact eucalyptus woodland and urban areas that could be used by Cooper's hawk for nesting and/or foraging. Direct impacts to Cooper's hawk would be considered significant under Significance Threshold 1.

Belding's Orange-Throated Whiptail

Belding's orange-throated whiptail is a CDFW watch list species. Implementation of the CMP could impact sage scrub, chaparral, and/or riparian area that could be used by Belding's orange-throated whiptail for nesting and/or foraging. Impacts to this species would be less than significant because the vast majority of suitable habitat would not be impacted by implementation of the CMP.

San Diegan Legless Lizard

San Diegan legless lizard is a CDFW species of special concern. Implementation of the CMP could impact sage scrub, chaparral, wetlands, and landscaping that could be used by San Diegan legless lizards. Impacts to this species would be less than significant because the higher quality suitable habitat within the study area would not be impacted by implementation of the CMP, while landscaping areas that could support this species are already subject to regular human disturbance with or without the CMP.

6.1.3 Nesting Birds

Implementation of the CMP has potential to impact nesting birds, should birds build nests in developed portions of the campus. Impacts to nesting birds protected under the MBTA and CFG Code would be considered significant under Significance Threshold 1.

6.1.4 Vegetation Communities and Federally Protected Wetlands

Impacts to sensitive vegetation communities are considered significant under Significance Threshold 2. Impacts to non-sensitive vegetation communities and developed land are not considered significant. On a project-by-project basis, impacts totaling less than 0.1 acre to sensitive upland vegetation communities and less than 0.01 acre for wetland vegetation communities would not be considered significant and would not require mitigation under CEQA. The small size of the impact would not be considered a substantial adverse effect. However, projects impacting less than 0.01 acre of wetland may be required to provide mitigation if required by the regulatory agencies (USACE, RWQCB, and/or CDFW). Exceptions to the above de minimis acreage thresholds would be projects that would impact habitat occupied by federal or state listed endangered or threatened species, which would be considered significant regardless of the acreage impacted. Few projects would be expected to result in impacts below these thresholds; nonetheless, a more streamlined approval process is appropriate for projects with minimal impact to sensitive vegetation communities. If impacts were to occur, wetland mitigation is typically provided at a minimum 2:1 ratio and mitigation is typically required by the regulatory agencies (Table 3, *Sensitive Communities/Land Use Types and Mitigation Ratios*). The idea is that no net loss of wetland functions and values would occur from projects impacting wetlands. Further, both upland and wetland mitigation should occur in lands with long-term preservation value.

Table 3
SENSITIVE COMMUNITIES/LAND USE TYPES AND MITIGATION RATIOS

Vegetation Community/Land Use Type	Acreage[1]	Mitigation Ratio
Wetlands		
Disturbed Southern Willow Scrub	2.04	2:1
Disturbed Wetland	0.56	2:1
Uplands		
Scrub Oak Chaparral	1.85	2:1
Diegan Coastal Sage Scrub (including disturbed)	4.14	1.5:1
Total	**8.59**	--

[1] Habitat rounded to the nearest 0.01 acre; total reflects rounding. Includes on-campus areas only (not 100-foot buffer).

Wetland vegetation communities mapped on campus are depicted on Figure 5. These areas are potentially subject to the regulatory jurisdiction of the USACE, RWQCB, and/or CDFW. Impacts to jurisdictional wetlands and waters would be considered significant under Significance Threshold 2, and if the impacts are to federally regulated wetlands, such impacts also would be significant under Significance Threshold 3.

Impacts to jurisdictional wetlands and waters would require project-specific permits from the appropriate regulatory agencies, including USACE, RWQCB, and/or CDFW. Jurisdictional delineations would be required for any future projects that would impact potentially jurisdictional features.

6.1.5 Wildlife Corridors and Linkages

Although undeveloped land occurs to the west and south of the Mesa College campus, these areas are surrounded by development, including residential development and roads. Therefore, these areas do not act as wildlife corridors or linkages. Implementation of the CMP would not impact wildlife corridors or linkages. No significant impact would occur under Significance Threshold 4.

6.1.6 Local Policies and Ordinances

Regarding Significance Threshold 5, the District is subject to its own District Standards and Guidelines policies. The District has two policies regarding trees, including the Temporary Tree and Plant Protection Construction Schedule Policy and the Tree Protection Policy. Each future project would follow these standard regulations.

The CMP includes potential improvements along City rights-of way (ROW), specifically near campus entrances. For project activities within the adjacent roadways, City tree preservation/street tree policies would apply. Therefore, no local policy conflicts are expected to arise with the implementation of the CMP, and no significant impact would occur under Significance Threshold 5.

6.1.7 Regional Conservation Planning

In regard to Significance Threshold 6, the Mesa College campus is not included within the City's MSCP nor is the District an enrolled agency in the NCCP program. Thus, the MSCP is not applicable to the District properties. However, the MSCP was taken into account during the preparation of the CMP biological resources analysis due to its applicability to the surrounding region. Where appropriate, the District's analysis of biological impacts reflects many of the standards established by the MSCP, including

species and vegetation community sensitivities and mitigation ratios. The CMP is not proposing development that would directly or indirectly affect the biological resources occurring on nearby MHPA lands, and no impacts to the City's MSCP or the NCCP program would occur from the implementation of the CMP; thus, no significant regional conservation planning impact would occur under Significance Threshold 6.

6.2 INDIRECT IMPACTS

Indirect impacts could occur during construction as well as post-construction operations. Potential indirect impacts from implementation of the CMP may include decreased water quality (e.g., through sedimentation, contaminants, or fuel release), fugitive dust, colonization of non-native plant species, edge effects/human activity, construction noise/animal behavioral changes, roadkill, night lighting, errant construction impacts, invasive insect pests, and brush management. Projects anticipated in the CMP would generally be situated in non-sensitive areas of campus. However, some projects may occur adjacent to the MHPA and/or natural undeveloped habitat outside of the MHPA. These projects have the potential to cause indirect effects on the natural habitats near campus, and these potential impacts are discussed below.

6.2.1 Water Quality

Water quality in riparian areas could be adversely affected by potential surface runoff and sedimentation during construction. The use of petroleum products (i.e., fuels, oils, lubricants) and erosion of cleared land during and after construction could potentially contaminate surface water and adversely affect biological resources. Decreased water quality may adversely affect vegetation, aquatic animals, and terrestrial wildlife that depend upon these resources.

Degraded surface water quality could have a potentially significant impact. However, the District would be required to minimize water quality impacts during and after construction, and Storm Water Pollution Prevention Plans and Water Quality Management Plans would be required on the majority of individual projects. Projects developed under the CMP would comply with applicable stormwater regulations as specified in the District's Standards and Guidelines and implemented and enforced by the RWQCB. Therefore, water quality impacts to biological resources on campus and off campus would be less than significant.

6.2.2 Fugitive Dust

Fugitive dust produced by construction could disperse onto sensitive vegetation adjacent to CMP construction sites. The resulting dust covering could reduce native plant productivity, in turn displacing native vegetation, reducing diversity, and affecting wildlife dependent on the vegetation.

Individual projects would avoid indirect impacts to plants and wildlife from fugitive dust by implementing standard air quality control measures to effectively reduce emissions during construction. The control measures may include, but are not limited to, application of soil stabilizers (water) to disturbed areas, termination of soil disturbance during high wind events, and covering material stockpiles. Therefore, fugitive dust impacts would be less than significant.

6.2.3 Non-Native Plant Species

Non-native plants could colonize sites disturbed by construction and could potentially spread into adjacent native vegetation communities. Some non-native plants are highly invasive and can disrupt native habitats by reducing native species diversity, potentially increase flammability and fire frequency, change ground and surface water levels, and potentially adversely affect native wildlife that is dependent on native plant species.

Colonization by non-native plant species in the MHPA would be a potentially significant impact. Colonization by non-native plant species in developed areas of campus is not considered a significant impact as these areas tend to be small and isolated from the MHPA and many areas on campus already support numerous non-native plant species and landscaping.

6.2.4 Edge Effects/Human Activity

Edge effects occur when blocks of habitat are fragmented, resulting in a higher ratio of development edge to native vegetation communities (i.e., an increase in the urban/wildland interface). These edges increase the potential for non-native plant species to invade native vegetation communities and for native and non-native predators to access prey that may have otherwise been protected within large, contiguous blocks of habitat. Edge effects can be particularly significant, for example, when nest parasites, such as the brown-headed cowbird (*Molothrus ater*), expand their population and are allowed easier access to bird nests. Impacts on native vegetation communities and wildlife from edge effects could occur along the edges of the campus, particularly the MHPA boundary, near campus.

As development increases on campus, corresponding increases in human activity in and adjacent to the MHPA, could result in degradation of sensitive vegetation communities by fragmenting habitat and forming edges through the creation of unauthorized trails. Pedestrians and bicyclists may leave established trails and take short cuts, potentially resulting in erosion and damage to native vegetation. Erosion often inhibits the reestablishment of vegetation even if the unauthorized trail (short cut) is blocked off, necessitating additional repair measures. In addition to creation of unauthorized trails, predation of native species by domesticated animals (particularly off-leash dogs) and illegal dumping also could occur in association with implementation of the CMP, particularly where trails skirt the edges of the MHPA or where student housing is adjacent to native habitat. Impacts from human activity, particularly unauthorized activities, along the edges of campus and into the MHPA would be potentially significant. No additional edge effects along the MHPA boundary are expected as a result of implementing the CMP.

6.2.5 Construction Noise/Animal Behavioral Changes

Construction-related noise from activities such as clearing, grubbing, and grading could be a temporary impact to wildlife. Breeding birds and mammals may temporarily or permanently leave their territories to avoid disturbances from construction activities, which could lead to reduced reproductive success and increased mortality. These indirect impacts would be considered significant for state or federally listed species, or for nesting raptors.

Construction noise that meets or exceeds 60 A-weighted decibel (dBA) hourly equivalent noise level (L_{EQ}), or the ambient noise level if it already exceeds 60 dBA L_{EQ}, at the edge of occupied gnatcatcher habitat would be significant. This impact would only be significant during the gnatcatcher breeding

season (February 15 through August 31), and only if these species are present within 500 feet of the construction activity.

Nesting raptors may also be susceptible to disturbance from construction activity and impacts from construction noise within 500 feet of an active raptor nest would be significant.

6.2.6 Roadkill

Roadkill can occur as vehicles travel on roads near native habitat. The CMP does not propose any new roads through MHPA or other large habitat areas; therefore, potential roadkill impacts are expected to be less than significant.

6.2.7 Night Lighting

Nighttime lighting has potential to spill over into native vegetation communities, exposing wildlife species to an unnatural light regime and potentially altering their behavior patterns, which can result in lower reproductive success, thus reducing species diversity. In addition, nighttime lighting could provide nocturnal predators with an unnatural advantage over their prey. This could cause an increased loss of native wildlife that could be potentially significant, especially for sensitive species.

Lighting that spills into the MHPA would be potentially significant where these areas are not currently affected by night lighting from adjacent campus development.

6.2.8 Errant Construction Impacts

Future development projects implemented as part of the CMP could result in inadvertent impacts outside pre-approved development limits defined during the project-level CEQA process during construction. Impacts to sensitive vegetation communities occurring outside of pre-approved development limits would be significant.

6.2.9 Invasive Insect Pests

Invasive, non-native insects could result in weakening and eventual death of native plant species that are used as host species by these insects, or invasion of natural areas by species that displace native insect species, disrupt natural food webs, or that may otherwise adversely affect native wildlife. Species that may displace native ant species and adversely affect native wildlife include Argentine ants (*Linepithema humile*) and South American fire ants (*Solenopsis invicta*). Argentine ants are already widespread in southern California, while the South American fire ant is less common. Both species tend to be associated with irrigated areas and may infect plants used for landscaping or habitat restoration. A potentially significant impact may occur if Argentine ant or South American fire ant are introduced into natural habitats where they do not currently exist. Another species of concern are polyphagous and Kuroshio shot hole borers (SHBs, [*Euwallacea* spp.]). The SHBs are invasive ambrosia beetles that introduce fungi and other pathogens into host trees. The fungi cause fusarium dieback disease, which can lead to the death of individual branches or, in severe cases, the entire tree. Numerous native and ornamental tree species have been documented as host species used by these SHBs.

Future development projects implemented as part of the CMP could potentially introduce SHBs into native vegetation communities on campus if infected ornamental or native trees are accidentally planted as part of a landscaping or habitat mitigation effort; this would result in a potentially significant impact.

Given the preferred host species for SHBs, the vegetation community within the study area at greatest risk of infection is southern willow scrub.

6.2.10 Brush Management

Brush management is required around occupied buildings that are adjacent to undeveloped areas. Brush management on campus generally follows the City's brush management guidelines, which identify a 100-foot-wide zone divided into two sections: Zone 1, a 35-foot-wide zone extending out from the structure, and Zone 2, the remaining 65 feet that extend beyond Zone 1. Zone 1 is typically hardscape or irrigated landscaping (or combination thereof) and is considered part of the development footprint for a project. Zone 2 is the thinning zone where selective thinning and pruning of plants is required to reduce fuel load. No grading or grubbing is allowed in Zone 2, and non-native plants are identified as priority for removal, ahead of native plants. Thinning of vegetation within Zone 2 would only occur from September 1 through February 14 (i.e., outside of the general avian breeding season), thereby avoiding impacts to nesting birds. Thinning of native vegetation could result in a potentially significant impact if invasive plant species not previously present were to establish in the thinned habitats in the MHPA.

6.3 CUMULATIVE IMPACTS

The State CEQA Guidelines (Section 15355) state that a cumulative impact consists of an impact that is created as a result of the combination of the project evaluated in an Environmental Impact Report (EIR) together with other projects causing related impacts. Section 15130 of the State CEQA Guidelines requires that an EIR address cumulative impacts of a project when the project's incremental effect would be cumulatively considerable. The term "cumulatively considerable" means that the incremental effects of the individual project are considerable when viewed in connection with the effects of past projects, other current projects, and probable future projects. This section of the report addresses the potential for cumulative impacts of implementing the CMP with respect to both the Mesa College campus and the San Diego region as a whole.

6.3.1 Cumulative Impacts to Biological Resources on Mesa College Campus

The anticipated development areas for the CMP overlap extensively with previously developed areas. For this reason, no substantial increase in impacts to native vegetation due to implementation of the CMP are expected.

Mitigation for wetland impacts, if needed, would be coordinated with the appropriate regulatory agencies on a project-by-project basis to ensure no net loss of functions and values. Upland mitigation would occur on or off campus through preservation and/or restoration of appropriate vegetation communities, as needed. These potential impacts are not considered cumulatively considerable given the implementation of mitigation measures to avoid and minimize impacts during design and construction of future projects would result in no net loss of the habitat types.

The cumulative loss of sensitive vegetation communities would be offset by preservation and/or mitigation. Vegetation community mitigation would occur at standardized ratios (consistent with MSCP ratios) at locations on or off campus with long-term preservation value and be managed in perpetuity. Therefore, the CMP would not contribute to a cumulatively significant impact to biological resources.

6.3.2 Cumulative Impacts to Biological Resources in the San Diego Region

In 1991, the State of California passed the NCCP Act, providing for the long-term, regional conservation of natural vegetation and wildlife diversity. The MSCP Plan is the framework NCCP plan for southwestern San Diego County. The USFWS and CDFW jointly adopted the MSCP Plan in 1997. As part of that approval process, a Joint EIR/Environmental Impact Statement (EIS) was prepared, which addressed the cumulative impacts to biological resources from growth in the San Diego region. The Final MSCP Plan (City 1998) and its associated Joint EIR/EIS (City and USFWS 1996) are summarized herein. Geographically, the MSCP Plan study area covers approximately 582,243 acres in southwestern San Diego County, including the cities of San Diego, Chula Vista, Coronado, Del Mar, El Cajon, Imperial Beach, La Mesa, Lemon Grove, National City, Poway, and Santee, as well as a large portion of the unincorporated area of southwestern San Diego County. The Mesa College campus is not a part of the MSCP planning effort or a formal part of the MSCP study area but is surrounded by the MSCP study area to the west and south. As part of the MSCP planning process, lands were identified for assembly into a comprehensive preserve for the conservation of biological resources. That preserve is referred to as the MHPA and was cooperatively designed by the participating jurisdictions and special districts in the study area in partnership with the wildlife agencies (CDFW and USFWS), property owners, and representatives from private industry and environmental groups. The MHPA conserves vacant land, including of habitat and other vacant lands that contribute to the preserve design. Approximately 62 percent of the coastal sage scrub in the MSCP study area is contained in the MHPA.

The biological conservation offered by the MSCP provides sufficient habitat area, diversity, and linkages to allow the participating local jurisdictions to directly impact or “take” up to 85 sensitive plant and animal species in the region. Those “covered species” identified in the plan consist of species listed as endangered or threatened by the federal or state ESAs, as well as currently unlisted sensitive species.

In addition to the direct and indirect impacts of the MSCP Plan, the cumulative analysis for the Joint EIR/EIS also takes into consideration other NCCP conservation planning efforts by nine other jurisdictions in the northern and eastern portions of the County. Together with the MSCP, these other plans would help form a 4,200-square-mile habitat preserve system within San Diego County. Although the NCCP plans are in various stages of planning, all have been or are being designed to be consistent with the NCCP conservation guidelines. Implementation of the MSCP Plan would result in cumulatively significant direct impacts to the 85 covered species (City and USFWS 1996). Assembly and management of the MHPA as part of the MSCP and other NCCP plans would reduce these cumulative impacts to less than significant levels. Cumulative indirect impacts to native vegetation communities associated with edge effects and increased development pressure outside the MHPA were not considered significant due to the measures in the plans that address these effects.

Implementation of the CMP may incrementally contribute to the loss of native vegetation communities, direct and indirect impacts to covered species, and the conservation of vegetation communities in the San Diego region. Based on the impact analysis contained in Section 6.0 of this report, CMP implementation is not expected to increase impacts to native vegetation communities anticipated within the MSCP study area.

Biological surveys conducted on campus, including focused surveys for sensitive species, found four MSCP-covered species in the study area (Shaw’s agave [planted/not naturally occurring], San Diego barrel cactus [planted/not naturally occurring], Torrey pine [planted/not naturally occurring], and coastal California gnatcatcher). An additional two MSCP-covered species are considered to have high potential

to occur on campus (Belding's orange-throated whiptail and Cooper's hawk). Of the 85-species covered in the MSCP Plan, the CMP would potentially contribute to impacts to six of those species (Shaw's agave, San Diego barrel cactus, Torrey pine, coastal California gnatcatcher, Belding's orange-throated whiptail, and Cooper's hawk). Based on the mitigation that would occur for impacts from individual projects planned on campus, together with regional habitat conservation plans approved or in preparation, incremental impacts to biological resources associated with the CMP in conjunction with regional growth would not be considered cumulatively significant.

7.0 MITIGATION PROGRAM FRAMEWORK

Specific mitigation will be determined on a case-by-case basis for each project that is implemented under the CMP. This section provides an overview of the programmatic mitigation requirements associated with the CMP development areas, and it provides a framework for how mitigation measures will be determined for future development. Included in this section are measures to minimize and mitigate impacts to vegetation and sensitive species, and for short- and long-term indirect impacts. Following the mitigation framework, a determination regarding the significance of impacts following implementation of these measures is provided.

7.1 MINIMIZATION AND MITIGATION MEASURES FOR CONSTRUCTION IMPACTS

This section describes the survey, minimization, and mitigation measures required for anticipated construction impacts from implementation of the CMP.

7.1.1 Sensitive Vegetation Communities

Survey Requirements

As described in Section 2.0 of this report, updated vegetation mapping of the campus was conducted in 2025. For those areas currently mapped as not containing sensitive vegetation communities (i.e., in those areas mapped as developed, disturbed land, or eucalyptus woodland on Figure 4), no further project-specific mapping will be required. Furthermore, in areas mapped as containing sensitive vegetation communities (Diegan coastal sage scrub, disturbed Diegan coastal sage scrub, disturbed southern willow scrub, scrub oak chaparral, or disturbed wetland) on Figure 4, no project-specific mapping will be required for projects undergoing CEQA review within five years of the most recent vegetation mapping (through 2030). In these cases, CEQA review will rely on the most recent, previous survey effort. For project sites mapped as containing sensitive vegetation communities where vegetation mapping has not been conducted within the preceding five years, the following mitigation measure shall apply:

> **BIO-1:** For those projects for which the site is mapped as supporting a sensitive vegetation type and vegetation mapping has not been conducted on the site in the preceding five years, updated vegetation mapping shall be conducted by a qualified biologist as part of the project planning and environmental review process to confirm the location and extent of sensitive vegetation communities within the project footprint.

Minimization Requirements

The CMP assumes densification/growth across the campus to meet stated academic objectives. Detailed grading information for future development is not yet available. Implementation of the following mitigation measure would minimize impacts to sensitive vegetation communities:

> **BIO-2:** During the project planning phase, site plans shall be designed to minimize impacts to sensitive vegetation communities to the extent feasible. Such minimization efforts shall include consideration of:
>
> i. Use of retaining walls to minimize grading impacts, to the extent possible from an engineering and visual impact standpoint.
>
> ii. Locations, widths, design features, and construction methods of any new trails or overlook areas shall carefully consider how to avoid and minimize impacts to sensitive vegetation communities (e.g., routing trails along canyon rims rather than through canyons, cantilevered overlook platforms, using bridges to avoid wetland vegetation communities, clearing trails by hand). To the extent practicable, a 50-foot buffer shall be provided between permanent development and wetland vegetation.
>
> iii. Priorities for avoidance (in descending order of sensitivity) shall be placed on wetland vegetation communities, scrub oak chaparral, and Diegan coastal sage scrub, particularly if these vegetation communities are determined to support sensitive species.

Habitat Mitigation Requirements

Table 4, *Mitigation Ratios for Impacts to Sensitive Vegetation Communities*, below, presents the recommended mitigation ratios and acreage for each sensitive vegetation community anticipated to be impacted by implementation of the CMP. The proposed mitigation ratios follow accepted ratios established by the City of San Diego Biology Guidelines (City 2018).

On a project-by-project basis, impacts totaling less than 0.1 acre for sensitive upland vegetation communities would not be considered significant and would not require mitigation. On a project-by-project basis, impacts totaling less than 0.01 acre for all wetland vegetation communities would not be considered significant under CEQA and would not require mitigation unless required by the regulatory agencies. Exceptions to the above de minimis thresholds would be for projects impacting habitat occupied by federal or state listed endangered or threatened species, which would be considered significant regardless of the acreage impacted.

Table 4
MITIGATION RATIOS FOR IMPACTS TO SENSITIVE VEGETATION COMMUNITIES[1]

Sensitive Vegetation Community	Mitigation Ratio
WETLAND COMMUNITIES[2]	
Southern Willow Scrub (including disturbed)	2:1
Disturbed Wetland	2:1
UPLAND COMMUNITIES[3]	
Scrub Oak Chaparral	2:1
Diegan Coastal Sage Scrub (including disturbed)	1.5:1

1 On a project specific basis, impacts to less than 0.1 acre for all sensitive upland vegetation communities and 0.01 acre for all wetland vegetation communities would not require mitigation, except in cases where habitat supporting federal or state listed endangered or threatened species would be impacted.

2 The wetland mitigation ratios are based on the City Biology Guidelines ratios for projects with a biologically superior design. Final mitigation requirements for wetland impacts will be based on regulatory permit requirements. Weland impacts typically require at least 1:1 creation to ensure no-net-loss unless the regulatory agencies agree otherwise.

3 The upland mitigation ratios are based on the City Biology Guidelines ratio for both the impact and mitigation happening outside of the MHPA.

Mitigation would occur pursuant to the following:

On a project-by-project basis, all direct impacts to sensitive vegetation communities shall be mitigated in accordance with the ratios listed above in Table 4. Mitigation should occur on campus to the extent feasible through a combination of habitat preservation, enhancement, and/or creation.

Restoration could occur within portions of the campus that are currently disturbed, or in areas disturbed by project impacts if they occur adjacent to other habitat adjacent to the MHPA. Mitigation may occur off campus or via the purchase of mitigation credits in instances where no on-campus mitigation is available. Mitigation credit would be applied only where the habitat would be considered viable in the long-term, in respect to future uses planned by the CMP.

> **BIO-3:** Mitigation for impacts to sensitive upland vegetation communities shall consist of preservation of habitat, habitat creation, and/or enhancement, or combination thereof on the Mesa College property or off campus through habitat acquisition and preservation, or purchase of credits from an approved conservation bank, at a 2:1 ratio for scrub oak chaparral and 1.5: 1 ratio for Diegan coastal sage scrub (including disturbed). Mitigation for impacts to upland communities shall be in-kind.
>
> **BIO-4:** Mitigation required for wetland and waters impacts shall be determined during regulatory permitting. Wetland impacts typically require a minimum 1:1 creation component to ensure no net-loss of these communities pursuant to the regulatory requirements, except in circumstances where 1:1 creation is not required by the regulatory agencies. Wetland mitigation shall occur on or off Mesa College property through creation, restoration, enhancement, and/or preservation, or combination thereof, or through purchase of credits at an approved wetland mitigation bank. The District shall contact the appropriate permitting agencies (USACE, RWQCB, and/or CDFW as determined following the jurisdictional delineation conducted under mitigation measure BIO-5) to discuss project permitting requirements and the following shall apply:

A detailed wetland restoration plan shall be prepared for all projects requiring wetland mitigation (except for mitigation met through purchase of credits from an approved wetland mitigation bank). The plan shall include, at a minimum, the proposed location of the mitigation area(s), site preparation, plant palette, success criteria, monitoring requirements and other details of the habitat restoration effort, and be prepared by a qualified biologist. The plan would be subject to approval by the corresponding regulatory permitting agencies (USACE, RWQCB, and/or CDFW) as part of the regulatory permitting process.

The District may choose to mitigate wetland impacts on a project-by-project basis, or to create an advance wetland mitigation area, whereby wetland habitat is created or enhanced in advance of anticipated impacts. Advance mitigation is subject to approval by the regulatory agencies. Wetland habitat has been mapped to the west of the campus and there is potential for restoration in this area. Mitigation activities shall be undertaken only where the habitat would be considered to be viable in the long-term, given the other surrounding uses planned by the CMP. Wetland mitigation shall be subject to approval by the corresponding regulatory agencies.

7.1.2 Jurisdictional Waters and Wetlands

BIO-5: During the project planning process, if a project site has vegetation that is mapped as potential wetlands (including disturbed southern willow scrub and disturbed wetland), or the project site contains or is located immediately adjacent to a natural drainage course identified by a biologist during subsequent mapping, a qualified biologist shall conduct a jurisdictional delineation. The jurisdictional delineation shall use current regulatory guidance to identify the presence of potential regulated waters and wetlands in the project vicinity. If there is potential for the project to adversely affect wetlands or waters, impacts shall be avoided and minimized to the extent practicable, and unavoidable impacts shall be mitigated through implementation of mitigation measure BIO-4, as applicable, and conformance with applicable regulatory permit conditions.

7.1.3 Sensitive Plant Species

Survey Requirements

BIO-6: Updated sensitive plant surveys shall be conducted for all projects that would be located within sensitive habitat (Diegan coastal sage scrub, disturbed Diegan coastal sage scrub, disturbed southern willow scrub, scrub oak chaparral, or disturbed wetland) and that have not been surveyed for plants within the preceding year. Sensitive plant surveys shall be conducted by a qualified biologist during the appropriate season for detecting the species as part of the project design phase, typically spring and summer. Surveys shall be conducted on foot, employing a level of effort sufficient to provide comprehensive coverage. If sensitive plant species are observed, they shall be avoided by adjusting the project boundary if feasible, although avoidance will not be required for planted specimens. If impacts cannot be avoided through project design, the impacts to those species must be evaluated and any significant impacts shall be mitigated by on-site or off-site plant salvage and relocation, restoration (which must include the impacted species in the plant palette at a minimum 1:1 ratio) and/or purchase of mitigation bank credits, as determined appropriate by a qualified biologist and consistent with resource agency guidance, as applicable.

7.1.4 Sensitive Animal Species

Coastal California Gnatcatcher

BIO-7: During the project planning process for projects located within 500 feet of Diegan coastal sage scrub habitat (including disturbed), coastal California gnatcatcher surveys shall be conducted 7 to 10 days apart in accordance with the current USFWS protocol to determine presence/absence of the species. Surveys may be conducted either on a project-specific basis, or on a programmatic level in portions of the campus likely to be subject to disturbance in the relatively near (within one year) future. The permittee shall submit the 15-day pre-survey notification to the USFWS Carlsbad Permits Division, including an explanation that three, six (February 15 through August 31), or nine (September 1 through February 14) surveys will be conducted, depending on the location on campus and the time of year, and that the District will mitigate all impacts to Diegan coastal sage scrub at least a 1.5:1 ratio, regardless of whether or not the impacted area is occupied by gnatcatcher. Documentation of the survey results shall be provided to USFWS in accordance with current protocol survey guidelines.

BIO-8: If habitat within a proposed impact area is determined to be occupied by the coastal California gnatcatcher, the District shall contact USFWS to discuss project permitting options, if impacts cannot be avoided to the satisfaction of the USFWS. This could be accomplished through either Section 7 or Section 10(a) of the Endangered Species Act. Impacts to the coastal California gnatcatcher and gnatcatcher-occupied habitat shall be avoided/mitigated by the following measures (additional measures could be required as a result of the consultation/permitting process):

i. Diegan coastal sage scrub occupied by gnatcatcher shall not be removed during the gnatcatcher breeding season (February 15 through August 31). If gnatcatchers are not present, then only mitigation for the habitat loss will be required as described in mitigation measure BIO-3, and habitat clearing can occur at any time of the year following the survey.

ii. If construction activities will commence during the gnatcatcher breeding season (February 15 through August 31) and gnatcatchers are found within 500 feet of the grading limits based on the survey to determine presence/absence required by mitigation measure BIO-7, an acoustical technician shall be consulted to identify appropriate measures for reducing construction noise levels to 60 dBA hourly equivalent sound level (L_{EQ}) or ambient, whichever is higher, during the breeding season. If noise reduction measures are determined to be necessary, the acoustical technician or a qualified biologist shall confirm, through noise measurements, that noise attenuation measures are effective at maintaining noise at or below the specified threshold where gnatcatchers are nesting.

iii. Impacts to Diegan coastal sage scrub (regardless of gnatcatcher occupancy) shall be mitigated at least a 1.5:1 ratio by preserving areas on-site or completing compensatory mitigation off-site as described in mitigation measure BIO-3.

Raptors

Raptors observed on campus include red-tailed hawk and red-shouldered hawk. Nests and eggs of raptors are protected under the federal MBTA and CFG Code. The following mitigation measure will be implemented to avoid potential impacts to nesting raptors:

BIO-9: To avoid potential impacts to active raptor nests, if construction commences during the raptor nesting season (generally January 15 through July 31), pre-construction surveys for such nests shall be performed by a qualified biologist within 500 feet of proposed construction activities no more than seven days prior to the initiation of construction. Construction activities within 500 feet of an identified active raptor nest shall not commence during the breeding season until a qualified biologist determines that the nest is no longer active or appropriate avoidance measures have been implemented. Trees with inactive nests can be removed outside of the breeding season without causing an impact.

Other Sensitive Animals

None of the other sensitive animal species known to occur or with high potential to occur on campus (Belding's orange-throated whiptail and San Diegan legless lizard) require avoidance or mitigation measures due to lack of anticipated impacts, their low sensitivity, their ability to move out of the impact area, and/or the preservation of suitable habitat within the MHPA.

7.1.5 Nesting Birds

Implementation of the following mitigation measure would reduce potential impacts to nesting birds protected by the MBTA to less than significant:

BIO-10: No grubbing, trimming, or clearing of vegetation (including brush management) shall occur during the general avian breeding season (February 15 through August 31). If grubbing, trimming, or clearing cannot feasibly occur outside of the general avian breeding season (September 1 to February 14), a qualified biologist shall perform a pre-construction nesting bird survey no more than seven days prior to the commencement of vegetation clearing or grubbing to determine if active bird nests are present in the affected areas. Should an active migratory bird nest be located, the project biologist shall direct vegetation clearing away from the nest until it has been determined by the project biologist that the young have fledged, or the nest has failed. If there are no nesting birds (includes nest building or other breeding/nesting behavior) within the proposed impact area, clearing, grubbing, and grading shall be allowed to proceed.

7.1.6 General Impact Minimization Measures

All projects proposed adjacent to lands identified as MHPA or lands supporting sensitive biological resources will be required to comply with the minimization measures described below (or alternative measures that provide equivalent or superior protection of resources), as well as required regulatory measures to control dust and protect water quality.

Controlled Access/Errant Construction Impacts

BIO-11: For projects that are proposed within 100 feet of City-designated MHPA, a pre-construction meeting shall be held between the project manager, project biologist, and construction crews prior to construction to ensure crews are informed of the sensitivity of habitats in the MHPA. Prior to commencement of clearing or grading activities within 100 feet of the MHPA, appropriate fencing as determined during the project design phase (e.g., silt fencing, orange construction fencing, and/or chain link fencing) shall be installed around the approved limits of disturbance to prevent errant disturbance of sensitive biological resources by construction vehicles or personnel. Installation of fencing to demarcate the approved limits of

disturbance shall be verified by the project biologist prior to initiation of clearing or grading activities. All movement of construction contractors, including ingress and egress of equipment and personnel, shall be limited to designated construction zones. This fencing shall be removed upon completion of all construction activities.

If errant construction activities result in inadvertent impacts to MHPA lands outside of the approved limits of disturbance, such impacted areas shall be evaluated and quantified by a qualified biologist and revegetation options shall be coordinated with City of San Diego staff. Errant construction impacts to non-sensitive vegetation communities shall be revegetated with an appropriate native erosion control seed mix. Errant construction impacts to wetland vegetation communities and native upland vegetation communities shall be restored to the pre-impact vegetation community in addition to providing any additional mitigation required to meet the mitigation ratio specified and requirements outlined in mitigation measures BIO-3 and BIO-4.

Storage and Staging Areas During Construction

BIO-12: For projects within 50 feet of the MHPA boundary, no temporary storage or stockpiling of construction materials shall be allowed within the MHPA, and all staging areas for equipment and materials shall be located at least 50 feet from the edge of these areas. Staging areas and construction sites in proximity to the MHPA will be kept free of trash, refuse, and other waste; no waste dirt, rubble, or trash will be deposited in these areas. The proper use and disposal of oil, gasoline, diesel fuel, antifreeze, and other toxic substances during and after construction shall be enforced by the District.

Fire Prevention During Construction

BIO-13: Equipment to extinguish small brush fires (e.g., from trucks or other vehicles) shall be present on site during all phases of project construction, along with personnel trained in the use of such equipment. Smoking shall be prohibited in construction areas adjacent to flammable vegetation.

Lighting During Construction

BIO-14: Night lighting shall not be used during construction unless determined to be necessary to avoid conflicts with other campus uses. If night lighting is necessary, lights shall be directed away from sensitive vegetation communities to the greatest extent practicable and shielded to minimize temporary lighting of the surrounding habitat.

Invasive Insect Pests

BIO-15: The following Best Management Practices shall be implemented for each project that would remove or install tree species on campus that may be used as host trees by shot hole borers (SHB). Kuroshio SHB known host plants include western sycamore (*Platanus racemosa*), coast live oak (*Quercus agrifolia*), red willow (*Salix laevigata*), arroyo willow (*Salix lasiolepis*), western cottonwood (*Populus fremontii*), black willow (*Salix gooddingii*), mule fat (*Baccharis salicifolia*), coyote brush (*Baccharis pilularis*), tamarisk (*Tamarix* sp.), avocado (*Persea americana*), cork oak (*Quercus suber*), coral tree (*Erythrina humeana*), black poplar (*Populus nigra*), black locust (*Robinia pseudoacacia*), mimosa (*Albizia julibrissin*), castor bean (*Ricinus*

communis), and strawberry snowball tree (*Dombeya cacuminum*). Source: http://eskalenlab.ucr.edu/shotholeborerhosts.html.

i. Trees to be installed on campus shall be obtained from a reliable source and be free of sign of SHB infestation;

ii. An education program for on-site workers responsible for tree installation shall be implemented. The program shall describe the signs of SHB infestation (e.g., sugary exudate on trunks or branches, and SHB entry/exit holes [approximately the size of the tip of a ballpoint pen]);

iii. Sign of SHB infestation shall be reported to the CDFW and University of California Riverside's Eskalen Lab (http://www.eskalenlab.ucr.edu/) by the Project Manager and/or the project biologist;

iv. Trees with sign of SHB infestation shall be pruned or removed, as appropriate, and potential host materials shall be chipped to less than one inch prior to composting on site or transfer to a landfill;

v. Equipment that is used to prune or remove SHB-infected trees shall be disinfected prior to additional use; and

vi. Biologists monitoring mitigation sites shall be knowledgeable regarding signs of SHB infestation.

Construction Monitoring

BIO-16: For projects proposed within sensitive habitat or determined to require biological monitoring based on subsequent CEQA review, during project construction, a biological monitor shall visit the construction site at least weekly during site preparation and rough grading activities and monthly following completion of rough grading, until construction is completed. During site visits, the monitor shall be responsible for ensuring that the construction activities and staging areas are restricted to the approved limits of work, and protective fencing is adequately maintained. The monitor shall also be responsible for ensuring that the contractor adheres to the other provisions described in applicable biological mitigation measures. The monitor, in cooperation with the on-site construction manager, shall have the authority to halt construction activities in the event that these provisions are not met. Biological monitors shall submit regular reports to the District during construction documenting the implementation of all applicable grading and construction minimization measures.

7.2 MINIMIZATION OF OPERATIONAL (POST-CONSTRUCTION) IMPACTS

This section describes the measures to be implemented on a project-specific basis for projects adjacent to the MHPA to minimize indirect impacts that could occur following the construction phase.

7.2.1 Runoff and Water Quality

BIO-17:

i. Integrated Pest Management principles shall be implemented to the extent practicable for areas adjacent to the MHPA for chemical pesticides, herbicides, and fertilizers. Examples of such measures may include, but are not limited to, alternative weed/pest control measures (e.g., hand removal) and proper application techniques (e.g., conformance to manufacturer specifications and legal requirements).

ii. Irrigation for project landscaping shall be minimized and controlled in areas in and adjacent to the MHPA through efforts such as designing irrigation systems to match landscaping water needs, using sensor devices to prevent irrigation during and after precipitation, and using automatic flow reducers/shut-off valves that are triggered by a decrease in water pressure from broken sprinkler heads or pipes.

7.2.2 Landscaping/Non-Native Plant Species

BIO-18:

i. Appropriate landscaping shall be selected based on the vegetation communities within and around the project site. In areas supporting native (or disturbed native) vegetation communities, revegetation of impacted slopes shall be with appropriate native plant materials.

ii. Only non-invasive plant species shall be included in the landscape plans for campus and individual campus projects (species not listed on the California Invasive Plant Inventory prepared by the California Invasive Plant Council [Cal-IPC]). A qualified landscape architect and/or qualified biologist shall review landscape plant palettes prior to implementation to ensure that no invasive species are included.

iii. Any planting stock brought onto a project site within 100 feet of the MHPA for landscaping or habitat restoration shall be inspected to ensure it is free of pest species that could invade natural areas, including but not limited to Argentine ants and South American fire ants. Inspections of planting stock for habitat restoration shall be by a qualified biologist, and inspections of planting stock for landscaping shall be the responsibility of a qualified District Project Manager or their designated individual. Any planting stock found to be infested with such pests shall be quarantined, treated, or disposed of according to best management practices by qualified personnel, in a manner that precludes invasions into natural habitats.

7.2.3 Operational Lighting

BIO-19: Lighting adjacent to the MHPA shall be selectively placed, shielded, and directed to minimize potential impacts to sensitive species. In addition, lighting from buildings or parking lots/structures abutting the MHPA shall be shielded and/or screened by vegetation to the extent feasible.

7.2.4 Human Activity

BIO-20:

i. Projects directly adjacent to the MHPA shall install open space signage along the boundary of the preserve, indicating the presence of lands supporting sensitive habitat.

ii. Projects directly adjacent to the MHPA shall install fencing or other visual/physical barriers (such as appropriate landscaping) to discourage human encroachment into the preserve in areas where trespass is likely to occur (gradual slopes; areas of low, open vegetation; areas of previous disturbance, etc.).

iii. Maintenance of stormwater facilities shall be conducted in a manner to minimize impacts to adjacent sensitive habitats. Maintenance within or adjacent to sensitive habitats shall be overseen by a qualified biologist and occur outside the general bird breeding season which extends from February 15 through August 31.

7.3 LEVEL OF SIGNIFICANCE AFTER MITIGATION

The project would not result in significant impacts under Significance Thresholds 4, 5, or 6 found in Section 5.0. As detailed above, project implementation could result in potentially significant impacts under Significance Thresholds 1, 2, and 3. With implementation of the mitigation measures for significant impacts to sensitive biological resources outlined in this section, impacts from implementation of the CMP would be less than significant.

8.0 LIST OF PREPARERS

The following individuals contributed to the fieldwork and/or preparation of this report.

Shelby Bocks[2]	B.A., Environmental and Ocean Sciences, University of San Diego, 2021
Sean Bohac[6]	GIS Graduate Certificate, San Diego Mesa College, 2003 B.S., Biology, The Evergreen State College, 1998
Shawn Carroll[3,5]	B.S., Conservation Biology, Arizona State University, 2006
Taylor Chase[3]	B.S., Environmental Protection and Management, California Polytechnic State University-San Luis Obispo, 2016
Beth Ehsan[3,8]	M.S., Natural Resources Policy, University of Michigan, 2004 B.A., Conservation Biology and Creative Writing, University of Wisconsin, 2001
Linda Garcia[7]	M.A., English, National University, San Diego, 2012 B.A., Literatures in English, University of California, San Diego, 2003
Mandy Mathews[3]	B.S., Wildlife and Fisheries, Frostburg State University, 2008 A.A., Life Sciences and Laboratory Science, Howard Community College, 2006
Jonathan Mercado[3]	B.S. Biology, Autonomous University of Baja California, Mexico
Laura Moreton[3,4]	M.S., Biodiversity Survey, University of Sussex, 2007 B.S., Biology, San Diego State University, 2006 A.S., Biology, Southwestern College, 2004
Vanessa Toscano[1]	B.A., Biology, University of San Diego, 2006

[1] Project Manager
[2] Assistant Project Manager
[3] Biologist
[4] Primary Author
[5] Contributing Author
[6] GIS Specialist
[7] Technical Editor
[8] Senior Reviewer

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Appendix A

2025 Crotch's Bumble Bee Survey Report

HELIX Environmental Planning, Inc.
7578 El Cajon Boulevard
La Mesa, CA 91942
619.462.1515 tel
619.462.0552 fax
www.helixepi.com

November 14, 2025 01737.00004.001

Mr. Lance Lareau
San Diego Community College District
3375 Camino del Rio South, Suite 310
San Diego, CA 92108-3883

Subject: 2025 Crotch's Bumble Bee (*Bombus crotchii*) Survey Report for the Mesa2030 Comprehensive Master Plan Project

Dear Mr. Lareau:

This letter presents the results of the 2025 presence/absence survey for the Crotch's bumble bee (*Bombus crotchii;* CBB), a candidate species under the California Endangered Species Act (CESA), conducted by HELIX Environmental Planning, Inc. (HELIX) for the Mesa2030 Comprehensive Master Plan Project (project). This report describes the methods used to perform the survey and the results. The survey methods were based on the Survey Considerations for CESA Candidate Bumble Bee Species[1] guidelines document.

PROJECT LOCATION

The project site, Mesa College, is in the Clairemont Community Plan Area of the City of San Diego (City), in southwestern San Diego County (Figure 1, *Regional Location*). Mesa College is located west of Interstate 805 and State Route 163, west of Genesee Avenue, and south of Balboa Avenue, in an unsectioned portion of the Pueblo Lands of San Diego, within Township 16 South, Range 3 West, on the U.S. Geological Survey (USGS) 7.5-minute *La Jolla* quadrangle (Figure 2, *USGS Topography*). The approximately 106.5-acre project site is bordered by Beagle Street to the north, Genesee Avenue to the west, Mesa College Drive to the south, and Armstrong Street to the east (Figure 3, *Aerial Photograph*). The study area included all suitable habitat within the project site, including landscaped areas within developed areas that may provide suitable nectar resources for CBB (Figure 4, *2025 Crotch's Bumble Bee Survey Results*).

[1] CDFW. 2023. Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species. June 6. Available at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=213150&inline.

METHODS

LITERATURE REVIEW

HELIX initially performed a desktop analysis of historical and current species occurrences. HELIX consulted the California Department of Fish and Wildlife's (CDFW's) California Natural Diversity Database (CNDDB), Bumble Bee Watch, and iNaturalist to determine the nearest Crotch's bumble bee occurrence(s). According to the CNDDB records, the nearest Crotch's bumble bee was observed in 2020, 2.9 miles southwest of the study area.[2] The nearest CBB observation recorded in Bumble Bee Watch was in 2024, 3.2 miles northeast of the study area.[3] The nearest observation recorded in iNaturalist was in 2025, approximately 2.7 miles northeast of the study area.[4]

Habitat Assessment

HELIX biologist Shawn Carroll conducted a habitat assessment of the project site on July 22, 2025, to document the presence/absence of potential CBB foraging, nesting, and/or overwintering resources. Mr. Carroll classified habitat series within the survey area following A Manual of California Vegetation.[5] The biologist recorded the estimated absolute percent cover of individual plant species for each habitat series and which species were in flower at the time. Per CDFW's guidelines, potential bumble bee nesting habitat includes abandoned rodent burrows or bird nests, thatched grasses, brush piles, rock piles, fallen logs, and bumble bees have also been found nesting in human-made structures such as walls, rubble, or abandoned furniture. Potential overwintering habitat includes leaf litter and woody forest edge. A list of plant species observed during the habitat assessment and their percent cover by habitat alliance is included in Attachment A, *Plant Species Composition by Vegetation Community for the Mesa2030 Comprehensive Master Plan Project Crotch's Bumble Bee Survey.*

Focused Surveys

Mr. Carroll performed three surveys, spaced at least two weeks apart, in accordance with the current CDFW survey guidelines (Table 1, *Survey Dates*). The first survey visit was conducted concurrently with the habitat assessment. The habitat assessment and focused surveys were conducted during the CBB colony active period (April to August). CBB surveys focused on suitable CBB nesting locations, pollen and nectar sources, and foraging bumble bee activity. Because the study area was so large (106.5 acres), the survey requirement to cover three acres per hour would be infeasible over the full project site. Therefore, the approach in this survey was to sample the most suitable habitats within the project site utilizing meandering transects within suitable vegetated habitats within the study area (see Table 1).

The CBB surveys generally met the guideline recommendations to "occur during the day (at least an hour after sunrise and at least two hours before sunset, though ideally between 9am-1pm) on warm, but not hot, sunny days (65-90 degrees F), with low wind (less than 8 mph)." Survey conditions started out cloudy during Survey 1 but quickly cleared. Surveys were conducted with binoculars and a camera to

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[2] California Department of Fish and Wildlife. 2025. California Natural Diversity Database and Rarefind. California Department of Fish and Wildlife: Sacramento, California. Available from: https://www.wildlife.ca.gov/Data/CNDDB/Maps-and-Data.

[3] Bumble Bee Watch. 2025. Citizen Science Database. Available from: https://www.bumblebeewatch.org/maps/.

[4] iNaturalist. 2025. Explore Observation, Crotch's Bumble Bee. Available from: https://www.inaturalist.org/observations?place_id=158630&subview=map&taxon_id=271451.

[5] Sawyer, John O., and Todd Keeler-Wolf. 1995. *A Manual of California Vegetation*. Sacramento: California Native Plant Society.

aid in insect detection and identification. When a bumble bee was observed, it was photographed (if possible) and recorded, as was the species of plant on which it was observed. The biologists recorded which species were in flower at the time of each survey. Representative photos taken during the survey are included in Attachment B, *Representative Site Photographs*. Plant species recorded in flower during each survey are presented in Attachment C, *Plant Species Observed in Flower for the Mesa2030 Comprehensive Master Plan Project Crotch's Bumble Bee Survey*.

Table 1
SURVEY DATES

Survey Number	Surveyor[1]	Date/ Time	Survey Conditions	Crotch's Bumble Bee Observed
Habitat Assessment	Shawn Carroll	July 22, 2025	NA	No
1	Shawn Carroll	July 22, 2025 0900/1200	68°F / 1-3 mph / 100% cc 71°F / 4-8 mph / 20% cc	No
2	Shawn Carroll	August 5, 2025 1130/1400	75°F / 6-9 mph / 0% cc 73°F / 4-7 mph / 0% cc	No
3	Shawn Carroll	August 21, 2025 1000/1200	80°F / 2-4 mph / 10% cc 82°F / 2-4 mph / 0% cc	No

F = Fahrenheit; mph = miles per hour; cc = cloud cover

1 Surveyor attended (1) *Bombus crotchii* Workshop – 2024, University of California, Riverside, Department of Entomology, and (2) Bumble Bee Atlas Training 2024.

RESULTS

Habitat Assessment

The study area encompassed approximately 12.3 acres of potentially suitable CBB habitat (see Figure 4). Vegetation communities surveyed included *Eriogonum fasciculatum* Alliance, *Salvia mellifera* – (*Artemisia californica*) Shrubland Alliance (including disturbed), and *Quercus berberidifolia* Shrubland Alliance (Attachment B, *Representative Site Photographs*). Within the study area, a total of 1.6 acres of developed lands were also surveyed, where native plantings were present in landscaped areas, which were in the center of campus (Figure 4). Although most of the developed land consists of parking lots, buildings, and sidewalks, it is landscaped with a variety of native and non-native flowering species that may provide suitable foraging habitat for this species. The project site is bordered by residential and commercial development to the north and west, with parks and natural open space lands to the east and south. Representative photos of the project site are shown in Attachment B, *Representative Site Photographs*.

Suitable nesting substrate for CBB was noted within the project site and included bare ground, thatched grasses, rubble and debris piles, rodent burrows, large fallen limbs, tree stumps, leaf litter, cavities, and brush piles. Species cover of flowering plants was low across the project site, with California buckwheat (*Eriogonum fasciculatum*) providing the most abundant potential nectar source. San Diego sunflower (*Bahiopsis laciniata*), which is also a species commonly used as a nectar source by CBB, was a common species within the *Eriogonum fasciculatum* Shrubland and *Salvia mellifera* – (*Artemisia californica*) Shrubland Alliances on-site. Within irrigated ornamental areas of the project site, California buckwheat,

purple sage (*Salvia leucophylla*), San Diego sunflower, and Menzies' goldenbush (*Isocoma menziesii*) were flowering.

Only a few nectar species commonly used by Crotch's bumble bee (e.g., genera *Acmispon, Antirrhinum, Asclepias, Cirsium, Clarkia, Cordylanthus, Dendromecon, Ehrendorferia, Eriodictyon, Eriogonum, Eschscholzia, Euthamia, Hypericum, Keckiella, Lantana, Lupinus, Monardella, Phacelia, Salvia, Trichostema, and/or Vicia*) were noted on-site and included California buckwheat (*Eriogonum fasciculatum*) and black sage (*Salvia mellifera*).

Focused Surveys

Survey results were negative for CBB (see Figure 4).

One bumble bee species was observed during the surveys, yellow-faced bumble bee (*Bombus vosnesenskii*), of which multiple individuals were observed foraging on a flowering tipa tree (*Tipuana tipu*). Other bee species observed included western honey bees (*Apis mellifera*), ligated furrow bees (*Halictus ligatus*), longhorn bees (*Melissodes* sp.), and digger bees (*Anthophora* sp.). The latter three species were all observed within landscaped areas in the center of the project site.

A total of 19 plant species were observed in flower during the surveys (Attachment C). The cover of flowering plants decreased significantly by the end of the survey effort, as many flowering plants went to seed or senesced as the season progressed.

CONCLUSION

Focused surveys indicated the absence of Crotch's bumble bee occupying the Mesa College project site. Please contact Shawn Carroll at ShawnC@helixepi.com or Laura Moreton at LauraM@helixepi.com should you have any questions about this report.

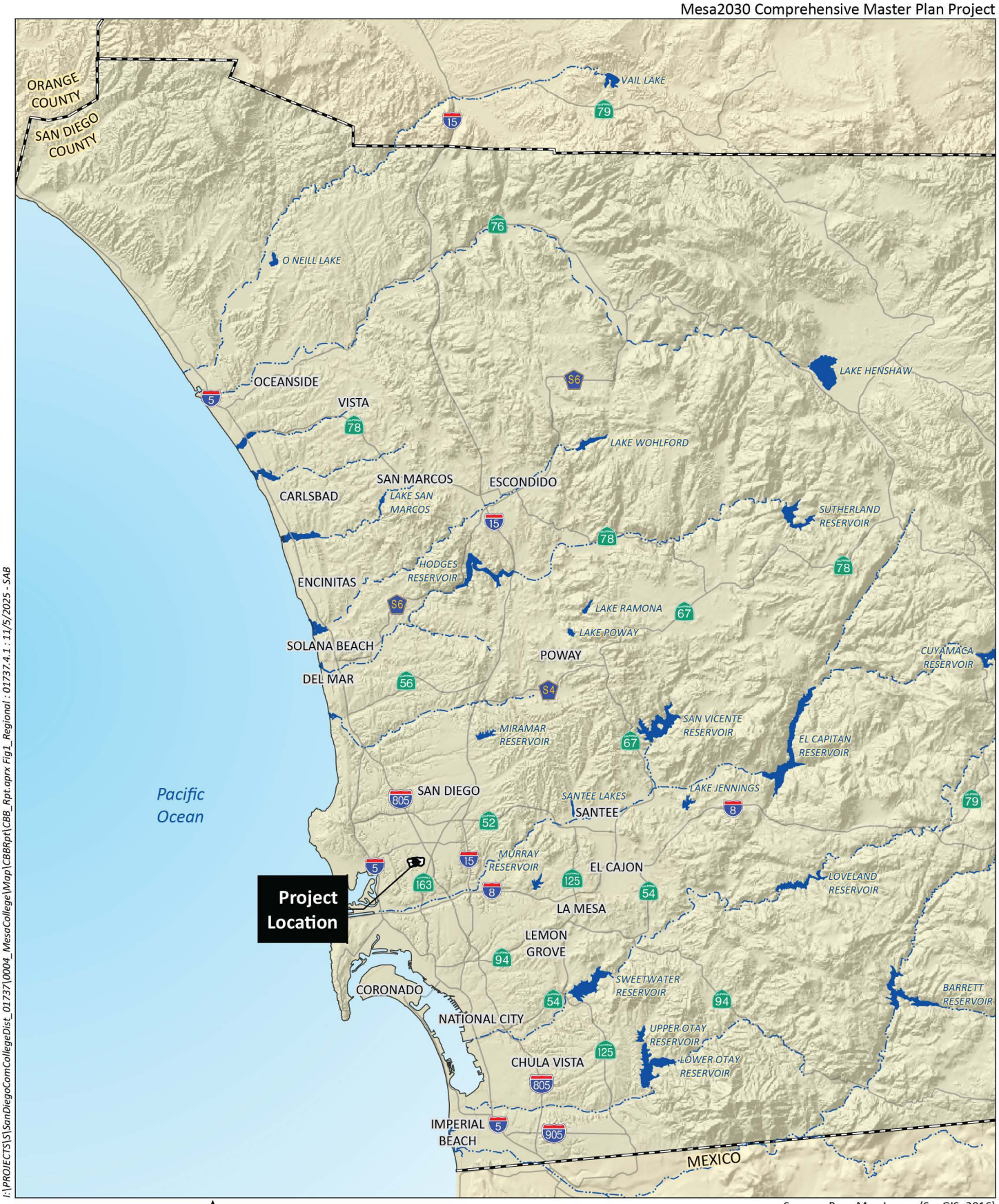
Sincerely,

Shawn Carroll
Senior Scientist

Enclosures:

Figure 1	Regional Location
Figure 2	USGS Topography
Figure 3	Aerial Photograph
Figure 4	2025 Crotch's Bumble Bee Survey Results
Attachment A	Plant Species Composition by Vegetation Community for the Mesa2030 Comprehensive Master Plan Project Crotch's Bumble Bee Survey
Attachment B	Representative Site Photographs
Attachment C	Plant Species Observed in Flower for the Mesa2030 Comprehensive Master Plan Project Crotch's Bumble Bee Survey

Figures



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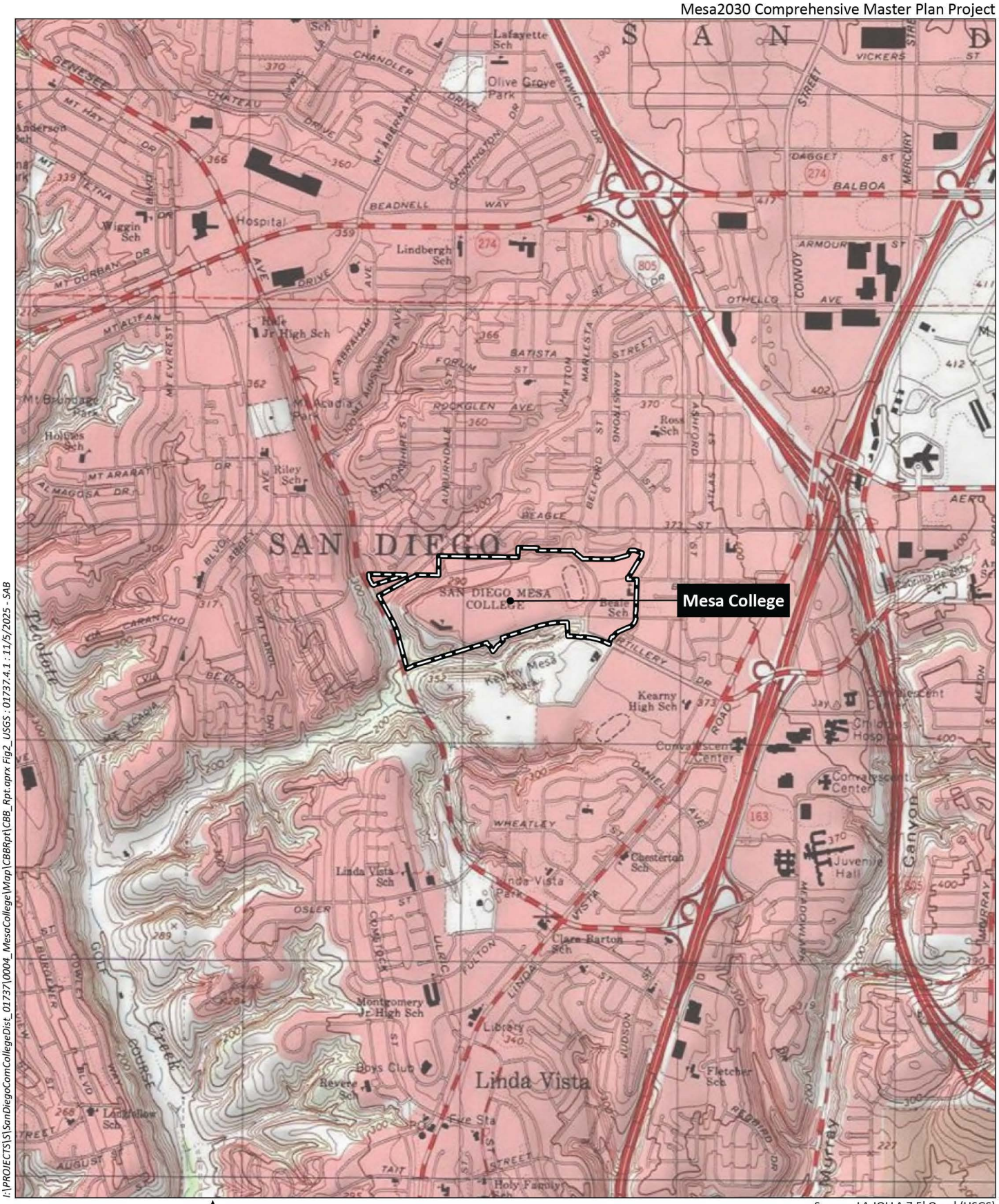
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Source: Base Map Layers (SanGIS, 2016)

HELIX Environmental Planning

Regional Location

Figure 1



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0 2,000 Feet

Source: LA JOLLA 7.5' Quad (USGS)

HELIX Environmental Planning

USGS Topography

Figure 2



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0 700 Feet

Source: Aerial (Maxar, 2025)

HELIX Environmental Planning

Aerial Photograph

Figure 3

Mesa College

Study Area

Habitat Alliance (Manual of California Vegetation)

Eriogonum fasciculatum Shrubland Alliance*

Eucalyptus spp. - *Ailanthus altissima* - *Robinia pseudoacacia* Woodland Semi-Natural Alliance

Quercus berberidifolia Shrubland Alliance*

Salix lasiolepis Shrubland Alliance

Salvia mellifera - *(Artemisia californica)* Shrubland Alliance (Disturbed)*

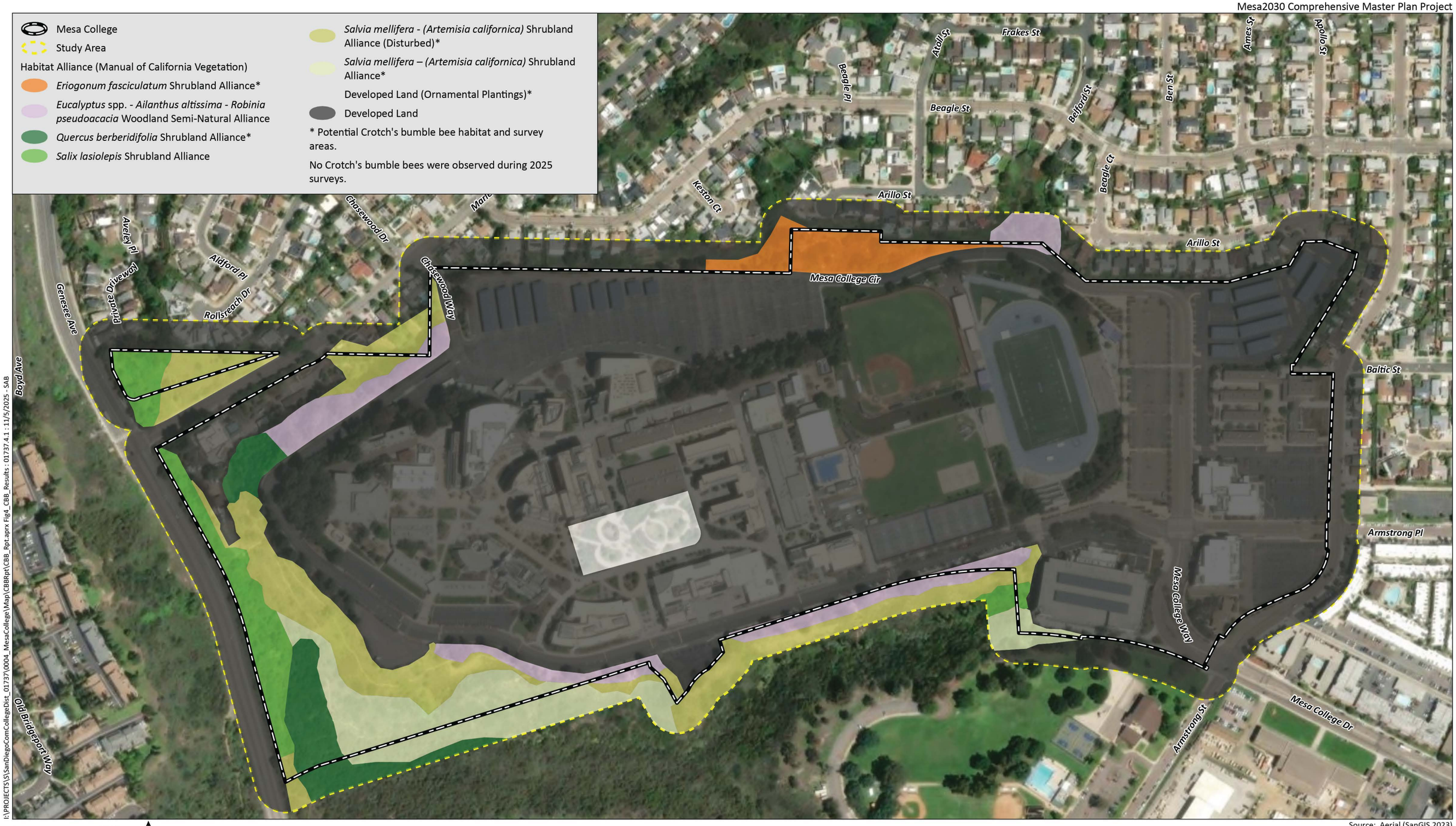
Salvia mellifera – *(Artemisia californica)* Shrubland Alliance*

Developed Land (Ornamental Plantings)*

Developed Land

* Potential Crotch's bumble bee habitat and survey areas.

No Crotch's bumble bees were observed during 2025 surveys.



0 300 Feet

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Source: Aerial (SanGIS 2023)

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HELIX Environmental Planning

2025 Crotch's Bumble Bee Survey Results

Figure 4

Attachment A

Plant Species Composition by Vegetation Community for the Mesa2030 Comprehensive Master Plan Project Crotch's Bumble Bee Survey

Scientific Name*,†,1	Common Name	Percent Cover
Salvia mellifera – (*Artemisia californica*) Shrubland Alliance (including Disturbed)		
Salvia mellifera	**black sage**	**18**
Artemisia californica	coastal sage brush	14
Eriogonum fasciculatum	**California buckwheat**	**10**
Eriodictyon crassifolium	**thick leaved yerba santa**	**5**
Malosma laurina	laurel sumac	5
Rhus integrifolia	lemonade berry	5
Salvia apiana	**white sage**	**5**
Encelia farinosa	brittlebush	3
Isocoma menziesii	white flowered goldenbush	3
Quercus berberidifolia	inland scrub oak	3
Adenostoma fasciculatum	chamise	3
Heteromeles arbutifolia	toyon	3
Baccharis sarothroides	broom baccharis	2
Eriogonum fasciculatum Shrubland Alliance		
Eriogonum fasciculatum	**California buckwheat**	**30**
*Carpobrotus edulis**	iceplant	10
Artemisia californica	coastal sage brush	10
*Parkinsonia aculeata**	Jerusalem thorn	10
Malosma laurina	laurel sumac	7
*Schinus terebinthifolia**	Brazilian pepper tree	7
Rhus integrifolia	lemonade berry	5
Baccharis pilularis	coyote brush	5
Opuntia ficus-indica	Mission cactus	3
*Crassula ovata**	jade plant	3
Eucalyptus spp. - *Ailanthus altissima* - *Robinia pseudoacacia* Woodland Semi-Natural Alliance		
*Eucalyptus polyanthemos**	silver dollar gum	30
*Eucalyptus camaldulensis**	red gum	20
*Schinus terebinthifolia**	Brazilian pepper tree	15
*Leptospermum laevigatum**	Australian tea tree	10
Baccharis sarothroides	broom baccharis	5
Malosma laurina	laurel sumac	3
Rhus integrifolia	lemonade berry	3
Eriogonum fasciculatum	**California buckwheat**	**3**
Ceanothus cuneatus	buck brush	3
*Carpobrotus edulis**	iceplant	2
Quercus berberidifolia Shrubland Alliance		
Quercus berberidifolia	inland scrub oak	40
Eriogonum fasciculatum	**California buckwheat**	**20**
Quercus dumosa†	Nuttall's scrub oak	10
*Carpobrotus edulis**	iceplant	5
Salix lasiolepis Shrubland Alliance		
Salix gooddingii	Gooding's willow	30
*Schinus terebinthifolia**	Brazilian pepper tree	15
Quercus agrifolia	coast live oak	15
*Washingtonia robusta**	Mexican fan palm	10
*Arundo donax**	giant reed	10
Baccharis pilularis	coyote brush	5

Scientific Name*,†,1	Common Name	Percent Cover
Baccharis salicifolia	mule fat	5

* Non-native

† Sensitive

1 **Bold text** indicates nectar species commonly used by Crotch's bumble bee (genera *Acmispon, Antirrhinum, Asclepias, Cirsium, Clarkia, Cordylanthus, Dendromecon, Ehrendorferia, Eriodictyon, Eriogonum, Eschscholzia, Euthamia, Hypericum, Keckiella, Lantana, Lupinus, Monardella, Phacelia, Salvia, Trichostema, and Vicia*). Additional species observed at less than 2 percent cover are not included in table. Species previously documented on the project site but not observed during the habitat assessment are also not included in table.

Attachment B

Representative Site Photographs



Photo 1. Example of *Eriogonum fasciculatum* Shrubland Alliance on-site. Photo taken on July 22, 2025.



Photo 2. Example of *Salvia mellifera* – (*Artemisia californica*) Shrubland Alliance on-site. Photo taken on July 22, 2025.

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Photo 3. Example of *Salvia mellifera* – (*Artemisia californica*) Shrubland Alliance (Disturbed) on-site. Portions of this community are thinned for fire management. Photo taken July 22, 2025.



Photo 4. Example of ornamental plantings with potential nectar sources within developed areas. Photo taken on August 5, 2025.

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Photo 5. Example of *Quercus berberidifolia* Shrubland Alliance on-site. Photo taken on July 22, 2025.



Photo 6. Yellow-faced bumble bee (*Bombus vosnesenskii*) feeding on tipa (*Tipuana tipu*). Photo taken on August 5, 2025.

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Attachment C

Plant Species Observed in Flower for the Mesa2030 Comprehensive Master Plan Project Crotch's Bumble Bee Survey

Family	Scientific Name[1]	Common Name	Survey[2]
Agavaceae	*Agave americana**	American century plant	2, 3
Aizoaceae	*Carpobrotus edulis**	iceplant	HA, 1, 2
Apiaceae	*Foeniculum vulgare*	fennel	2, 3
Asteraceae	*Bahiopsis laciniata*†	San Diego County sunflower‡	HA, 1, 2, 3
	Isocoma menziesii	white flowered goldenbush‡	HA, 1, 2, 3
	Stephanomeria virgata	twiggy wreath plant	HA, 1
Boraginaceae	*Heliotropium curassavicum*	salt heliotrope	HA, 1, 2, 3
Cactaceae	*Opuntia ficus-indica**	Mission cactus	HA, 1, 2
	Opuntia littoralis	prickly pear	HA, 1, 2
Crassulaceae	*Dudleya pulverulenta*	chalk dudleya	HA, 1
Fabaceae	*Acacia longifolia**	golden wattle	2
	*Parkinsonia aculeata**	Jerusalem thorn	2
	*Tipuana tipu**	tipa	2, 3
Lamiaceae	***Salvia apiana***	**white sage**	**HA, 1**
	Salvia leucophylla	**purple sage**‡	**HA, 1, 2, 3**
Plumbaginaceae	*Limonium perezii**	Perez's sea lavender	HA
Polygonaceae	***Eriogonum fasciculatum***	**California buckwheat**‡	**HA, 1, 2, 3**
Rosaceae	*Heteromeles arbutifolia*	toyon	HA, 1
Solanaceae	*Nicotiana glauca**	tree tobacco	HA, 1, 2, 3

* Non-native

† Sensitive

‡ Potential nectar sources planted as irrigated ornamentals in developed portions of the project site.

[1] **Bold text** indicates nectar species commonly used by Crotch's bumble bee (genera *Acmispon, Antirrhinum, Asclepias, Cirsium, Clarkia, Cordylanthus, Dendromecon, Ehrendorferia, Eriodictyon, Eriogonum, Eschscholzia, Euthamia, Hypericum, Keckiella, Lantana, Lupinus, Monardella, Phacelia, Salvia, Trichostema,* and *Vicia*).

[2] Species observed flowering during a given survey:
HA = Habitat Assessment (July 22, 2025)
1 = Survey 1 (July 22, 2025)
2 = Survey 2 (August 5, 2025)
3 = Survey 3 (August 21, 2025)

Appendix B

Plant Species Observed

Family	Scientific Name	Common Name	Vegetation Community[1]
Agavaceae	*Agave americana**	American century plant	DEV
	Agave shawii†	Shaw's agave	DEV
	Hesperoyucca whipplei	chaparral yucca	DEV
Aizoaceae	*Carpobrotus edulis**	iceplant	DEV, DH, EW
Anacardiaceae	*Malosma laurina*	laurel sumac	DCSS, DEV, DH
	Rhus integrifolia	lemonadeberry	DCSS, DH, EW
	*Schinus terebinthifolia**	Brazilian pepper tree	DCSS, DEV, DH, SWS-D
	Toxicodendron diversilobum	poison oak	SWS-D
Apiaceae	*Daucus pusillus*	wild carrot	DHEW
	*Foeniculum vulgare**	fennel	SWS-D
Arecaceae	*Washingtonia robusta**	Mexican fan palm	DW, SWS-D
Asparagaceae	*Asparagus asparagoides**	African asparagus fern	EW
Asphodelaceae	*Aloe arborescens**	candelabra aloe	DEV
	*Aloiampelos striatula**	hardy aloe	DEV
	*Asphodelus fistulosus**	onionweed	DH
Asteraceae	*Ambrosia psilostachya*	western ragweed	SWS-D
	Artemisia californica	coastal sagebrush	DCSS, DH, SOC
	Baccharis pilularis	coyote brush	DCSS, SWS-D, EW
	Baccharis salicifolia	mule fat	SWS-D
	Baccharis sarothroides	broom baccharis	DH
	Bahiopsis laciniata†	San Diego sunflower	DCSS, DEV, DH
	*Bidens pilosa**	hairy beggarticks	DEV
	*Centaurea melitensis**	tocalote	DCSS, DH
	Deinandra fasciculata	fascicled tarplant	DCSS
	Encelia californica	bush sunflower	DCSS
	Encelia farinosa	brittlebush	DEV, DH, SWS-D
	Erigeron canadensis	horseweed	DEV
	Eriophyllum confertiflorum	golden-yarrow	DCSS
	Gamochaeta stagnalis	desert cudweed	DH, EW
	Hazardia squarrosa	saw toothed goldenbush	SOC
	Isocoma menziesii	San Diego goldenbush	DCSS
	*Lactuca serriola**	prickly lettuce	DH
	Pseudognaphalium biolettii	bicolor cudweed	DCSS
	Pseudognaphalium californicum	California everlasting	DCSS
	*Pseudognaphalium luteoalbum**	jersey cudweed	DCSS, DH
	*Sonchus asper**	spiny sow-thistle	DEV
	Stephanomeria pauciflora	wire lettuce	DCSS
	Stephanomeria virgata	twiggy wreath plant	DCSS
Boraginaceae	*Cryptantha muricata*	prickly cryptantha	DCSS, DH
	Heliotropium curassavicum	salt heliotrope	SWS-D
	*Echium candicans**	pride of madeira	DH
	Eriodictyon californicum	yerba santa	DCSS
	Eriodictyon crassifolium	thick leaved yerba santa	DCSS
Brassicaceae	*Brassica nigra**	black mustard	DCSS, DH
	*Hirschfeldia incana**	short-pod mustard	DH
	Lepidium sp.	peppergrass	DCSS
Cactaceae	*Cylindropuntia prolifera*	coast cholla	DCSS, DEV
	Ferocactus viridescens†	San Diego barrel cactus	DCSS
	Mammillaria dioica	fishhook cactus	DCSS

Family	Scientific Name	Common Name	Vegetation Community[1]
Cactaceae (cont.)	*Opuntia ficus-indica**	mission cactus	DH
	Opuntia littoralis	coastal prickly pear	DCSS, DH
Chenopodiaceae	*Atriplex semibaccata**	Australian saltbush	DH
	*Chenopodium murale**	nettle leaf goosefoot	EW, SOC
	*Salsola tragus**	Russian thistle	DH
Cleomaceae	*Peritoma arborea*	bladderpod	DCSS
Crassulaceae	*Cotyledon orbiculate**	pig's ear	DCSS, DH
	*Crassula ovata**	jade plant	DCSS
	Dudleya edulis	ladies-fingers	DCSS
	Dudleya pulverulenta	chalk-lettuce	DCSS
	*Kalanchoe daigremontiana**	mother of thousands	DH
Convolvulaceae	*Cuscuta* sp.	dodder	DCSS
Cucurbitaceae	*Marah macrocarpa*	chilicothe	DCSS
Cupressaceae	*Hesperocyparis* sp.	cypress	DEV
Cyperaceae	*Cyperus alternifolius**	umbrella sedge	DH
Euphorbiaceae	*Euphorbia maculata**	spotted spurge	DCSS
	*Euphorbia tirucalli **	Indian tree spurge	DEV
	*Ricinus communis**	castor bean	DW, SWS-D
Ericaceae	*Arbutus marina**	strawberry tree	DEV
	Arctostaphylos glandulosa	Eastwood manzanita	DEV
	Xylococcus bicolor	mission manzanita	DCSS
Fabaceae	*Acacia cyclops**	coastal wattle	DH, EW
	*Acacia longifolia**	golden wattle	DEV
	*Acacia redolens**	prostrate acacia	DEV
	Acacia sp.*	acacia	DCSS, DEV
	*Acacia stenophylla**	shoestring acacia	DEV
	Acmispon glaber	deerweed	DCSS
	Astragalus trichopodus	Santa Barbara milk vetch	DCSS
	*Bauhinia galpinii**	South African orchid bush	DEV
	Lupinus succulentus	arroyo lupine	DH
	*Melilotus indicus**	annual yellow sweetclover	DEV, SWS-D
	*Parkinsonia aculeata**	Mexican palo verde	DEV
	*Tipuana tipu**	tipa	DCSS
Fagaceae	*Quercus agrifolia*	coast live oak	DEV, SWS-D
	Quercus berberidifolia	inland scrub oak	SOC
	Quercus dumosa†	Nuttall's scrub oak	SOC
Geraniaceae	*Erodium cicutarium**	coastal heron's bill	DH
Hamamelidaceae	*Liquidambar styraciflua**	sweetgum	DEV
Iridaceae	*Dietes grandiflora**	fairy iris	DEV
Lamiaceae	*Salvia apiana*	white sage	DCSS
	Salvia clevelandii	cleveland sage	DEV
	*Salvia greggii**	autumn sage	DH
	Salvia leucophylla	purple sage	DEV
	Salvia melifera	black sage	DCSS
Malvaceae	*Malacothamnus fasciculatus*	chaparral bush mallow	SWS-D
Myrsinaceae	*Lysimachia arvensis**	scarlet pimpernel	DDH
Myrtaceae	*Eucalyptus camaldulensis**	red river gum	EW
	*Eucalyptus cladocalyx**	sugar gum	EW
	*Eucalyptus conferruminate**	spider gum	DH

Family	Scientific Name	Common Name	Vegetation Community[1]
Myrtaceae (cont.)	*Eucalyptus globulus**	blue gum	DCSS, DEV, EW
	*Eucalyptus polyanthemos**	silver dollar gum	EW
	Eucalyptus sp.*	eucalyptus	DCSS
	*Leptospermum laevigatum**	Australian tea tree	EW
	*Melaleuca viminalis**	weeping bottlebrush	DEV
Nyctaginaceae	*Mirabilis laevis*	desert wishbone bush	DCSS
Oleaceae	*Fraxinus uhdei**	shamel ash	DH
	*Olea europaea**	olive	DEV
Orobanchaceae	*Cordylanthus* sp.	bird's beak	DCSS
Oxalidaceae	*Oxalis* sp.	wood sorrel	DH
Papaveraceae	*Eschscholzia californica*	California poppy	DEV
Phrymaceae	*Diplacus aurantiacus*	sticky monkeyflower	DCSS, DH
Pinaceae	*Pinus halepensis**	Aleppo pine	DEV, DH
	Pinus torreyana ssp. *torreyana*†	Torrey pine	DEV
Platanaceae	*Platanus racemosa**	California sycamore	DEV
Plumbaginaceae	*Limonium perezii**	Perez's sea lavender	DCSS
Poaceae	*Arundo donax**	giant reed	DW, SWS-D
	*Bromus diandrus**	ripgut brome	DCSS
	*Bromus madritensis**	foxtail chess	DCSS
	*Cenchrus setaceus**	crimson fountaingrass	DEV
	*Cortaderia selloana**	pampas grass	DEV, DH, DW, SWS-D
	*Cynodon dactylon**	Bermuda grass	DH
	Elymus triticoides	beardless wild rye	DEV
	*Eragrostis pilosa**	Indian lovegrass	DCSS, DEV
	*Festuca myuros**	rattail sixweeks grass	DCSS
	*Melinis repens**	natal grass	EW
	Muhlenbergia californica	California muhly	DH
	*Pennisetum setaceum**	fountain grass	DCSS, DH
	Stipa pulchra	purple needlegrass	DEV
	Stipa sp.	needlegrass	DCSS
Polygonaceae	*Eriogonum fasciculatum*	California buckwheat	DCSS, DEV, EW, SOC
	Rumex sp.*	dock	DSWS
Rhamnaceae	*Ceanothus cuneatus*	buck brush	DCSS, EW
	Frangula californica	California coffeeberry	DEV
	Rhamnus crocea	spiny redberry	DCSS
Rosaceae	*Adenostoma fasciculatum*	chamise	DCSS
	Heteromeles arbutifolia	toyon	DCSS, DEV, EW
Rubiaceae	*Galium nuttallii*	climbing bedstraw	DH, EW
	Galium sp.	bedstraw	DCSS
Salicaceae	*Populus fremontii*	Fremont cottonwood	DEV
	Salix gooddingii	Gooding's willow	SWS-D
	Salix laevigata	polished willow	DEV, SWS-D
	Salix lasiolepis	arroyo willow	SWS-D
	Salix sp.	willow	DW, SWS-D
Sapindaceae	*Koelreuteria bipinnata**	golden rain tree	DEV
Scrophulariaceae	*Myoporum* sp.*	myoporum	DEV, DW
Selaginellaceae	*Selaginella cinerascens*†	ashy spike-moss	DCSS
Simmondsiaceae	*Simmondsia chinensis*	jojoba	DH

Family	Scientific Name	Common Name	Vegetation Community[1]
Solanaceae	*Nicotiana glauca**	tree tobacco	DH
	*Solanum nigrum**	black nightshade	DCSS, DH
Tropaeolaceae	*Tropaeolum majus**	garden nasturtium	DH
Urticaceae	*Urtica dioica*	stinging nettle	DH
Zamiaceae	*Encephalartos horridus**	Eastern cape blue cycad	DEV

† Special-Status Species

* Non-Native Species

[1] DCSS=Diegan coastal sage scrub; DEV=Developed; DH=Disturbed habitat; EW=Eucalyptus woodland; SOC=Scrub Oak Chaparral; DW=Disturbed wetland; SWS-D=Disturbed southern willow scrub.

Appendix C

Animal Species Observed or Detected

Order	Family	Scientific Name†	Common Name
INVERTEBRATES			
Hymenoptera	Apidae	*Anthophora* sp.	Digger Bee
		Apis mellifera	Western Honey Bee
		Bombus vosnesenskii	Yellow-faced Bumble Bee
		Melissodes sp.	Longhorn Bee
	Halictidae	*Halictus ligatus*	Ligated Furrow Bee
VERTEBRATES			
Reptiles			
Squamata	Anguidae	*Elgaria multicarinata*	Southern Alligator Lizard
	Phrynosomatidae	*Uta stansburiana elegans*	Western Side-blotched Lizard
Birds			
Accipitriformes	Accipitridae	*Buteo jamaicensis*	Red-tailed Hawk
		Buteo lineatus	Red-shouldered Hawk
Apodiformes	Trochilidae	*Calypte anna*	Anna's Hummingbird
Passeriformes	Aegithalidae	*Psaltriparus minimus*	Bushtit
	Corvidae	*Aphelocoma californica*	California Scrub-Jay
		Corvus brachyrhynchos	American Crow
		Corvus corax	Common Raven
	Estrildidae	*Lonchura punctulata*	Scaly-breasted Munia
	Fringillidae	*Haemorhous mexicanus*	House Finch
		Spinus psaltria	Lesser Goldfinch
	Mimidae	*Mimus polyglottos*	Northern Mockingbird
		Toxostoma redivivum	California Thrasher
	Parulidae	*Setophaga coronata*	Yellow-rumped Warbler
	Passerellidae	*Junco hyemalis*	Dark-eyed Junco
		Melospiza melodia	Song Sparrow
		Melozone crissalis	California Towhee
		Pipilo maculatus	Spotted Towhee
		Zonotrichia leucophrys	White-crowned Sparrow
	Polioptilidae	*Polioptila californica californica*†	Coastal California Gnatcatcher
	Regulidae	*Corthylio calendula*	Ruby-crowned Kinglet
	Sylviidae	*Chamaea fasciata*	Wrentit
	Troglodytidae	*Thryomanes bewickii*	Bewick's Wren
	Turdidae	*Sialia mexicana*	Western Bluebird
	Vireonidae	*Vireo huttoni*	Hutton's Vireo
Piciformes	Picidae	*Dryobates nuttallii*	Nuttall's Woodpecker
Mammals			
Rodentia	Sciuridae	*Otospermophilus beecheyi*	California Ground Squirrel

† Special-Status Species

Appendix D

Special-Status Plant Species Potential to Occur

Scientific Name	Common Name	Status[1]	Habitat Associations	Potential to Occur[2]
Acanthomintha ilicifolia	San Diego thorn-mint	FT/CE CRPR 1B.1 MSCP Covered NE	Annual herb. Typically grows on clay soils within chaparral, coastal scrub, valley and foothill grassland, and vernal pools. Found in San Diego County. Flowering period: April to June. Elevation: below 30 to 3,150 feet (10 to 960 meters).	**None**. The study area lacks suitable clay soils and vernal pool habitat to support this species.
Agave shawii var. *shawii*	Shaw's agave	--/-- CRPR 2B.1 MSCP Covered NE	Perennial succulent. Most often found on coastal bluffs and along mesas and foothill within coast bluff scrub, coastal scrub. Maritime succulent scrub, and chaparral. Found in San Diego County. Flowering period: September to May. Elevation: below 395 feet (120 meters).	**Present (Planted)**. Although this species is present within the study area, the few individuals present were recently planted along a trail.
Brodiaea orcuttii	Orcutt's brodiaea	--/-- CRPR 1B.1 MSCP Covered	Perennial bulbiferous herb. Occurs within closed-cone coniferous forest, chaparral, cismontane woodland, meadows and seeps, valley and foothill grassland, and vernal pools. Prefers mesic or clay soils. Found in Riverside San Diego counties. Flowering period: May to July. Elevation: 98 to 5,550 feet (30 to 1,692 meters).	**None.** The study area lacks suitable clay soils and habitat types suitable for supporting this species.
Ceanothus verrucosus	Wart-stemmed ceanothus	--/-- CRPR 2B.2 MSCP Covered	Perennial shrub. Found on rocky slopes within chaparral, particularly southern maritime chaparral. Found in Riverside and San Diego counties. Flowering period: December to May. Elevation: below 1,245 feet (380 meters).	**Presumed Absent**. This conspicuous perennial shrub would have been apparent at the time of the 2025 biological survey.
Chloropyron maritimum ssp. *maritimum*	Salt marsh bird's-beak	FE/SE CRPR 1B.2 MSCP Covered	Annual herb. Found in coastal salt marshes and swamps, particularly on slightly raised hummocks, and on coastal dunes. Found along the coastal regions from San Luis Obispo County south to San Diego County and east to San Bernardino County. Flowering period: May to October. Elevation: below 100 feet (30 meters).	**None**. There is no suitable habitat for this species within the study area.

Scientific Name	Common Name	Status[1]	Habitat Associations	Potential to Occur[2]
Chorizanthe orcuttiana	Orcutt's spineflower	FE/SE CRPR 1B.1	Annual herb. Found in sandy openings of coastal sage scrub, maritime chaparral, and closed-cone coniferous forests. Known from only three occurrences in Encinitas and Point Loma within San Diego County. Flowering period: March to May. Elevation: 5 to 410 feet (3 to 125 meters).	**None**. There is no suitable habitat for this species within the study area.
Eryngium aristulatum var. *parishii*	San Diego button celery	FE/SE CRPR 1B.1 MSCP Covered	Annual or perennial herb. Grows in vernal pools and other mesic areas, such as marshes. Found in Los Angeles, Orange, Riverside, and San Diego counties. Flowering period: April to June. Elevation: 65 to 2,035 feet (20 to 620 meters).	**None**. There is no suitable habitat for this species within the study area.
Ferocactus viridescens	San Diego barrel cactus	--/-- CRPR 2B.1 MSCP Covered	Perennial (stem succulent) shrub. Grows in sandy to rocky areas within chaparral, valley grassland and coastal sage scrub communities. Found in San Diego County. Flowering period: May to June. Elevation: 5 to 492 feet (3 to 450 meters).	**Present (Planted)**. Although this species is present within the study area, the few individuals present were recently planted along a trail.
Isocoma menziesii var. *decumbens*	Decumbent goldenbush	--/-- CRPR 1B.2	Perennial shrub. Occurs in sandy soil and disturbed areas on the inland side of dunes, hillsides, and arroyos within coastal sage scrub and chaparral. Found in along the coast of southern California, Peninsular Ranges, and Channel Islands. Flowering period: July to November. Elevation: below 656 feet (200 meters).	**Presumed Absent**. Although this species has been recorded in the vicinity of the study area, this conspicuous perennial shrub would have been apparent at the time of the 2025 biological survey.
Monardella viminea	Willowy monardella	FE/SE CRPR 1B.1 MSCP Covered NE	Perennial herb. Associated with riparian scrub, usually at sandy locales in seasonally dry washes. Generally, there is no canopy cover and river cobbles may lie in close proximity. Found in San Diego County. Flowering period: June to August. Elevation: 160 to 740 feet (50 to 225 meters).	**None**. There is no suitable habitat for this species within the study area.

Scientific Name	Common Name	Status[1]	Habitat Associations	Potential to Occur[2]
Orcuttia californica	California Orcutt grass	FE/SE CRPR 1B.1 MSCP Covered	Annual herb. Occurs in vernal pools. Tends to grow in wetter portions of the vernal pool basins but does not show much growth until the basins become somewhat desiccated. Found in the coastal regions of southern California from Ventura County south to San Diego County and in western Riverside County. Flowering period: April to August. Elevation: 45 to 2,165 feet (15 to 660 meters).	**None**. There is no suitable vernal pool habitat for this species within the study area.
Pinus torreyana ssp. *torreyana*	Torrey pine	--/-- CRPR 1B.2 MSCP Covered	Perennial evergreen tree. Grows on sandstone soils within chaparral and closed-cone coniferous forest. Found in San Bernardino and San Diego counties. Flowering period: none. Elevation: 95 to 525 feet (30 to 160 meters).	**Present (Planted).** This species has been planted on the college campus, along a trail.
Pogogyne abramsii	San Diego mesa mint	FE/SE CRPR 1B.1 MSCP Covered NE	Annual herb. Occurs within vernal pools of San Diego County. Flowering period: March to July. Elevation: 295 and 665 feet (90 to 200 meters).	**None**. There is no suitable vernal pool habitat for this species within the study area.
Pogogyne nudiuscula	Otay mesa mint	FE/SE CRPR 1B.1 MSCP Covered NE	Annual herb. Grows in vernal pools of San Diego County. Flowering period: May to July. Elevation: 295 to 820 feet (90 to 820 meters).	**None**. There is no suitable vernal pool habitat for this species within the study area.
Quercus dumosa	Nuttall's scrub oak	--/-- CRPR 1B.1	Perennial shrub. Occurs on sandy or clay loam soils near the coast within coastal scrub, chaparral, cismontane woodland, and riparian woodland. Found along the coast, San Jacinto Mountains, and Peninsular Ranges of southern California. Flowering period: March to May. Elevation: below 1,310 feet (400 meters).	**Present**. This species is found throughout the scrub oak chaparral that occurs in the southwestern portion of the study area.
Sphaerocarpos drewiae	Bottle liverwort	--/-- CRPR 1B.1	Liverwort. Occurs in the opening of coastal scrub and chaparral within Riverside and San Diego counties. Flowering period: none. Elevation: 295 to 1,970 feet (90 to 600 meters).	**Low**. Although the study area comprises suitable coastal sage scrub and chaparral habitats, this species has not been recorded recently in the vicinity of the study area.

Scientific Name	Common Name	Status[1]	Habitat Associations	Potential to Occur[2]
Stylocline citroleum	Oil neststraw	--/-- CRPR 1B.1	Annual herb. Occurs on clay soils within coastal scrub, chenopod scrub, valleys, and foothill grasslands. Found in western Kern County and southern San Diego County. Flowering period: March to April. Elevation: 160 and 1,310 feet (50 to 1,310 meters).	**None**. The study area lacks suitable clay soils to support this species.

[1] Listing codes as follows: F = Federal; S = State of California; E = Endangered; T = Threatened; C = Candidate for listing; R = Rare.

CRPR = California Native Plant Society California Rare Plant Rank: 1A – presumed extirpated in California and either rare or extinct elsewhere; 1B – rare, threatened, or endangered in California and elsewhere; 2A – presumed extirpated in California, but more common elsewhere; 2B – rare, threatened, or endangered in California, but more common elsewhere; 3 – plants for which more information needed (review list); 4 – watch list for species of limited distribution. Extension codes: .1 – seriously endangered; .2 – moderately endangered; .3 – not very endangered.

MSCP Covered Species: Covered Species under City of San Diego (City) Multiple Species Conservation Plan (MSCP) Subarea Plan (1997); VPHCP Covered Species: Covered Species under the City Vernal Pool Habitat Conservation Plan (VPHCP; 2017); VP Species = Vernal Pools Species listed under the VPHCP; NE = Narrow Endemic Species.

[2] Potential to Occur is assessed as follows – **None:** There are no recent or historical records of the species occurring on or in the immediate vicinity (within 5 miles) of the study area and the diagnostic habitats and soils associated with the species do not occur on or in the immediate vicinity of the study area; **Low:** Suitable habitat is present in the study area and a recent or historical record of the species occurs in the immediate vicinity (within 5 miles), but existing conditions such as elevation, soils, density of cover, prevalence of non-native species, evidence of disturbance, limited habitat area, and/or isolation reduce the possibility that the species may occur; **Moderate:** The diagnostic habitats associated with the species occur on or in the immediate vicinity of the study area but there is not a recorded occurrence of the species within the immediate vicinity, or recorded occurrences are limited to historical records. Some species that have extremely limited distributions may be considered moderate, even if there is a recorded occurrence in the immediate vicinity; **High:** Suitable habitat occurs in the study area and the species has been recorded recently on or in the immediate vicinity but the species was not observed during project surveys; **Presumed Absent:** Species would be visible all year and would have been observed if present; **Present:** The species was observed within the study area during biological surveys for the project.

Appendix E

Special-Status Animal Species Potential to Occur

Scientific Name	Common Name[1]	Status	Habitat Associations	Potential to Occur[2]
INVERTEBRATES				
Bombus crotchii	Crotch's Bumble Bee	--/SCE	Found throughout southwestern California from the Central Valley south to the U.S./Mexico border. Inhabits open grasslands and scrub habitats. Primarily nests underground and forages on a wide variety of flowers, but a short tongue renders it best suited to open flowers with short corollas. Most commonly observed on flowering species in the Fabaceae, Asteraceae, and Lamiaceae families. Occurrence has also been linked to habitats containing *Asclepias, Chaenactis, Lupinus, Medicago, Phacelia,* and *Salvia* genera.	**Not Expected.** Protocol surveys conducted for this species in 2025 were negative.
Branchinecta sandiegonensis	San Diego Fairy Shrimp	FE/-- MSCP Covered NE VPHCP Covered City VP Species	Restricted to vernal pools and other ephemeral basins in southern California from coastal Orange County to San Diego County. Found in seasonally astatic pools which occur in tectonic swales or earth slump basins and other areas of shallow, standing water often in patches of grassland and agriculture interspersed in coastal sage scrub and chaparral.	**None.** There is no suitable vernal pool habitat or road ruts to support this species.
VERTEBRATES				
Amphibians				
Spea hammondii	Western Spadefoot Toad	FPT/SSC	In California, historically found west of the Sierra Nevada at elevations below 4,500 feet from Shasta County south to San Diego County. Terrestrial species that inhabit underground burrows for most of the year and requires temporary pools for breeding. Burrows in upland habitats such as grasslands, oak woodlands, coastal sage scrub, and chaparral that are located near potential breeding sites. Breeding occurs between October and May in temporary pools that are formed by seasonal rains. Other potential breeding sites include non-flowing drainage areas and artificial water bodies such as cattle ponds. Generally found in breeding pools that lack exotic predators such fish, bullfrogs, and crayfish.	**Low**. Although this species has been recorded in the vicinity of the study area, the study area lacks suitable temporary or permanent pools where this species breeds.

Scientific Name	Common Name[1]	Status	Habitat Associations	Potential to Occur[2]
Reptiles				
Anniella stebbinsi	San Diegan Legless Lizard	--/SSC	Found throughout southern California from the Transverse Ranges south to the U.S./Mexico border. Occurs in sparsely vegetated areas with moist, warm, loose soil with plant cover; moisture is essential. Common in several habitats but especially in beach dunes, coastal scrub, chaparral, pine-oak woodlands, desert scrub, sandy washes, and stream terraces. Found primarily in areas with sandy or loose organic soils or where there is plenty of leaf litter. Sometimes found in suburban gardens.	**High**. The study area partially comprises suitable coastal sage scrub and chaparral that this species prefers. Furthermore, this species has been reported within the study area.
Aspidoscelis hyperythra beldingi	Belding's Orange-Throated Whiptail	--/WL MSCP Covered	Found within the southwestern portion of California in southern San Bernardino, western Riverside, Orange, and San Diego counties on the western slopes of the Peninsular Ranges at elevations below 3,500 feet. Suitable habitat includes coastal sage scrub, chaparral, juniper woodland, oak woodland, and grasslands along with alluvial fan scrub and riparian areas. Occurrence of the species is correlated with the presence of perennial plants which provide a food base for its major food source, termites.	**High**. The study area partially comprises suitable coastal sage scrub and chaparral that this species prefers. Furthermore, this species has been reported within the study area.
Birds				
Astur cooperii	Cooper's Hawk	--/WL MSCP Covered	In California, breeds from Siskiyou County south to San Diego County and eastwards to Owens Valley at elevations below 9,000 feet. Inhabits forests, riparian areas, and, more recently, suburban and urban areas. Nests within dense woodlands and forests and isolated trees in open areas.	**High.** Mature trees that could support nesting are found throughout the study area.

Scientific Name	Common Name[1]	Status	Habitat Associations	Potential to Occur[2]
Polioptila californica californica	Coastal California Gnatcatcher	FT/SSC MSCP Covered	Year-round resident of California occurring from Ventura County south to San Diego County, and east to the western portions of San Bernardino and Riverside counties. Typically occurs in arid, open sage scrub habitats on gently sloped hillsides to relatively flat areas at elevations below 3,000 feet. Composition of sage scrub in which gnatcatchers are found varies though California sagebrush (*Artemisia californica*) present as dominant or co-dominant species. Mostly absent from areas dominated by black sage (*Salvia mellifera*), white sage (*Salvia apiana*), or lemonade berry (*Rhus integrifolia*), though may occur more regularly in inland regions dominated by black sage.	**Present**. A single individual was observed within coastal sage scrub in the southwest portion of the study area during the 2025 general biological survey.
Mammals				
Nyctinomops femorosaccus	Pocketed Free-Tailed Bat	--/SSC	Rare in California occurring from Los Angeles County east to San Bernardino County and south to San Diego County. Closely associated with their preferred roosting habitats consisting of vertical cliffs, quarries, and rocky outcrops. Sometimes roosts under tiled roofs and observed utilizing bat boxes. Habitat generalists foraging in grasslands, shrublands, riparian areas, oak woodlands, forests, meadows, and ponds, favoring larger water bodies for drinking.	**Low.** This species is more likely to seek urban canyons and parks with a density of tree cover and less human disturbance, which may substantially reduce the possibility that the species may occur within the study area.
Nyctinomops macrotis	Big Free-Tailed Bat	--/SSC	Rare in California with species found in urban areas of San Diego County. Closely associated with their preferred roosting habitats consisting of vertical cliffs, quarries, and rocky outcrops. Also roosts in buildings and, occasionally, in holes in trees. Associated with coastal and desert scrub, forests, riparian zones, and montane woodlands.	**Low.** This species is more likely to seek urban canyons and parks with a density of tree cover and less human disturbance, which may substantially reduce the possibility that the species may occur within the study area.

[1] Listing codes are as follows: FE = Federally Endangered; FT = Federally Threatened; FPE = Federally Proposed Endangered; FPT = Federally Proposed Threatened; FC = Federal Candidate species; FD = Federally Delisted; SE = State of California Endangered; ST = State of California Threatened; SC = State of California Candidate for listing as endangered or threatened; SD = State of California Delisted; U.S. Fish and Wildlife Service (USFWS) BCC = Birds of Conservation Concern; California Department of Fish and Wildlife (CDFW) FP = State of California Fully Protected; CDFW SSC = State of California Species of Special Concern; CDFW WL = State of California Watch List.

MSCP Covered Species: Covered Species under City of San Diego (City) Multiple Species Conservation Plan (MSCP) Subarea Plan (1997); VPHCP Covered Species: Covered Species under the City's Vernal Pool Habitat Conservation Plan (VPHCP; 2017); NE = Narrow Endemic Species; VP Species = Vernal Pool Species listed under the VPHCP.

[2] Potential to Occur is assessed as follows – **None**: The study area is located outside of the species known range and distribution, the species is so limited to a particular habitat that it cannot disperse on its own, and/or habitat suitable for species establishment and survival does not occur in the study area; **Not Expected**: There are no recent or historical records of the species occurring on or in the immediate vicinity (within five miles) of the study area and the suitable habitats associated with the species do not occur on or adjacent to the study area. The species moves freely and might disperse through or across the study area, but suitable habitats for residence or breeding do not occur; **Low**: There is a recent or historical record of the species on or in the immediate vicinity of the study area (within five miles) and potentially suitable habitats associated with the species occur in or adjacent to the study area, but existing conditions such as elevation, species composition, density of cover, prevalence of non-native species, evidence of disturbance, limited habitat area, and/or isolation may substantially reduce the possibility that the species may occur; **Moderate:** Suitable habitats associated with the species occur on or adjacent to the study area but there is not a documented occurrence of the species within the immediate vicinity (within five miles), or recorded occurrences are limited to historical records. Some species that contain extremely limited distributions may be considered moderate, even if there is a recorded occurrence in the immediate vicinity; **High**: Suitable habitats associated with the species occur in the study area and the species has been recently recorded on or in the immediate vicinity (within three miles) of the study area, but was not observed during project surveys; **Present**: The species was observed in or adjacent to the study area during biological surveys or during a previous survey and is assumed to occupy the study area.

Appendix D

Archaeological Technical Report

HELIX Environmental Planning

Mesa College Comprehensive Master Plan

Archaeological Technical Report

August 2026 | 01737.00004.003

Prepared for:

San Diego Community College District
1450 Frazee Road, Suite 500
San Diego, CA 92108

Prepared by:

HELIX Environmental Planning, Inc.
7578 El Cajon Boulevard
La Mesa, CA 91942

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National Archaeological Database Information

Authors:	James Turner, M.A., RPA; Theodore G. Cooley, M.A., RPA; and Shelby Castells, M.A., RPA
Firm:	HELIX Environmental Planning, Inc.
Client/Project:	San Diego Community College District/Mesa College Comprehensive Master Plan
Report Date:	August 2026
Report Title:	Archaeological Technical Report for the Mesa College Comprehensive Master Plan Project, San Diego, San Diego County, California
Submitted to:	San Diego Community College District
Type of Study:	Archaeological Study
New Sites:	None
Updated Sites:	None
USGS Quad:	La Jolla 7.5' Quadrangle
Acreage:	Approximately 106.48 acres
Key Words:	San Diego County; Township 16 South, Range 3 West; San Diego; Mesa College; No archaeological resources found

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TABLE OF CONTENTS

Section **Page**

EXECUTIVE SUMMARY ES-1

1.0 INTRODUCTION 1

1.1 Project Location 1
1.2 Project Description 1
1.2.1 Near-Term Projects 2
1.3 Regulatory Framework 3
1.3.1 California Environmental Quality Act 3
1.3.2 Native American Heritage Values 4
1.4 Project Personnel 4

2.0 PROJECT SETTING 5

2.1 Natural Setting 5
2.2 Cultural Setting 6
2.2.1 Ethnohistory 6
2.2.2 Archaeological Record 7
2.2.3 Historical Background 8

3.0 METHODS 11

4.0 RESULTS 11

4.1 Previous Studies 11
4.2 Previously Recorded Resources 13
4.3 Other Archival Research 14
4.4 Native American Contact Program 14
4.5 Pedestrian Survey 15
4.6 Sensitivity Analysis 17

5.0 IMPACT ANALYSIS 17

5.1 Archaeological Resources 18
5.2 Human Remains 18
5.3 Tribal Cultural Resources 19

6.0 CONCLUSIONS AND MANAGEMENT RECOMMENDATIONS 19

6.1 Mitigation Framework 20

7.0 REFERENCES 22

TABLE OF CONTENTS (cont.)

LIST OF APPENDICES

A Resumes of Key Personnel
B Records Search Results (Confidential, bound separately)
C Native American Correspondence (Confidential, bound separately)

LIST OF FIGURES

No.	Title	Follows Page
1	Regional Location	2
2	Aerial Photograph	2
3	USGS Topography	2
4	Cultural Resources Sensitivity	18

LIST OF TABLES

No.	Title	Page
1	Previous Studies Within One-Half Mile of the Project Area	11
2	Previously Recorded Resources Within One-Half Mile of the Project Area	13

ACRONYMS AND ABBREVIATIONS

AB	Assembly Bill
AMSL	above mean sea level
APN	Assessor's Parcel Number
BP	Before Present
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CHRIS	California Historical Resources Information System
City	City of San Diego
CMP	Comprehensive Master Plan
CRHR	California Register of Historical Resources
District	San Diego Community College District
EIR	Environmental Impact Report
GSF	gross square foot/feet
HELIX	HELIX Environmental Planning, Inc.
I-	Interstate
m	meters
MCAS	Marine Corps Air Station
NAHC	Native American Heritage Commission
NRHP	National Register of Historic Places
OHP	California Office of Historic Preservation
PRC	Public Resources Code
project	Mesa College Comprehensive Master Plan
Red Tail	Red Tail Monitoring and Research, Inc.
SCIC	South Coastal Information Center
SR	State Route
TCA	traditionally and culturally affiliated
TCP	Traditional Cultural Properties
TCR	Tribal Cultural Resources

ACRONYMS AND ABBREVIATIONS (cont.)

UCSB	University of California, Santa Barbara
USDA	United States Department of Agriculture
USGS	U.S. Geological Survey

EXECUTIVE SUMMARY

HELIX Environmental Planning, Inc. (HELIX) was contracted by the San Diego Community College District (District) to provide archaeological resources services for the Mesa College Comprehensive Master Plan Project (CMP; project) in the City of San Diego, San Diego County, California. The project proposes a series of physical improvements across the Mesa College campus including construction of new campus building space and the demolition of existing aging facilities with the replacement of them with more modern facilities that accommodate existing programming. The CMP is conceptual in nature and describes potential projects for the campus that would assist Mesa College in meeting its educational and programming goals. Specific project designs, building footprints, architectural details, circulation and parking improvements, infrastructure alignments, and operational characteristics are expected to be refined during future planning and design phases. The CMP has identified two near-term projects, the Athletics Complex, and the Performing Arts and Administrative Center and Parking Structure, as well as multiple future long-term projects. This archaeological study included a records search of the California Historical Resources Information System, a Sacred Lands File search by the Native American Heritage Commission, Native American outreach, a review of historic aerial photographs and maps, a pedestrian archaeological survey, and an archaeological sensitivity analysis for the project area. This report details the methods and results of archaeological study and has been prepared to comply with the California Environmental Quality Act (CEQA).

The records search conducted at the South Coastal Information Center (SCIC) on February 18, 2025, indicated that 23 previous cultural resources studies have been conducted within one-half mile of the project area, five of which overlap with the project area. The records search results also indicated that a total of six cultural resources have been previously recorded within one-half mile of the project area; none of which have been documented within the project area. The resources documented within the search radius generally consist of historic buildings and the historic route of Highway 395. A search of the Sacred Lands File held by the Native American Heritage Commission (NAHC) was conducted with positive results. Outreach letters were sent on March 25, 2025, to the Native American representatives and interested parties indicated by the NAHC; to date, no responses have been received.

The field investigations included an intensive pedestrian archaeological survey of the project area by a HELIX archaeologist and a Native American monitor on February 28, 2025. The survey was negative for archaeological resources within the project area. Therefore, no archaeological resources that are considered historical resources per CEQA have been recorded within the project area and the project would not have an effect on archaeological historical resources.

An archaeological sensitivity analysis was performed for the project area with much of the project area being classified as having a low sensitivity for archaeological resources. It is unlikely that there would be an inadvertent discovery of archaeological resources during ground disturbance in these areas and no further archaeological work is recommended within the low sensitivity area. Both near-term projects, the Athletics Complex and the Performing Arts and Administrative Center and Parking Structure, are located within an area identified as having low sensitivity for archaeological resources, and no further archaeological work is recommended for these near-term projects. For long-term projects located within the low sensitivity area, no further archaeological work is recommended.

However, due to dense vegetation causing poor ground surface visibility during the survey, lack of previous development, the alluvial nature of the canyons, and the positive Sacred Lands File records

search results, the undeveloped canyon within the project area has been designated as having a moderate sensitivity for archaeological resources. Ground-disturbing activities (such as grading, trenching, or vegetation removal requiring grubbing) have the potential to damage or destroy cultural resources, or unintentionally disturb human remains, that may be present on or below the ground surface in areas with a moderate sensitivity. Mitigation measures have been recommended to guide the identification, evaluation, and mitigation of potential impacts to cultural resources in areas of moderate cultural sensitivity; including an archaeological monitoring program in the moderate sensitivity areas. With these measures, potential impacts to unrecorded archaeological historical resources would be reduced to below a level of significance.

The monitoring program would include attendance by an archaeologist and Native American monitor at a preconstruction meeting and the presence of archaeological and Native American monitors during initial ground disturbing activities. Both archaeological and Native American monitors would have the authority to temporarily halt or redirect grading and other ground-disturbing activities in the event that cultural resources are encountered. If significant cultural material is encountered, the project archaeologist would coordinate with District staff to develop and implement appropriate avoidance or mitigation measures.

1.0 INTRODUCTION

HELIX Environmental Planning, Inc. (HELIX) was contracted by the San Diego Community College District (District) to provide cultural resources services for implementation of the Mesa College Comprehensive Master Plan (CMP; project) in the City of San Diego (City), San Diego County, California. The project proposes a series of physical improvements across the Mesa College campus including construction of new campus building space and the demolition of existing aging facilities with the replacement of them with more modern facilities that accommodate existing programming. The CMP is conceptual in nature and the exact architectural programming and design of each project would be developed during project implementation in coordination with user groups.

This archaeological study included a records search of the California Historical Resources Information System (CHRIS), a Sacred Lands File search by the Native American Heritage Commission (NAHC), Native American outreach, a review of historic aerial photographs and maps, a pedestrian archaeological survey, and an archaeological sensitivity analysis for the project area. This report details the methods and results of the archaeological study and has been prepared to comply with the California Environmental Quality Act (CEQA).

1.1 PROJECT LOCATION

The project site is in the Clairemont Community Plan Area of the City of San Diego, within southwestern San Diego County (Figure 1, *Regional Location*). The project site is generally located west of Interstate (I-) 805 and State Route (SR) 163, east of Genesee Avenue, and south of Balboa Avenue, in an unsectioned portion of the Pueblo Lands of San Diego within Township 16 South, Range 3 West on the U.S. Geological Survey (USGS) 7.5-minute *La Jolla* quadrangle (Figure 2, *USGS Topography*). The approximately 106.48-acre project site is located within Assessor's Parcel Numbers (APNs) 420-510-18-00, 420-574-12-00, 427-010-31-00, 427-020-23-00, 427-020-29-00, 427-020-30-00, 427-020-33-00, and 427-020-35-00, and is bordered by Beagle Street and Marlesta Drive to the north, Genesee Avenue to the west, Mesa College Drive to the south, and Armstrong Street to the east (Figure 3, *Aerial Photograph*).

The Mesa College campus is located within an urbanized area characterized by a mix of educational, residential, commercial, and institutional land uses. Mesa College sits at an elevated position relative to the surrounding canyon systems and neighborhoods. The study area consists of buildings, athletic and recreational facilities, structured and surface parking lots, and landscaped open areas associated with the Mesa College campus. An area of open space occurs to the west and southwest of Mesa College, consisting of a west-facing slope that decreases in elevation from the campus towards Genesee Avenue.

1.2 PROJECT DESCRIPTION

Based on current campus challenges and anticipated growth, the CMP recommends a series of physical improvements across the Mesa College campus. The projects would generally demolish existing aging facilities on the campus and replace them with more modern facilities that accommodate existing programming. The CMP is conceptual in nature and describes potential projects for the campus that would assist Mesa College in meeting its educational and programming goals. Specific project designs, building footprints, architectural details, circulation and parking improvements, infrastructure

alignments, and operational characteristics are expected to be refined during future planning and design phases. Specific projects identified for development under the CMP include:

- Athletics Complex
- Performing Arts and Administration Center and Parking Structure
- English/English Language Acquisition (ELAC)/Student Resource Center replacement building
- Conference Center
- On-Campus Housing
- High School relocation
- Facilities Services relocation to dedicated area with loading and storage space
- New Welcome Center near eastern entrance
- Child Development Center relocation and expansion
- New Community Clinic
- West Entrance reconfiguration (Genesee Avenue and Marlesta Drive)

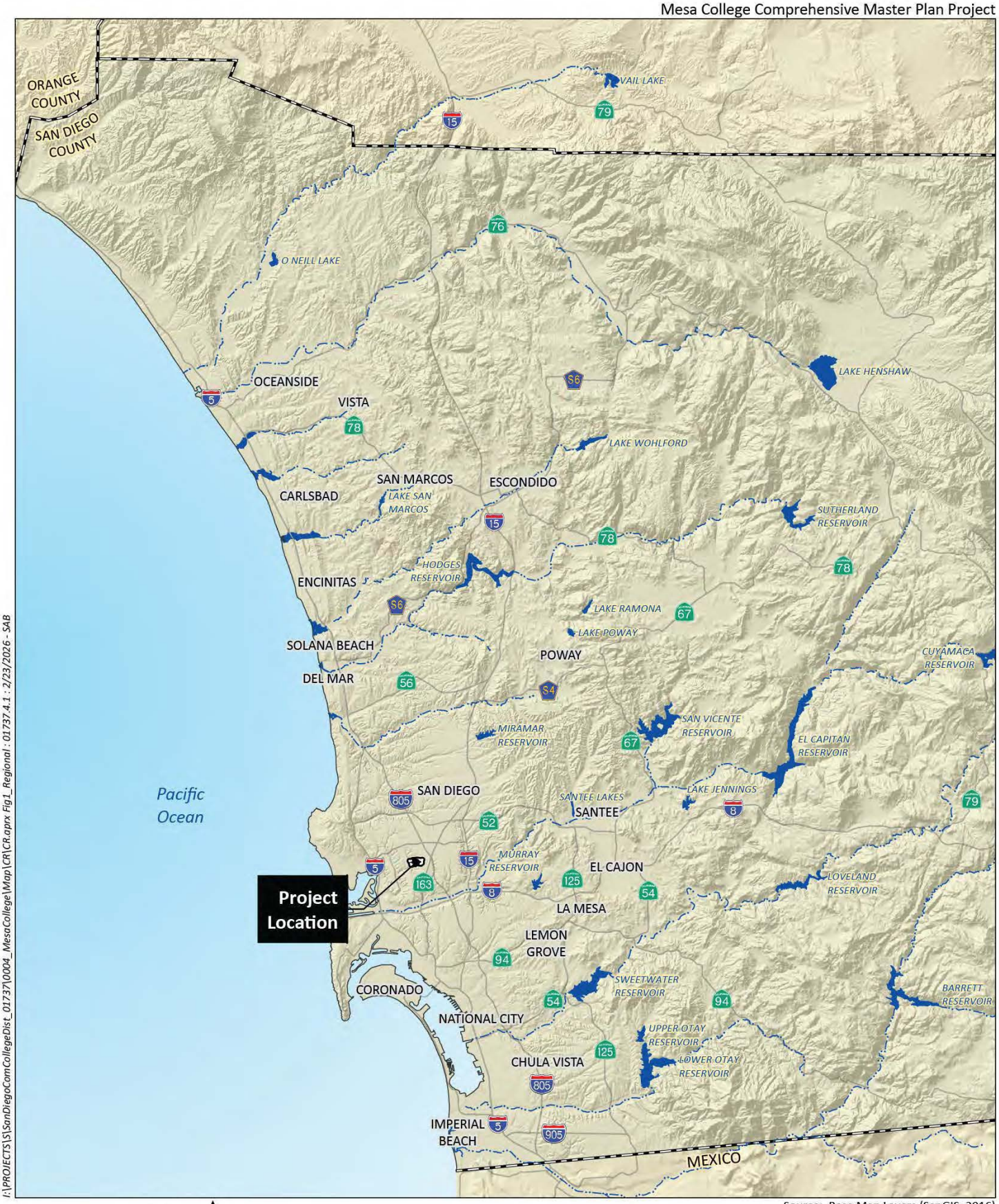
Campus-wide improvements related to utility infrastructure and circulation are also part of the CMP and could be implemented in coordination with the projects listed above or undertaken as campus-wide efforts. Interior renovations, continued maintenance, and other minor construction could also occur throughout existing campus buildings. The Athletics Complex and Performing Arts and Administration Center and Parking Structure projects are anticipated to be designed and constructed in the near term. No specific timing or phasing is identified for the remaining projects or campus-wide improvements.

1.2.1 Near-Term Projects

1.2.1.1 Athletics Complex

A series of improvements are proposed to replace and reconfigure existing athletic, exercise science, and dance instructional and support spaces to improve connectivity and facility quality. The existing Pool, Upper Athletic Field, Gym, and Physical Education building (L1) would be demolished.

The proposed reconfiguration would place a new three-court gym at the eastern end of the mesa top with two options for hillside extensions along the baseball field and stadium. In addition to court space, the approximately 175,000-gross square foot (GSF) complex would include dance studios, athletic training spaces, offices, study areas, locker rooms, team rooms, weight rooms, classrooms, press boxes, ticketing/concessions and restrooms, stadium seating, and equipment storage space. Relocated and expanded pool complex, beach volleyball, softball field, and practice fields are proposed on the west side of the new gym building. These facilities would be accessible via the pedestrian network of pathways across campus. The existing baseball field would also be reconfigured, remaining generally in its existing location, and the field house located between the baseball field and stadium would be replaced.



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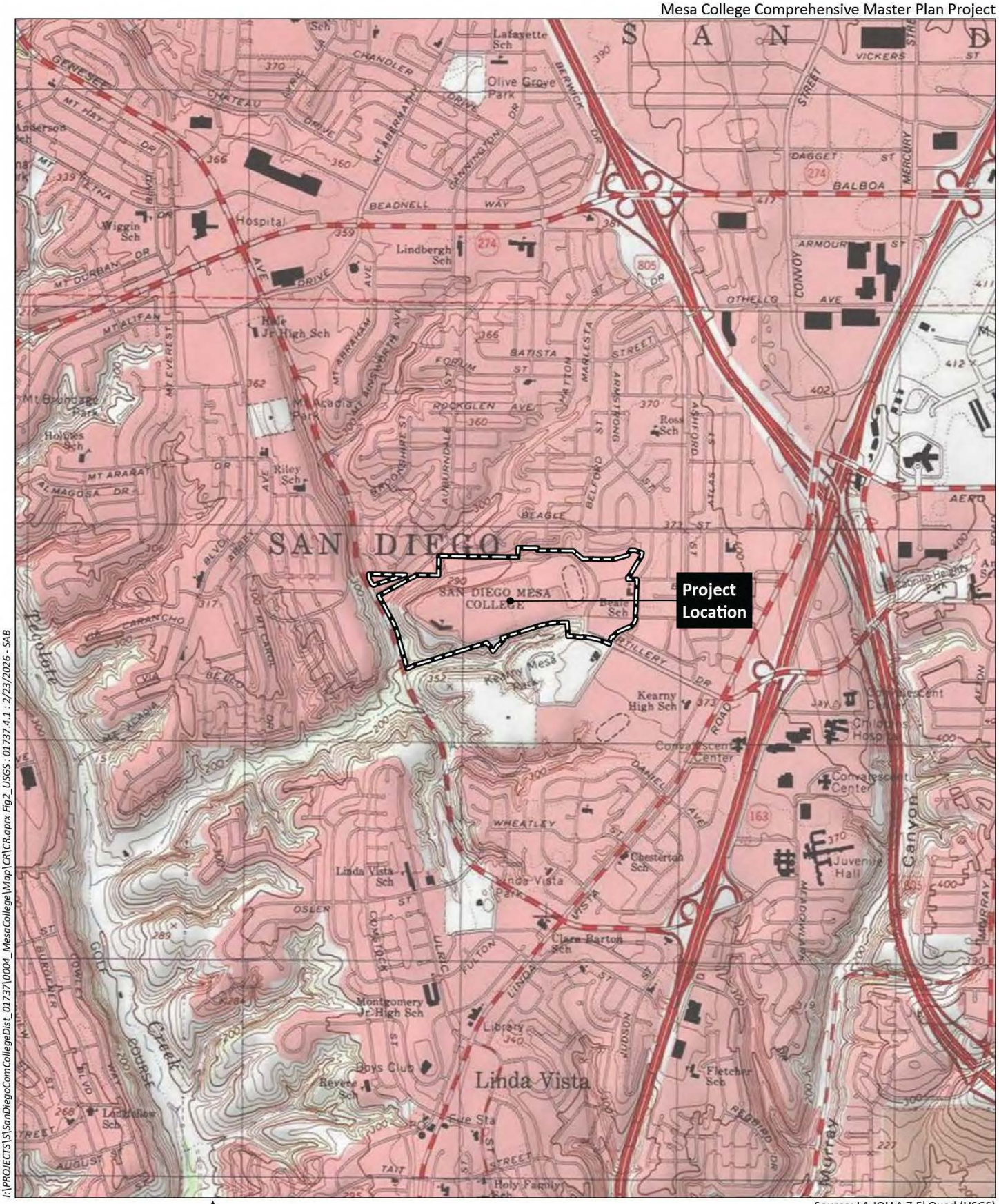
0 8 Miles

Source: Base Map Layers (SanGIS, 2016)

HELIX Environmental Planning

Regional Location

Figure 1



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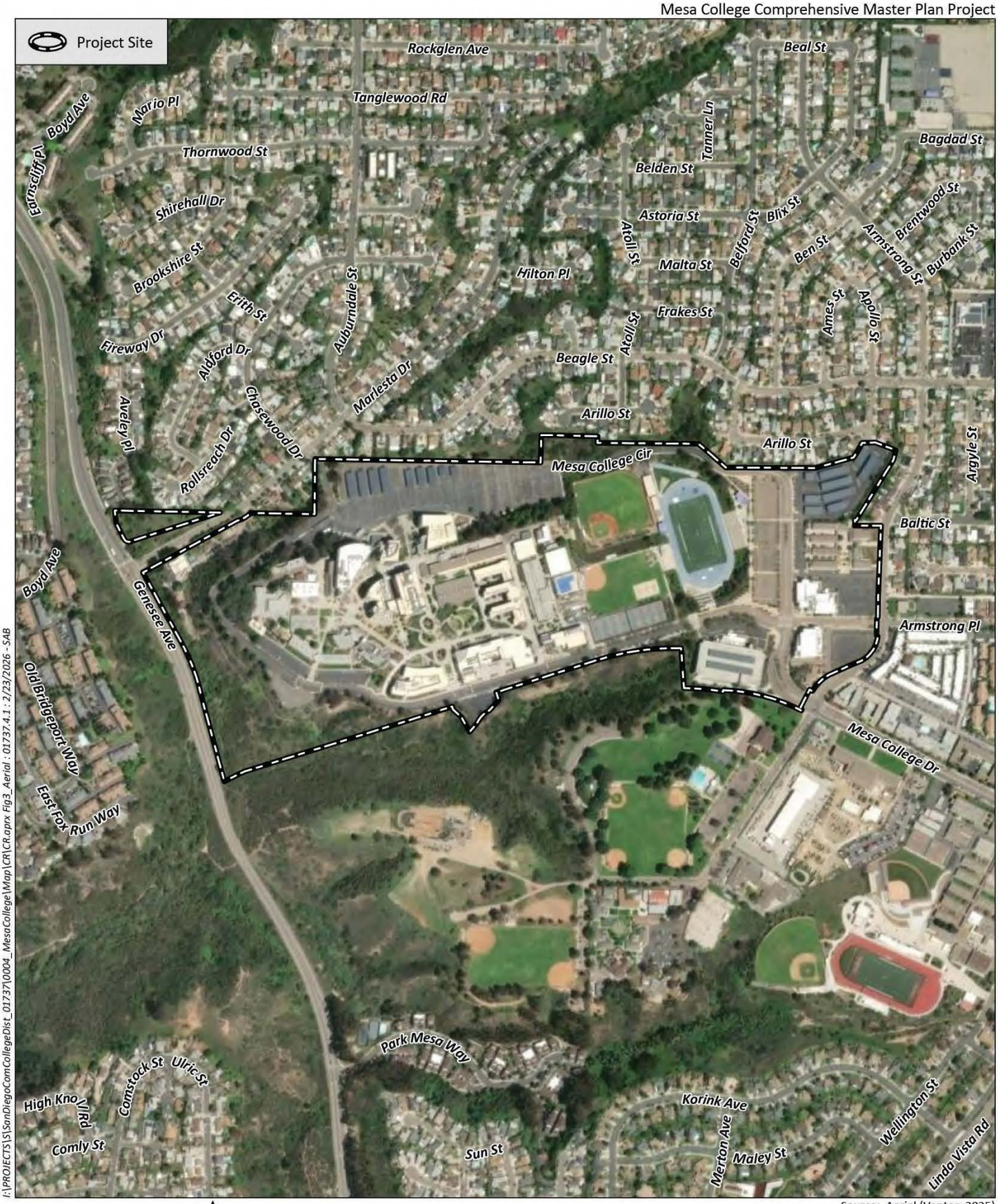
0 2,000 Feet

Source: LA JOLLA 7.5' Quad (USGS)

HELIX Environmental Planning

USGS Topography

Figure 2



Source: Aerial (Vantor, 2025)

HELIX Environmental Planning

Aerial Photograph

Figure 3

Track and field event spaces, including for javelin and hammer throw events, currently located on and adjacent to the Upper Athletic Field are proposed to be relocated to the area east of the stadium where high fencing would be provided to address safety concerns related to pedestrian movement.

1.2.1.2 Performing Arts and Administration Center and Parking Structure

A new multi-story, 140,000-GSF building is proposed on the north side of the mesa top and adjacent to the I-400 Student Services Center. The building would be constructed into the hillside and would therefore be accessible from both Lot 1 and the mesa level. A large main stage theater would occupy a portion of the building, with ground floor entry available from Lot 1. Theater support spaces would be constructed into the hillside while instructional labs and offices for Administration services would occur on the upper floors and be accessible from the active plaza on the mesa level of campus. Programs in the proposed Performing Arts and Administration Center would be relocated from their location in original campus buildings on the west side of campus, and these buildings would be demolished or re-purposed when future construction in this area occurs.

A multi-story parking structure is proposed adjacent to the Performing Arts and Administration Center on the east. The structure would replace all parking displaced by the construction of the new Performing Arts Center and Administration Building and would similarly be constructed into the hillside, improving access to large events at the Performing Arts and Administration Center and athletic fields.

1.3 REGULATORY FRAMEWORK

1.3.1 California Environmental Quality Act

The CEQA Guidelines (Section 15064.5) address determining the significance of impacts to archaeological and historic resources. Cultural resources are defined as buildings, sites, structures, or objects, each of which may have historical, architectural, archaeological, cultural, and/or scientific importance (California Office of Historic Preservation [OHP] 1995). Significant resources are designated as "historical resources," and are defined per Public Resources Code (PRC) 21084.1 and CEQA Guidelines, California Code of Regulations (CCR) Title 14 Section 15064.5 as follows:

- Resource(s) listed or determined eligible by the State Historical Resources Commission for listing in the California Register of Historical Resources (CRHR) (14 CCR Section 15064.5[a][1]);

- Resource(s) either listed in the National Register of Historic Places (NRHP) or in a "local register of historical resources" or identified as significant in a historical resource survey meeting the requirements of Section 5024.1(g) of the PRC, unless "the preponderance of evidence demonstrates that it is not historically or culturally significant" (14 CCR Section 15064.5[a][2]); or

- Resources determined by the Lead Agency to meet the Criteria for listing on the CRHR (14 CCR Section 15064.5[a][3]).

For listing in the CRHR, a historical resource must be significant at the local, state, or national level under one or more of the following four criteria:

1. It is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States;

2. It is associated with the lives of persons important to local, California, or national history;

3. It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values;

4. It has yielded or has the potential to yield information important to the prehistory or history of the local area, California, or the nation.

All resources nominated for listing must have integrity, which is the authenticity of a historical resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance. Resources, therefore, must retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. Integrity is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and association. A resource must also be judged with reference to the particular criteria under which it is proposed for nomination.

Under 14 CCR Section 15064.5(a)(3), the final category of "historical resources" may be determined at the discretion of the lead agency.

1.3.2 Native American Heritage Values

California State Assembly Bill (AB) 52, revised PRC Section 21074 to include Tribal Cultural Resources (TCRs) as an area of CEQA environmental impact analysis. As a general concept, a TCR is similar to the federally defined termed Traditional Cultural Properties (TCP); however, it incorporates consideration of local and state significance and required mitigation under CEQA. According to Parker and King (1998), "Traditional" in this context refers to those beliefs, customs, and practices of a living community of people that have been passed down through the generations, usually orally or through practice. The traditional cultural significance of a historic property, then, is derived from the role the property plays in a community's historically rooted beliefs, customs, and practices.

Per PRC Section 21080.3, a CEQA lead agency must consult with any California Native American tribe that requests consultation and that is traditionally and culturally affiliated with the geographic area of a proposed project to identify resources of cultural or spiritual value to the tribe, even if such resources are already eligible as historical resources as a result of cultural resources studies. A TCR may be considered significant if it is (i) included in a local or state register of historical resources; (ii) determined by the lead agency to be significant pursuant to criteria set forth in PRC Section 5024.1; (iii) a geographically defined cultural landscape that meets one or more of these criteria; (iv) a historical resource described in PRC Section 21084.1 or a unique archaeological resource described in PRC Section 21083.2; or (v) a non-unique archaeological resource if it conforms with the above criteria.

1.4 PROJECT PERSONNEL

Shelby Castells, M.A., RPA, served as principal investigator for this project. James Turner, M.A., RPA, is the primary author of this technical report and conducted the field survey, and Theodore G. Cooley, M.A., RPA, is a report coauthor. Ms. Castells, Mr. Turner, and Mr. Cooley all meet the qualifications of

the Secretary of Interior's Standards and Guidelines for archaeology. Javier Dominguez (Kumeyaay Native American monitor) from Red Tail Monitoring and Research, Inc. (Red Tail) participated in the pedestrian survey. Resumes for key project personnel are presented in Appendix A.

2.0 PROJECT SETTING

2.1 NATURAL SETTING

The project area is situated within the coastal plain of western San Diego County, where the climate is characterized as semi-arid steppe, with warm, dry summers and cool, moist winters (Hall 2007; Pryde 2004). The study area is situated on a mesa, the remnant of an ancient wave-cut marine terrace, with the East Tecolote Canyon drainage system forming the western and southern boundary. The East Tecolote Canyon drainage system begins just north of Mesa College and extends south and west until it merges with the main Tecolote Canyon drainage system. The main Tecolote Canyon drainage system extends from Clairemont Mesa Boulevard and Genesee Avenue, south, through the central area of the community, before angling to the west and entering Mission Bay. The San Diego River is located approximately 2.48 miles to the south, at its closest point. The elevation of the study area ranges from approximately 215 feet above mean sea level (AMSL) along the western boundary of the project area, to a maximum of approximately 370 feet AMSL within the parking lots along the eastern side of the project area.

Geologically, the majority of the study area is underlain by very old paralic deposits dating to the middle to early Pleistocene (Kennedy and Tan 2008). The canyon surrounding the project area is also underlain by the Friars formation and Stadium Conglomerate, both dating to the middle Eocene.

The area containing the project is characterized predominantly by urban development; areas within and immediately surrounding the study area include transportation infrastructure and commercial development. Consequently, while a number of soil series are present in the study area, the series mapped for the largest areas are the Chesterton urban land complex and the Olivenhain urban land complex, which reflect the largely developed condition of the study area. Both of these series are described as "landscape [that] has been altered through cut and fill operations and leveling for building sites" (Bowman 1973:36-37; 55). In the disturbed areas of these series, the substrata are described as "iron hardpan" in the Chesterton series, or as "cobbly loams" in the Olivenhain series (Bowman 1973:36-37; 68). Other soil series present within the project area are the Carlsbad urban land complex, Olivenhain cobbly loams, and terrace escarpments (U.S. Department of Agriculture [USDA] 2025).

Prior to historic and modern activities, the study area vicinity would have consisted of grassland communities and coastal sage scrub on the mesa, with stands of riparian vegetation within major drainages such as along the San Clemente, Rose, and Tecolote canyons (Beauchamp 1986). The riparian community would have consisted of plants such as sycamore (*Platanus racemosa*), Fremont cottonwood (*Populus fremontii*), coast live oak (*Quercus agrifolia*), and willow (*Salix* spp.) (Beauchamp 1986; Munz 1974). Major wildlife species found in this environment prehistorically were coyote (*Canis latrans*), mule deer (*Odocoileus hemionus*), grizzly bear (*Ursus arctos*), mountain lion (*Puma concolor*), rabbit (*Sylvilagus audubonii*), jackrabbit (*Lepus californicus*), and various rodents, the most notable of which are the valley pocket gopher (*Thomomys bottae*), California ground squirrel (*Spermophilus beecheyi*), and dusky footed woodrat (*Neotoma fuscipes*) (Head 1972; University of Michigan 2020). Acorns and grass seeds were staple vegetal food resources in the Late Prehistoric Period in southern California

(Gallegos 2002:31). Rabbits, jackrabbits, and rodents were very important to the prehistoric diet as well; deer were somewhat less significant for food but were an important source of leather, bone, and antler. In addition, many of the plant species naturally occurring in the study area and vicinity are known to have been used by native populations for medicine, tools, ceremonial, and other uses (Christenson 1990; Hedges and Beresford 1986; Luomala 1978).

2.2 CULTURAL SETTING

The cultural history in San Diego County presented below is based on documentation from both the archaeological and ethnographic records and represents a continuous human occupation in the region spanning the last 10,000 years. While this information comes from the scientific reconstructions of the past, it does not necessarily represent how the Kumeyaay see themselves. While the material culture of the Kumeyaay is contained in the archaeological record, their history, beliefs and legends have persevered and are retained in the songs and stories passed down through the generations. It is important to note that Native American aboriginal lifeways did not cease at European contact. Protohistoric refers to the chronological trend of continued Native American aboriginal lifeways at the cusp of the recorded historic period in the Americas.

2.2.1 Ethnohistory

The Ethnohistoric Period, sometimes referred to as the ethnographic present, commenced with the earliest European arrival in what is now San Diego and continued through the Spanish and Mexican periods and into the American period. The founding of Mission San Diego de Alcalá in 1769 brought about profound changes in the lives of the Kumeyaay. Many of the coastal Kumeyaay died from introduced diseases or were brought into the mission system; however, some Kumeyaay were displaced inland, to the east, and many remained within the vicinity of the project area (Carrico 1997). Earliest accounts of Native American life in what is now San Diego were recorded as a means to salvage scientific knowledge of native lifeways. These accounts were often based on limited interviews or biased data collection techniques. Later researchers and local Native Americans began to uncover and make public significant contributions in the understanding of native culture and language. These studies have continued to the present day and involve archaeologists and ethnographers working in conjunction with Native Americans to address the continued cultural significance of sites and landscapes across San Diego County.

The project area is located within the traditional territory of the Kumeyaay, also known as Ipai, Tipai, or Diegueño (named for Mission San Diego de Alcalá). At the time of Spanish contact, Yuman-speaking Kumeyaay bands occupied southern San Diego and southwestern Imperial counties and northern Baja California. The Kumeyaay are a group of exogamous, patrilineal territorial bands who lived in semi-sedentary, politically autonomous villages or rancherias. Most rancherias were the seat of a clan, although it is thought that, aboriginally, some clans had more than one rancheria and some rancherias contained more than one clan (Carrico 2017; Luomala 1978). Several sources indicate that large Kumeyaay villages or rancherias were located in river valleys and along the shoreline of coastal estuaries (Kroeber 1976; Luomala 1978). They subsisted on a hunting and foraging economy, exploiting San Diego's diverse ecology throughout the year; coastal bands exploited marine resources while inland bands might move from the desert, ripe with agave and small game, to the acorn and pine nut rich mountains in the fall (Cline 1984; Kroeber 1925; Luomala 1978).

At the time of Spanish colonization in the late 1700s, several major Kumeyaay villages were located in proximity to the project area. The closest was the village of *La Rinconada de Jamo* (Rinconada), located approximately 2.75 miles west, where the Rose Canyon drainage enters into Mission Bay (Carrico 1977, 2008; Cooley et al. 1992; Winterrowd and Cardenas 1987). Another nearby village was the village of *Cosoy*, located along the south side of the San Diego River near the location of the San Diego Presidio and the first location of the Mission de Alcalá, approximately 3.5 miles south of the project area. Both of these village locations were documented as inhabited at the inception of Spanish colonization when they were visited by the Spanish during the Portolá expedition in 1769 (Carrico 1977). A third nearby village, located upriver along the north side of the San Diego River, was the village of *Nipaquay* at the second and final location of the San Diego Mission de Alcalá, approximately four miles southeast of the project area (Brodie 2013; Carrico 2008). A fourth nearby village, indicated by Kroeber (1925) to also be located along the lower San Diego River, was the village of *Sinyeweche* to the east of the village of *Nipaquay*. The presence of these Kumeyaay villages at or near the locations of these early Spanish facilities was not accidental. The Spaniards chose these locations because there were native villages present in proximity (Carrico 2008). Some native speakers referred to river valleys as *oon-ya*, meaning trail or road, describing one of the main routes linking the interior of San Diego with the coast. For example, the floodplain from the San Diego Mission de Alcalá to the ocean was *hajir* or *qajir* (Harrington 1925). It is likely that the Kumeyaay people used the San Diego River valley, as well as Rose Canyon and its tributaries, as travel corridors from interior coastal plain areas, to and from villages located along, and at the mouth of, the river, such as *Cosoy, La Rinconada de Jamo, Nipaguay*, and *Sinyeweche* as well as other villages along the coast to the north of the river and the project area, including *Ystagua*, *Peñasquitos*, and *Pawai/Pawaii/Paguay* (Carrico 2018:12).

2.2.2 Archaeological Record

The earliest well-documented sites in the San Diego area belong to the San Dieguito Tradition, dating to over 9,000 years ago (Carrico et al. 1993; Knell and Becker 2017; Vaughan 1982; Warren 1966, 1967, 1968; Warren and Ore 2011; Warren and True 1961; Warren et al. 2008). The San Dieguito Tradition is thought by most researchers to have a subsistence system with an emphasis on hunting (Warren 1967, 1968). Diagnostic artifact types and categories associated with the San Dieguito Tradition, in coastal contexts, include elongated bifaces, scraping tools, crescentics, and leaf-shaped projectile points (Rogers 1929, 1938, 1939, 1966; Warren 1966, 1967, 1968).

In the southern coastal region, the traditional view of San Diego prehistory has the San Dieguito Tradition followed by complexes and traditions during the Archaic Period, dating from circa 8600 Before Present (BP) to circa 1300 BP (Warren et al. 2008). Many archaeological site assemblages dating to this period have been identified at a range of coastal and inland sites. These assemblages, designated as the La Jolla/Pauma complexes, are considered part of Warren's (1968) "Encinitas Tradition" and Wallace's (1955) "Early Milling Stone Horizon." The Encinitas Tradition is generally "recognized by millingstone assemblages in shell middens, often near sloughs and lagoons" (Moratto 1984:147) and brings a shift toward a more generalized economy and an increased emphasis on vegetal, especially seed resources; small game; and shellfish (Warren 1968, 2012). The local cultural manifestations of the Archaic period are called the La Jolla complex along the coast and the Pauma complex inland. Pauma complex sites lack the evidence of marine food resources, such as shellfish, that dominates many La Jolla complex site assemblages. Sites dating to the Archaic Period are most numerous along the coast, near-coastal valleys, and around estuaries. In the inland foothill areas of San Diego County, sites associated with, and radiocarbon dated to the Archaic Period, while not absent (e.g., Cooley 1995; Cooley and Barrie 2004; Raven-Jennings and Smith 1999), are less common relative to the Late Prehistoric complexes that follow

them (McDonald 1995:14). The La Jolla/Pauma complex tool assemblage is dominated by manos and metates and rough cobble tools, especially choppers, scraper planes, and scrapers, but also includes flexed burials, doughnut stones, discoidals, stone balls, plummets, biface points, beads, bone tools, and terrestrial and marine mammal remains (Moriarty 1966; True 1958, 1980; Warren 1968; Warren et al. 2008).

While there has been considerable debate about whether the San Dieguito and La Jollan subsistence patterns might represent the same people using different environments and subsistence techniques, or whether they are separate cultural patterns (e.g., Bull 1983; Ezell 1987; Gallegos 1987; Warren et al. 2008), abrupt shifts in subsistence and new tool technologies are seen to occur in the archaeological record defining the onset of the Late Prehistoric Period (1500 BP to AD 1769). The Late Prehistoric period is characterized by higher population densities and intensification of social, political, and technological systems. The Late Prehistoric period is represented by the San Luis Rey complex in the northern portion of San Diego County and the Cuyamaca complex in the southern portion of the county. Late Prehistoric artifactual material is characterized by arrow points, Tizon Brownware pottery, various cobble-based tools (e.g., scrapers, choppers, and hammerstones), arrow shaft straighteners, pendants, manos and metates, and mortars and pestles (McDonald and Eighmey 2008). The arrow point assemblage is dominated by Cottonwood Triangular and Desert Side-notched point types, but the Dos Cabezas Serrated type also occurs (McDonald and Eighmey 2008). Ethnographic data suggest that subsistence during at least the latter part of the Late Prehistoric Period was focused on the utilization of acorns and grass seeds, with small game serving as a primary protein resource and big game as a secondary resource. Fish and shellfish were also secondary resources, except immediately adjacent to the coast, where they assumed primary importance (Luomala 1978). The settlement system is characterized by seasonal villages where people used a central-based collecting subsistence strategy.

2.2.3 Historical Background

2.2.3.1 Spanish Period

While Juan Rodríguez Cabrillo visited San Diego briefly in 1542, the beginning of the historic period in the San Diego area is generally given as 1769. In the mid-eighteenth century, Spain had escalated its involvement in California from exploration to colonization (Weber 1992) and, in that year, a Spanish expedition headed by Gaspar de Portolá and Junípero Serra established the Royal Presidio of San Diego. Portolá then traveled north from San Diego, seeking suitable locations to establish military presidios and religious missions to extend the Spanish Empire into Alta California. Initially, both a mission and a military presidio were located on Presidio Hill overlooking the San Diego River. A small pueblo, now known as Old Town San Diego, developed below the presidio. The Mission San Diego de Alcalá was constructed in its current location five years later. The missions and presidios stood, literally and figuratively, as symbols of Spanish colonialism, importing new systems of labor, demographics, settlement, and economies to the area. Cattle ranching, animal husbandry, and agriculture were the main pursuits of the missions.

2.2.3.2 Mexican Period

Although Mexico gained its independence from Spain in 1821, Spanish patterns of culture and influence remained for a time. The missions continued to operate as they had in the past, and laws governing the distribution of land were also retained in the 1820s. Following the secularization of the missions in 1834, large ranchos were granted to prominent and well-connected individuals, ushering in the Rancho Era,

with the society making a transition from one dominated by the church and the military to a more civilian population, with people living on ranchos or in pueblos. With the numerous new ranchos in private hands, cattle ranching expanded and prevailed over agricultural activities. These ranches put new pressures on California's native populations, as grants were made for inland areas still occupied by the Kumeyaay, forcing them to acculturate or relocate farther into the backcountry. In rare instances, former mission neophytes were able to organize pueblos and attempt to live within the new confines of Mexican governance and culture. The most successful of these was the Pueblo of San Pasqual, located inland along the San Dieguito River Valley, founded by Kumeyaay who were no longer able to live at the Mission San Diego de Alcalá (Carrico 2018; Farris 1994).

Land was also granted to pueblos with locally elected town councils. In 1833, San Diego submitted a petition to Governor Figueroa asking for formal recognition as a pueblo and, in 1834, was granted permission to establish a municipal government. However, partially due to the establishment of the ranchos in the back-county areas and the subsequent population shift to the ranchos, San Diego's population shrunk from nearly 500 people in 1834 to 150 in 1841 (Crane 1991). Consequently, the town council was replaced by a justice of the peace in 1838. A few years later, in 1845, the town was allowed a governor-appointed sub-prefect, Santiago Arguello, who commissioned a survey of the pueblo lands; the resulting map was signed by Governor Pio Pico in 1846, establishing the pueblo as a 58,875-acre swath of land (Pourade 1977). The project area is situated entirely within the pueblo lands.

2.2.3.3 American Period

American governance began in 1848, when Mexico signed the Treaty of Guadalupe Hidalgo, ceding California to the United States at the conclusion of the Mexican-American War. A great influx of settlers to California and the San Diego region occurred during the American Period, resulting from several factors, including the discovery of gold in the state, the end of the Civil War, the availability of free land through the passage of the Homestead Act, and, later, the importance of San Diego County as an agricultural area supported by roads, irrigation systems, and connecting railways. The increase in American and European populations quickly overwhelmed many of the Spanish and Mexican cultural traditions and greatly increased the rate of population decline among Native American communities.

While the American system required that the newly acquired land be surveyed before settlement, the Treaty of Guadalupe Hidalgo bound the United States to honor the land claims of Mexican citizens who were granted ownership of ranchos by the Mexican government. The Land Act of 1851 established a board of commissioners to review land grant claims, and land patents for the land grants were issued throughout the following years. Twenty-three years later, in 1874, San Diego received a land patent for 47,323 acres, which was slightly less than the size of the original pueblo lands, partially due to 1,233 acres within Point Loma being assigned as a military reservation (Crane 1991).

In the early years of the American Period, Old Town remained the center of civic life in the area; however, the San Diego River was prone to major floods and, in the 1870s, downtown San Diego, then known as Horton's Addition, become the urban center (AECOM 2015). The San Diego River, however, remained the main source of water for the growing town (Papageorge 1971). While the first attempt to build a dike to route the San Diego River into what was then known as "False Bay" (now known as Mission Bay) occurred in the 1850s, it was not until the 1870s that a more permanent channel was constructed (Brodie 2013).

In the late 1860s, Alonzo Horton began the development of New San Diego and began the shift of commerce and government centers from Old Town (San Diego pueblo) to New Town (downtown). Development from downtown San Diego initially began to spread eastward, in part by following natural transportation corridors. The following decades saw "boom and bust" cycles that brought thousands of people to the area of San Diego County. In the Clairemont area, a short-lived real estate boom occurred in the late 1880s: the boom started slowly in 1885 and peaked in 1887.

By the end of the 1880s, many of the newcomers to San Diego had left, although some remained to form the foundations of small communities based on dry farming, orchards, dairies, and livestock ranching. In the 1890s, the City entered a time of steady growth, and subdivisions surrounding downtown were developed. As the City continued to grow in the early twentieth century, the downtown's residential character changed. Streetcars and the introduction of the automobile allowed people to live farther from their downtown jobs, and new suburbs were developed.

A pause in development occurred in the Clairemont area during the early 1900s as a direct result of a shift towards military-focused infrastructure, with the community area remaining largely undeveloped throughout the 1920s. During the early part of that decade, oil speculators drilled several wells and installed oil derricks within the Clairemont Mesa area; these included areas just east of Morena, near Mesa College, and Northern Clairemont (City 2020; Urbana Preservation & Planning 2019).

In the 1940s, military housing was developed in Linda Vista, south of the project area (City 2001). As part of the housing development, the federal government extended water and sewer pipelines to the Linda Vista area and improved public facilities. From Linda Vista, urban development spread north to the Kearny Mesa area, then to the Clairemont area (City 2001). The development in Clairemont was primarily residential-based and Clairemont, dubbed "The City Within a City" had close to 80 subdivisions platted within the area between 1950 and 1956. These, along with nearly three dozen commercial and residential tracts, were developed by Louis Cowley Burgener and Carlos Tavares. Due to its distance from downtown San Diego, Clairemont included commercial business and retail shopping, schools, libraries, and other amenities (City 2020; Eddy 1995).

In 1948, the Cabrillo Parkway, now SR 163, was constructed as U.S. Highway 395. Plans to expand construction eastward began in early 1956—Tavares and Burgener sought to connect Clairemont to Highway 395. East Clairemont, surrounded by Tecolote Canyon to the west, Burford Street/Tamres Drive/Mesa College to the south, I-805 to the east, and SR 52 to the north, provided direct access. Clairemont and East Clairemont provided housing for many working and stationed at Marine Corps Air Station (MCAS) Miramar and the aerospace industry.

2.2.3.4 San Diego Community College District

The San Diego Community College District was established in 1914, when the first two-year post-secondary course of study was established in San Diego (Van Wormer 2006). Because this was an extension of the public high school program, the classes were taught in San Diego High School; there were four instructors and 35 students in the first year of classes. By 1969, the faculty grew to 16 instructors, and all of the original students had graduated and had transferred to universities as juniors.

In 1921, the program, which had more than 120 students enrolled, was moved to the State Normal School; shortly after this, the program was moved to the campus of San Diego State College (now San Diego State University). Beginning in 1939, however, the San Diego Evening Junior College began its

program at San Diego High School, and the daytime junior college program was transferred back to the San Diego High School campus in 1946 (Van Wormer 2006). In the 1950s, the Junior College expanded into its own campus, a single city block between Russ Boulevard and A Street, from 14th to 15th Streets.

Over the next decade, the downtown campus expanded. In 1964, San Diego Mesa College opened to 1,800 students. Around this time, the San Diego Community College District was formed, governed by the superintendent of the San Diego Unified School District. In 1972, voters approved the creation of an independent College District. Over the subsequent decades, Mesa College grew and expanded: the 1990s saw the construction of the Animal Health Technology Center, Student Services Center, and Learning Resource Center. Shortly after that, the Humanities Building and Allied Health Building opened, followed soon after by a new Student Services Center, Math and Science Complex, and others (San Diego Mesa College 2025).

3.0 METHODS

HELIX conducted a record search of the CHRIS for the project area and a one half-mile radius at the South Coastal Information Center (SCIC) on February 18, 2025. The NAHC was contacted for a Sacred Lands File search on February 18, 2025; following the receipt of the results, outreach letters were sent to the Native American Representatives and interested parties indicated by the NAHC on March 25, 2025. Various archival sources were also consulted, including historic topographic maps and aerial imagery, to identify historic structures and land use in the area, and geological maps and soil surveys, to assess subsurface archaeological potential.

A pedestrian survey of the project area was conducted on February 28, 2025, by HELIX staff archaeologist James Turner, with Kumeyaay Native American monitor Javier Dominguez from Red Tail. As much of the project area is heavily developed, the survey focused on areas of open ground. These areas were walked in transects spaced approximately five meters (m) apart.

4.0 RESULTS

4.1 PREVIOUS STUDIES

The SCIC has a record of 23 previously conducted cultural resources studies within the one-half mile search radius, five of which overlapped the project area (Table 1, *Previous Studies Within One-Half Mile of the Project Area).* The studies which overlap the project consist of a cultural resource analysis, an inventory, an assessment, and a study, as well as a draft environmental impact report. Two studies not on file at the SCIC overlap with the entire project area (Turner et al. 2023; Wilson et al. 2025). None of these studies identified resources within or adjacent to the project area.

Table 1
PREVIOUS STUDIES WITHIN ONE-HALF MILE OF THE PROJECT AREA

Report No. (SD-)	Report Title	Author, Date
00742	Archaeological Impact Report on Mesa Park	Kaldenberg, 1975
01175	Tecolote Canyon Archaeological Survey	Hector,1986

Report No. (SD-)	Report Title	Author, Date
02825	Proposed Mitigated Negative Declaration for East Linda Vista Trunk Sewer, San Diego, California	City of San Diego, 1991
11823	Cultural Resources Technical Report for the San Diego Vegetation Management Project	Kick, 2007
11826	**Archaeological Resources Analysis for the Master Stormwater System Maintenance Program, San Diego, California Project**	**Robbins-Wade, 2008**
11851	Addendum to the Cultural Resources Study for the Proposed Tecolote Canyon Longterm Maintenance and Access Project and the Proposed Tecolote Canyon Wetland Mitigation Project	Garcia-Herbst, 2008
12119	**Cultural Resources Study for the Proposed Tecolote Canyon Long-Term Maintenance and Access Project and the Proposed Tecolote Canyon Wetlands Mitigation Project**	**Cook, 2006**
12200	**Draft Environmental Impact Report for the Master Storm Water System Maintenance Program (MSWSMP)**	**City of San Diego Development Services Department, 2009**
12422	**A Cultural Resources Inventory for the Route Realignment of the Proposed PF. Net / AT&T Fiber Optics Conduit Oceanside to San Diego, California**	**Ní Ghabhláin and Pallette, 2001**
13962	Archaeological Resources Report, Tecolote Canyon Natural Park, San Diego, California	Robbins-Wade, 2004
14026	Negative Cultural Resources Survey for the Kearny High School Athletic Field Redevelopment, San Diego, California	Beker, 2012
14740	Sewer Group Job 743	City of San Diego, 2014
15114	Direct APE Historic Architectural Assessment for T-Mobile West, LLC Candidate SD06687A (SD687 Ashford Center) 7440 Beagle Street, San Diego, San Diego County, California	Bonner and Crawford, 2014
15619	Cultural Resources Records Search and Site Visit Results for T-Mobile West, LLC Candidate SD06687A (SD687 Ashford Center) 7440 Beagle Street, San Diego, San Diego County, California	Bonner, Williams, and Crawford, 2013
15624	Cultural Resources Records Search and Site Visit Results for T-Mobile West, LLC Candidate SD06070A (SD06070A Linda Vista-AT&T Office) 7847 Linda Vista Road, San Diego, San Diego County, California	Bonner, Williams, and Crawford, 2013
15625	Direct APE Historic Architectural Assessment for T-Mobile West, LLC Candidate SD06070A (SD06070A Linda Vista- AT&T Office) 7847 Linda Vista Road, San Diego, San Diego County, California	Bonner and Crawford, 2013
17102	Cultural Resources Survey Report for the Proposed San Diego Gas & Electric TL676 Mission to Mesa Reconductor Project, San Diego County, California	Foglia, Cooley, and Mello, 2017
17195	Negative Cultural Resource Study for the Kearny High School CTE Building Project, City of San Diego, California	Castells, 2016
17231	**Cultural Resource Assessment of the MTSA San Diego Fiber Trench Project, San Diego, California (BCR Consulting Project No. Syn1613)**	**Brunzell, 2017**
17232	San Diego 55 Fiber Project, San Diego County, California (BCR Consulting Project No. Syn1628)	Brunzell, 2017
17233	San Diego 129 Project, San Diego County, California (BCR Consulting Project No. Syn1622)	Brunzell, 2017
18908	Historical Resources Survey for the East Tecolote Canyon Long-Term Access Phases 1 And 2, San Diego, California	Zepeda-Herman, 2017

Report No. (SD-)	Report Title	Author, Date
NOF	**Cultural Resources Analysis for the Blueprint San Diego Program, City of San Diego, California**	**Turner, Cooley, and Wilson, 2023**
NOF	**Cultural Resources Constraints and Sensitivity Analyses for the Clairemont Community Plan Update, City of San Diego, California**	**Wilson, Castells, Turner, and Cooley, 2025**

Bold indicates overlapping studies; NOF indicates studies not on file at the SCIC.

In 2023, HELIX conducted a cultural resource analysis for the Blueprint San Diego Program (Turner et al. 2023). As discussed in further detail in Section 4.6 below, this study designated areas within the City of San Diego as either Low, Moderate, or High Sensitivity based on the presence of cultural resources, the level of development, and other factors. HELIX conducted a cultural resources constraints and sensitivity analysis for the Clairemont Community Plan Area in 2025; this analysis refined the sensitivity analysis performed for the 2023 study (Wilson et al. 2025). The results of these studies are described in further detail in Section 4.6.

4.2 PREVIOUSLY RECORDED RESOURCES

The records search results indicated that six cultural resources have been previously recorded within the one-half-mile search radius, none of which are located within or adjacent to the project area (Table 2, *Previously Recorded Resources Within One-Half Mile of the Project Area*). All of the previously recorded resources within the search radius are built environment resources consisting of historic-era buildings and the historic-era alignment of Highway 395; the historic-era buildings are discussed further in the Built Environment report. The records search results are located in Appendix B (confidential, bound separately).

Table 2
PREVIOUSLY RECORDED RESOURCES WITHIN ONE-HALF MILE OF THE PROJECT AREA

Resource Number (P-37-)	Resource Number (CA-SDI-)	Age and Resources Present	Description	Recorder, Date
033349	---	Historic-era building	The Potter's House Christian Fellowship Church of San Diego, built in 1960	Marvin, 2013
033557	---	Historic-era structure	Highway 395, constructed in the 1910s, and modified throughout the twentieth century	Tift, 2013; ASM, 2015; Chasteene, 2017; Foglia and Keckeisen, 2017; Stringer-Bowsher, 2018; ASM, 2021
035166	---	Historic-era building	A one-story, rectangular Modern-style commercial office/retail building built in 1959	Crawford, 2013
035176	---	Historic-era building	A one-story, rectangular Modern-style commercial building built in 1965	Crawford, 2013
035179	---	Historic-era building	A multi-story, Modern-style public utility building built in 1961	Crawford, 2013

Resource Number (P-37-)	Resource Number (CA-SDI-)	Age and Resources Present	Description	Recorder, Date
040628	---	Historic-era building	Kearny Mesa Senior High School, built in 1954, with modifications in 1955 and 1963	Yates, 2019

4.3 OTHER ARCHIVAL RESEARCH

Various additional archival sources were also consulted, including historic topographic maps and aerial imagery. These include aerial photographs from 1941, 1953, 1964, 1966, 1972, 1978, 1980, 1985, 1990, 2000, and 2010 (NETR Online 2025; University of California, Santa Barbara [UCSB] Digital Library 2025) and several historic USGS topographic maps, including the 1903 and 1930 *La Jolla* (1:62,500) and 1953, 1967, and 1996 *La Jolla* (1:24,000) topographic maps. The purpose of this research was to identify historic structures and to review the changes in land use throughout the twentieth century.

The early aerial photographs, from 1941 and 1953, show the project area as an undeveloped mesa, with little surrounding development (NETR Online 2025; UCSB Digital Library 2025). The 1941 aerial photograph shows roads graded for the neighborhood to the south of the project area, while the 1953 aerial photograph shows neighborhoods to the south and southwest. Additionally, this aerial photograph shows grading occurring to the southeast for what would ultimately become Kearny Mesa Senior High School. The construction for the high school, as well as much of the surrounding area, was completed by the time the 1963 aerial photograph was taken (UCSB Digital Library 2025). This photograph shows the mesa on which Mesa College would later be built as being graded, likely below cultural levels. The 1964 aerial photograph depicts the early Mesa College campus, with several buildings, a baseball field, and a football field (NETR Online 2025). Aerial photographs located within the Mesa College Archives depict the grading and construction for the campus. While the exact depth of grading is difficult to ascertain from these photographs, the majority of the campus, with exception of the canyons to the northwest and southwest, is shown as having been graded. The completed construction for Mesa College campus is visible on the 1966 aerial photograph, which also shows heavy residential development in the area. Subsequent aerial photographs show little change in the area containing Mesa College, save for the development of Genesee Avenue and numerous neighborhoods to the west.

The topographic maps also show the residential development of the area. The 1903 and 1930 *La Jolla* 91:62,500) maps show little development in the area: a few roads or trails are present, but no structures are recorded. The development to the south and east is first recorded on the 1953 *La Jolla* (1:24,000) map, and additional development is present to the north and west of the project area on the 1967 topographic map. This 1967 map also depicts San Diego Mesa College. Finally, the 1996 topographic map shows the area surrounding Mesa College as heavily developed, much as it is today.

4.4 NATIVE AMERICAN CONTACT PROGRAM

HELIX contacted the NAHC on February 18, 2025, for a Sacred Lands File search and list of Native American contacts for the project area. The NAHC indicated in a response dated March 4, 2025, that the search was positive and to contact the Viejas Band of Kumeyaay Indians. Letters were sent on March 25, 2025, to Native American representatives and interested parties identified by the NAHC, including the Viejas Band of Kumeyaay Indians. No responses have been received to date. If any responses are

received, they will be forwarded to District staff. Native American correspondence is included as Appendix C (confidential, bound separately).

4.5 PEDESTRIAN SURVEY

As noted above, the pedestrian survey focused primarily on any areas with open ground. These included the periphery of the campus along Mesa College Circle, undeveloped slopes to the west of the campus, the sports fields, and landscaped areas between the buildings and parking lots (Plates 1 through 3).

Apart from the landscaped areas within the campus, these areas were surveyed using reconnaissance methodologies, as steep slopes or dense vegetation prohibited surveying in transects. A walking trail was present in the open space to the west of the campus. Here, due to the steep slopes and dense vegetation, the surveyors utilized reconnaissance methodologies to investigate the area (Plate 1). Native and non-native vegetation was present in the canyon, which is an eastern drainage of East Tecolote Canyon. Large and small cobbles were observed eroding from the slopes, and the observed soil consisted of tan-brown sandy silt.

The sports fields and areas within the campus itself with open ground were heavily landscaped with grasses and native plants (Plates 2 and 3). Ice plants were present surrounding the sports fields, reducing visibility to 10 percent. Visible soil throughout the campus consisted generally of tan-brown silty loam and sand.

No archaeological resources were observed during the field survey.



Plate 1. Overview of open space west of the campus, view to the west.



Plate 2. Landscaped areas along eastern boundary of campus, view to the south.



Plate 3. Landscaped areas along the northern boundary of campus, view to the west.

4.6 Sensitivity Analysis

Three cultural resource sensitivity levels (low, moderate, or high) were considered for categorization of the project area based on the results of the records search, archival research, the NAHC Sacred Lands File check, regional environmental factors (e.g., slope, geology, proximity to rivers and creeks), the pedestrian archaeological survey, and the amount of modern development that has occurred, further defined below. As noted above, the project area is located within the Clairemont Community Planning Area. In the forthcoming 2025 Clairemont Community Plan Update, the area containing existing campus development was designated as low sensitivity, with the southwestern canyon designated as moderate sensitivity. These designations are based on the criteria defined in the Cultural Resource Study for the 2023 Blueprint San Diego Environmental Impact Report (EIR; Turner et al. 2023; Wilson et al. 2025). The analysis conducted for the Blueprint San Diego EIR designates areas within the City of San Diego as either Low, Moderate, or High Sensitivity. These designations are defined as thus:

> **High Sensitivity**: Indicates locations where significant cultural resources have been documented or would have the potential to be identified. High sensitivity resources include village and habitation sites and areas near fresh water sources. These resources may range from moderately complex to highly complex, with more defined living areas or specialized work space areas, and a large breadth of features and artifact assemblages. The potential for identification of additional resources in such areas would be high.
>
> **Moderate Sensitivity**: Indicates that some cultural resources have been recorded within the area or the area was developed before 1984 when CEQA review may not have been applied. Moderate sensitivity resources consist of diversity or density of feature and artifact types (e.g., a moderately dense lithic scatter).
>
> **Low Sensitivity**: Indicates areas where there is a high level of disturbance or development, and few or no previously recorded cultural resources are present based on records search results and due to the timing of development of the project site occurring after 1984 when CEQA would have been applied. Within these areas, the potential for additional resources to be identified would be low.

Based on these ratings, as well as the pedestrian survey, developmental history of the campus, and a review of aerial photographs, portions of the campus have been categorized as either Low or Moderate Sensitivity. Figure 4, *Cultural Resources Sensitivity*, illustrates the cultural resources sensitivity of the Mesa College campus. Most of the campus has been designated as low sensitivity due to the grading that occurred in the early 1960s; the undeveloped canyon and heavily vegetated slopes have been designated as moderate sensitivity given their undeveloped status.

5.0 IMPACT ANALYSIS

The CMP recommends a series of improvement projects across the Mesa College campus. As part of the impact analysis for archaeological resources, the potential CMP projects were evaluated to identify proximity of known cultural resources, cultural sensitivity, and the potential to impact subsurface cultural resources. Project-specific cultural resources analysis is presented below for the near-term projects, the Athletics Complex and the Performing Arts and Administrative Center and Parking Structure. Program-level analysis and additional recommendations are included for future long-term

projects, which would be implemented as part of the CMP but for which the specific locations and project development characteristics are unknown at this time.

As noted above, much of the campus is located within an area of low sensitivity for archaeological resources. As such, the potential for impacts to archaeological resources within the developed campus is low. Both near-term projects, the Athletics Complex and the Performing Arts and Administrative Center and Parking Structure, would be located within areas identified as having low sensitivity for archaeological resources, and no further archaeological work is recommended for these near-term projects. For future long-term projects located within low sensitivity areas, no further archaeological work is recommended. If future long-term projects are located within areas of moderate sensitivity, such as the undeveloped canyon to the south of the campus and the undeveloped areas north of Marlesta Drive, which have a higher potential to encounter inadvertent discoveries of archaeological resources during project implementation, additional work is recommended.

5.1 ARCHAEOLOGICAL RESOURCES

State CEQA Guidelines Section 15064.5(b)(1) defines a substantial adverse change as one that would materially impair the significance of a historical resource. According to Section 15064.5(2)(C), "the significance of a historic resource is materially impaired when a project demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the CRHR as determined by a lead agency for purposes of CEQA." Historical resources include both archaeological sites and built environment resources determined significant under CEQA. Built environment resources are addressed in the Historic Resources Survey Report prepared for the CMP (HELIX 2026).

As described in Section 4.2, no archaeological resources have been previously recorded within the one-half-mile records search radius or the project area and no archaeological resources were identified within the project area during the current study. Therefore, no archaeological resources within the project area were identified as historical resources, per CEQA Guidelines Section 15064.5, and implementation of the CMP would not result in an effect to known archaeological resources.

No impacts would occur for future projects in the low sensitivity areas and no further work is required in the low sensitivity areas. However, ground-disturbing activities within the moderate sensitivity areas associated with the implementation of the CMP that require clearing, trenching, and/or grading, have the potential to damage or destroy archaeological resources that may be present on or below the ground surface. Adverse effects to significant or unique archaeological resources may result in a loss of valuable information that could be gained from the resources or prevent potentially eligible sites from being listed on a register of cultural resources. As such, projects requiring ground disturbance in moderate sensitivity areas may potentially cause a substantial adverse change in the significance of a historical and/or archaeological resource pursuant to Section 15064.5 of the State CEQA Guidelines and result in a potentially significant impact if inadvertent discoveries of significant cultural resources are made.

5.2 HUMAN REMAINS

Pursuant to State CEQA Guidelines Section 15064.5, a project must be evaluated for its potential to disturb any human remains, including those interred outside of formal cemeteries. A project that would have an adverse impact (direct, indirect, or cumulative) on human remains as defined by this guideline



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Source: Aerial (SanGIS 2023)

HELIX Environmental Planning

Cultural Resources Sensitivity

Figure 4

would be considered to have a significant impact. Human burials have occurred outside of formal cemeteries within San Diego County, usually associated with archaeological resource sites and prehistoric people. Due to the low to moderate cultural resources sensitivity of the project area and the lack of prehistoric archaeological resources previously recorded within the vicinity, this is considered unlikely to have occurred within the campus. As such, while low, the potential exists for unknown burials to be present within the previously undeveloped portions of the project area, and ground-disturbing activities associated with the implementation of the project could have the potential to disturb human remains and result in a potentially significant impact.

5.3 TRIBAL CULTURAL RESOURCES

A project would have a potentially significant environmental impact (direct, indirect, or cumulative) if it would cause a substantial adverse change in the significance of a TCR, defined as a site, feature, place, or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and may be considered significant if it is (1) listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources; or (2) a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1.

Ground-disturbing or other activities associated with the project have the potential to affect TCRs, including archaeological sites, traditional gathering areas, or other areas of traditional use. The Sacred Lands File search conducted by the NAHC was returned with positive results, indicating that sacred lands or Native American cultural resources may be present within the project area. Per AB 52, the District conducted consultation with California Native American tribes that are traditionally and culturally affiliated with the project area to identify resources of cultural value to the tribe.

It is anticipated that ground-disturbing activities associated with the implementation of the project could have the potential to cause a substantial adverse change in the significance of a TCR pursuant to PRC Section 21074, and result in a potentially significant impact.

6.0 CONCLUSIONS AND MANAGEMENT RECOMMENDATIONS

This study was undertaken to identify if archaeological resources, which may be considered historical resources per CEQA Guidelines Section 15064.5, are present within in the Mesa College Comprehensive Master Plan project area and, if present, determine the effects of the project on historical resources pursuant to CEQA. No archaeological resources have been recorded within the project area and therefore implementation of the CMP is expected to have no effect on recorded archaeological historical resources. Although the project area is rated mainly as having low sensitivity, with some areas of moderate sensitivity, there remains a potential for inadvertent discoveries of cultural material.

Much of the project area has been disturbed by the construction of the campus facilities, including buildings, parking lots, recreational areas, and access roads. While the entire campus was developed prior to 1984, aerial photographs indicate that the grading occurred to below depths in which cultural material would be expected to be observed (NETR Online 2025). Therefore, these areas have been classified as low sensitivity for cultural resources. Both near-term projects, the Athletics Complex and

the Performing Arts and Administrative Center and Parking Structure, would be located within areas identified as having low sensitivity for archaeological resources, and no further archaeological work is recommended for these near-term projects. For long-term projects located within the low sensitivity area, no further archaeological work is recommended.

The undeveloped canyon to the southwest of the campus as well as the area northwest of the Genesse Avenue/Marlesta Drive intersection and the area north of the baseball field have not been previously developed and there is a potential for inadvertent discoveries of buried cultural resources during ground disturbance within these areas. Therefore, these areas were classified as moderate sensitivity and potentially significant impacts to cultural resources could occur during ground disturbance in these areas.

The following mitigation measures are recommended in order to reduce potential impacts to archaeological historical resources, human remains, and TCRs to less than significant. These measures are intended to guide the identification, evaluation, and mitigation of potential impacts to significant resources, if identified. With the implementation of the mitigation framework presented below, the identified potentially significant impacts to archaeological resources, human remains, and TCRs would be mitigated to a less than significant level.

6.1 MITIGATION FRAMEWORK

CUL-1 Cultural Resources Monitoring Program. If ground disturbance is proposed within a moderate sensitivity area, a cultural resources monitoring program shall be implemented.

1. The San Diego Community College District (District) shall retain a qualified Project archaeologist and Native American monitor associated with a tribe that is traditionally and culturally affiliated (TCA) with the project area (“TCA Tribe”) to implement the monitoring program, as described below. The qualified Project archaeologist shall meet the Secretary of the Interior’s Professional Qualifications Standards (48 Federal Register 44738-39).

2. The qualified Project archaeologist and a Native American monitor shall attend the pre-grading meeting with the grading contractors to explain and coordinate the requirements of the monitoring program.

3. The monitoring program shall require that during the initial grubbing, site grading, excavation, trenching, or disturbance of the ground surface, an archaeological monitor, overseen by the qualified Project archaeologist, and a Native American monitor shall be on-site full-time. The frequency of inspections shall depend on the rate of excavation, the materials excavated, and discoveries of archaeological resources or of tribal cultural resources as defined in California Public Resources Code Section 21074. Archaeological and Native American monitoring may be discontinued when the depth of grading or soil conditions no longer retain the potential to contain cultural deposits. The qualified Project archaeologist, in consultation with the Native American representative, shall be responsible for determining the duration and frequency of monitoring.

4. If unevaluated potentially significant cultural resources are discovered, construction activities shall be diverted away from the discovery until significance evaluation can be conducted and the appropriate preservation or treatment actions can be taken. All cultural material collected

during monitoring and appropriate for curation shall be processed and curated at a San Diego County facility that meets federal standards per 36 Code of Federal Regulations Part 79 unless, in the case of Native American cultural material, other appropriate treatment measures such as the reburial of recovered cultural material are agreed upon by the District and the TCA Tribe.

5. After the completion of monitoring, an appropriate report summarizing the monitoring program shall be prepared. If no significant cultural resources are discovered, a brief letter shall be prepared and submitted to the District and the South Coastal Information Center (SCIC). If significant cultural resources are discovered, a technical report with the results of the monitoring and data recovery or treatment (including the interpretation of the data within the research context), as applicable, shall be prepared and submitted to the District and SCIC.

CUL-2 Procedure for Inadvertent Discovery of Human Remains. As specified by California Health and Safety Code Section 7050.5, if human remains are found on the project site during construction or during archaeological work, the person responsible for the excavation, or their authorized representative, shall immediately notify the San Diego County Medical Examiner's office. Determination of whether the remains are human shall be conducted by a forensic anthropologist on-site and in situ where they were discovered unless the forensic anthropologist and the Native American representative agree to remove the remains to an off-site location for examination. No further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall occur until the Medical Examiner's office has made the necessary findings as to origin and disposition. A temporary construction exclusion zone shall be established surrounding the area of the discovery so that the area would be protected, and consultation and treatment could occur as prescribed by law. In the event that the remains are determined to be of Native American origin, the Most Likely Descendant, as identified by the Native American Heritage Commission, shall be contacted in order to determine proper treatment and disposition of the remains in accordance with California Public Resources Code Section 5097.98. The Native American remains shall be kept in situ, or in a secure location in close proximity to where they were found, and the analysis of the remains shall only occur on-site in the presence of a Native American monitor.

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Appendix A

Resumes of Key Personnel

EDUCATION

Master of Arts, Anthropology, San Diego State University, 2018

Bachelor of Arts, Biology and Anthropology, San Diego State University, 2015

REGISTRATIONS/ CERTIFICATIONS

Registered Professional Archaeologist No. 17338

PROFESSIONAL AFFILIATIONS

Society for Historical Archaeology

Society for California Archaeology

JAMES TURNER

Senior Archaeologist



Mr. Turner is a Registered Professional Archaeologist (RPA) with a Master's degree in Anthropology and field and college-level teaching experience in archaeology. He has more than six years of experience in Section 106, the Native American Graves Protection and Repatriation Act (NAGPRA) and writing detailed reports. Mr. Turner has archaeological research and fieldwork expertise throughout southern California. He has also received training in identifying and analyzing animal remains in archaeological contexts, historic artifact identification, and technical writing. Mr. Tuner's experience meets the Secretary of the Interior's Professional Qualification Standards for archaeology.

Coronado Strand Main Replacement. Archaeologist for a 46,300 linear-foot water main replacement in the City of Coronado, San Diego County. Prepared the cultural resource survey report. Work performed for Brown and Caldwell.

Casa de las Campanas Project. Archaeologist for a 10.1-acre expansion of the Casa de las Campanas Continuing Care Facility in San Diego, California. Conducted a field survey of the proposed project areas, as well as assisted with the production of the Archaeological Resources Report Form. Work completed for Casa de las Campanas.

Haymar Easement Protection Project. Archaeologist for an emergency easement erosion prevention project. Prepared cultural resources monitoring report. Work performed for the United States Army Corps of Engineers.

Ocean Beach Dog Beach Accessibility Improvements. Archaeologist for the implementation of Americans with Disabilities Act upgrades to an existing pathway at the Ocean Beach Dog Beach, located in the City of San Diego. Created Monitoring Work Plan. Work performed for the City of San Diego.

Southcrest Green Infrastructure Project. Staff Archaeologist for the replacement and installation of new storm drains and green infrastructure facilities in the community of Southcrest, San Diego. Prepared Native American Heritage Commission Sacred Land File search request. Work performed for the City of San Diego.

Sewer and AC Group 793. Staff Archaeologist for sewer line replacements and improvements in the City of San Diego. Prepared Native American Heritage Commission Sacred Land File Search request letter. Work performed for the City of San Diego.

Bounty & Waring Navajo Canyon Long Term Access Project. Archaeologist for the repair of erosion on a long-term access path for the sewer infrastructure in Navajo Canyon. Performed an intensive pedestrian survey of the project area. Work performed for the City of San Diego.

Stowe Trail Cultural Resources Assessment. Archaeologist for a proposed trail alignment in the Mission Trails Regional Park. Performed background research and assisted with report writing. Work performed for the City of San Diego Parks and Recreation Department.

Clairemont Community Plan Update EIR Phase 1. Archaeologist for the Clairemont Community Plan Update. Performed background research and assisted with preparing the Community Plan Update cultural resources section. Work performed for the City of San Diego.

Aliso Creek Canyon Restoration Project. Archaeologist for an erosion repair project in Lake Forest. Conducted a field survey of the project area, performed background research, and produced a cultural resources report. Work performed for the Orange County Department of Public Works.

Peutz Valley Preserve Cultural Surveys and Report. Archaeologist for the proposed construction of an ecological preserve located in the community of Alpine. Conducted historical and archival research regarding the area surrounding the proposed preserve. Work conducted for the County of San Diego.

Santa Ysabel Nature Center Monitoring. Archaeologist for a proposed 3-mile hiking trail in the unincorporated community of Julian. Performed background research and assisted with report writing. Work performed for the County of San Diego Department of Parks and Recreation.

Lakeside Equestrian Facility Monitoring. Archaeologist for the construction of a 13.91-acre equestrian facility in Lakeside, California. Created cultural resources monitoring plan. Work performed for the County of San Diego.

Greg Cox Bike Skills Park Construction Monitoring. Archaeologist for the construction of a 3.2-acre bike park facility in the Otay Valley Regional Park, San Diego, California. Created cultural resources monitoring plan. Work performed for the County of San Diego.

Diaz Road Expansion, PW17-25. Archaeologist for proposed city infrastructure improvements associated with the widening and/or construction of Diaz Road in the city of Temecula. Prepared cultural resources survey report. Work performed for David Evans and Associates, Inc.

San Jacinto Las Colinas DD. Archaeologist for a development project in the community of San Jacinto. Prepared a due diligence cultural assessment. Work performed for David Evans and Associates, Inc.

Downtown Riverside Metrolink Station Track & Platform Project. Archaeologist for the construction of an additional rail platform and tracks and extension of an existing pedestrian bridge at the existing Riverside-Downtown Station, Riverside. Assisted with report preparation. Work performed for the Riverside County Transportation Commission.

Painted Hills. Archaeologist for a proposed bridge repair program in the Temescal Valley area in Riverside County. Prepared the Phase IV cultural resources monitoring report. Work performed for KB Home.

Temescal Canyon - TR 37153. Archaeologist for a due diligence constraints assessment related to cultural resources for an approximately 14.8-acre property located in an unincorporated area of Riverside County, California. Performed constraints assessment and produced a due diligence report. Work performed for KB Home.

Wasson Canyon Project. Archaeologist for a due diligence constraints assessment related to cultural resources for an approximately 74.6-acre property located in the City of Lake Elsinore, Riverside County, California. Performed constraints assessment and produced a due diligence report. Work performed for KB Home.

Rosetta Hills Project. Archaeologist for a due diligence constraints assessment related to cultural resources for an approximately 49.6-acre property located in the City of Lake Elsinore, Riverside County, California. Performed constraints assessment and produced a due diligence report. Work performed for KB Home.

Lake Morena's Oak Shores Eastside Pipeline Looping Project. Archaeologist for the Lake Morena's Oak Shores Mutual Water Company Eastside Pipeline Looping and Pipeline Abandonment Project. The project consisted of improvements to the existing water distribution system. Conducted archaeological monitoring and wrote a letter report summarizing the methods and results of the monitoring program. Work performed for Lake Morena's Oak Shores Mutual Water Company.

Escondido Country Club. Archaeological monitor for the redevelopment of the Escondido Country Club. Performed construction monitoring. Work performed for Lennar Homes.

Broadway Channel Improvements - Phase A. Archaeologist for an earthen channel improvement project in the city of El Cajon. Performed background research and prepared cultural resource survey report. Work performed for City of El Cajon.

Seawater Controls Project. Archaeologist for a proposed tank installation near the Scripps Institute of Oceanography in La Jolla. Performed monitoring of geotech borings and conducted a site survey. Work performed for University of California, San Diego.

Carmel Mountain Road Life Sciences Project. Archaeologist for a proposed commercial development project in the Torrey Hills Community Plan area. Responsibilities included performing background and archival research and producing an archaeological resources report. Work performed for Allen Matkins Leck Gabme Mallory & Natsis, LLP.

Parkway Drive and Alvarado Road Trunk Sewer Phase 3 Upgrade Project. Archaeologist for a sewer infrastructure improvement project in the city of La Mesa, San Diego County. Performed construction monitoring. Work performed for the City of La Mesa.

Diamond Sports Complex. Archaeologist for the construction of a sports complex in Lake Elsinore. Assisted with report preparation. Work performed for the City of Lake Elsinore.

City of Escondido's Trunk Sewer Main Replacement Environmental Services. Archaeologist for the replacement of the City of Escondido's trunk sewer main. Wrote a memo summarizing the methods and results for the records search and Sacred Lands File search. Work performed for Infrastructure Engineering Corporation, with the City of Escondido as the lead agency.

Mountain View Connector Pipeline Cultural Monitoring. Archaeologist for a waterline replacement project in the community of Alpine. Conducted cultural resource monitoring and prepared the final monitoring report. Work performed for Padre Dam Municipal Water District.

Cordial Road Pipeline. Archaeologist for a pipeline replacement project in the unincorporated portion of the City of El Cajon. Performed background research and field survey. Other responsibilities included the production of a letter report detailing the methods and results of the survey, as well as the completion of a site record update to submit to the South Coastal Information Center. Work performed for the Padre Dam Municipal Water District.

The Triangle Project. Archaeologist for an approximately 40.6-acre development center consisting of restaurant, commercial/retail, theater/entertainment, hotel, and office uses in Temecula, Riverside County, California. Prepared the cultural resources study update report and the records search update memo. Work performed for Domenigoni-Barton Properties, LLC.

THEODORE COOLEY, RPA

Senior Archaeologist

EDUCATION

Bachelor of Arts, Anthropology, California State College, Long Beach, 1970

Master of Arts, Anthropology, California State University, Los Angeles, 1982

REGISTRATIONS/ CERTIFICATIONS

Register of Professional Archaeologists No. 10621

City of San Diego, Certified Principal Investigator for Monitoring Projects

County of San Diego, Approved Consultant for Archaeological Resources

County or Riverside, Certified Cultural Resources Consultant Principal Investigator

County of Orange, Certified Cultural Resources Consultant Principal Investigator

Los Angeles, Ventura, San Luis Obispo, and Santa Barbara Approved Consultant

PROFESSIONAL AFFILIATIONS

Society for California Archaeology

Society for American Archaeology

Mr. Cooley has 46 years of experience in archaeological resource management. He has directed test and data recovery investigations, monitoring programs, and archaeological site surveys of large and small tracts, and has prepared reports for various cultural resource management projects. He is well-versed in National Historic Preservation Act, National Environmental Policy Act (NEPA), and California Environmental Quality Act (CEQA) regulations and processes. Mr. Cooley's experience also includes Native American consultation for monitoring of archaeological field projects, including some with human remains and reburial-related compliance issues.

Sycamore Canyon/Goodan Ranch Public Access Plan IS/MND. Senior Archaeologist for Phase I pedestrian survey and cultural resource inventory in support of the preparation by the County of San Diego County Parks Department of a Public Access Plan for the Sycamore Canyon/Goodan Ranch Preserve located in coastal foothills of unincorporated west-central San Diego County. Involvement included participation in the analysis of the results from the survey program and co-authorship of the technical report. Work performed for the County of San Diego.

Sycuan/Sloane Canyon Trail IS/MND. Senior Archaeologist for Phase I pedestrian survey and cultural resource inventory in support of the preparation by the County of San Diego County Department of a Parks and Recreation for the Sycuan/Sloane Canyon Trail project located in the coastal foothills of unincorporated southwestern San Diego County. Involvement included participation in the analysis of the results from the survey program and co-authorship of the technical report. Work performed for the County of San Diego.

R.M. Levy Water Treatment Plant Sewer Replacement. Senior Archaeologist for a Phase I pedestrian survey and cultural resource inventory and assessment program in support of a water treatment plant, sewer pipeline, replacement project, located in the community of Lakeside, San Diego County. Involvement included participation in the analysis of the results from the survey program and preparation of the technical report. Work performed for HELIX Water District.

Hiser Property Project. Senior Archaeologist for a due diligence study prepared to summarize potential cultural resources constraints to the 9.2-acre Hiser Property development project, located in the Mission Gorge area of the City of Santee, San Diego County. The study consisted of background research including a record search and limited archival study, a field survey, and a review of the Sacred Lands File from the Native American Heritage Commission (NAHC). Involvement included participation in the analysis of the results and preparation of a summary letter report of the potential cultural resources-related constraints to the planned development. Work performed for KB Home.

San Elijo Joint Powers Authority Roadway and Trail Addendum and Permitting. Senior Archaeologist for Phase I cultural resource inventory, pedestrian survey, and resource testing at the San Elijo Water Reclamation Facility adjacent to San Elijo

lagoon, in San Diego County, in support of the preparation by the San Elijo Joint Powers Authority of a Roadway and Trail Addendum for upgrades to the facility requiring verification of Nationwide Permit authorization from the U.S. Army Corps of Engineers (USACE). Involvement included participation in the analysis of the results from the survey and testing program and co-authorship of the technical report. Work performed as a subconsultant to Kimley-Horn & Associates, with the San Elijo Joint Powers Authority as lead agency.

Cubic Redevelopment Environmental Consulting. Senior Archaeologist for a Phase I pedestrian survey and cultural resource inventory and assessment program in support of a 20-acre redevelopment project, located in the community of Kearny Mesa, City of San Diego. Involvement included participation in the analysis of the results from the survey program and preparation of the technical report. Work performed for Cubic Redevelopment Environmental Consulting, with the City of San Diego as lead agency.

The Enclave at Delpy's Corner Project. Senior Archaeologist for a cultural resources monitoring and data recovery program in support of a proposed 124-unit townhome development project, in the City of Vista, San Diego County. Involvement included participation in the analysis of the prehistoric lithic artifacts and preparation of technical report sections containing the results of these analyses. Work performed for CalAtlantic Homes.

Sycamore & Watson Project. Senior Archaeologist for an archaeological construction monitoring program for the Sycamore & Watson residential development project, located in City of Vista, San Diego County. Involvement included participation in the analysis of the results from the monitoring program and preparation of the technical report. Work performed for Meritage Homes.

French Valley 303 Project. Senior Archaeologist for an archaeological construction monitoring program for the French Valley 303 Site residential development project, located in the French Valley area of unincorporated Riverside County. Involvement included participation in the analysis of the results from the monitoring program and co-authorship of the technical report. Work performed for Pulte Home Co., LLC.

Brown Field and Montgomery-Gibbs Executive Airport Master Plans. Senior Archaeologist for Phase I cultural resource inventory and pedestrian survey programs at the Brown Field Municipal Airport and the Montgomery-Gibbs Executive Airport, in the City of San Diego, in support of updating of the Airport Master Plan and its Programmatic Environmental Impact Report. Involvement included participation in the analysis of the results from the survey programs and co-authorship of the technical reports. Work performed as a subconsultant to C&S Companies, with the City of San Diego as the lead agency.

Newage Carlsbad Luxury Resort Technical Studies. Senior Archaeologist for a cultural resources assessment study for the Ponto Hotel development project in the City of Carlsbad, San Diego County, California. Involvement included participation in the analysis of the results from the assessment program and preparation of the technical report. Work performed for Kam Sang Company, with the City of Carlsbad as the lead agency.

Salt Bay Design District Specific Plan EIR. Senior Archaeologist for a Phase I pedestrian survey and cultural resource inventory program in support of the 46.6-acre Salt Bay Design District Specific Plan mixed-use wholesale/retail shopping and light industrial development project, in the cities of San Diego and Chula Vista. Involvement included participation in the analysis of the results from the survey program and co-authorship of the technical report. Work performed for M. & A. Gabaee, with the City of San Diego as lead agency.

Riverside Views and Briggs Road Development Project. Senior Archaeologist for a Phase I pedestrian survey and cultural resource inventory program of the Briggs Road Residential project located in Riverside County. Involvement included participation in the analysis of the results from the survey program and co-authorship of the technical report. Work performed for the Walton International Group, LLC.

San Jacinto Property Project. Senior Archaeologist for a Phase I pedestrian survey and cultural resource inventory program of the 214 residential project located in Riverside County. Involvement included participation in the analysis of the results from the survey program and co-authorship of the technical report. Work performed for the Walton International Group, LLC.

8016 Broadway Self Storage Project. Senior Archaeologist for a Phase I pedestrian survey and cultural resource inventory program of the Lemon Grove Self-Storage project located in the City of Lemon Grove, San Diego County. Involvement included participation in the analysis of the results from the survey program and co-authorship of the technical report. Work performed for the Summit Environmental Group, Inc.

Shelby Castells, RPA

Senior Archaeologist

HELIX Environmental Planning

Summary of Qualifications

Ms. Castells has provided cultural resources management services in San Diego County and Southern California for nearly 20 years. She has served as a principal investigator for cultural resources studies for private development, public utilities, energy infrastructure, and federal projects. Ms. Castells has extensive experience providing regulatory compliance for California Environmental Quality Act (CEQA), National Environmental Policy Act (NEPA), National Historic Preservation Act (NHPA), and the Native American Graves Protection and Repatriation Act (NAGPRA). She has expertise in bioanthropology/ managing human remains and is also skilled in Phase I, II, and III cultural resources studies, the evaluation of resources and assessments of effects, creation of mitigation measures and management plans, construction compliance management, quality assurance/quality control (QA/QC) State Historic Preservation Officer (SHPO) consultation, and Tribal and government consultations. Ms. Castells is a Registered Professional Archaeologist (RPA) and meets the U.S. Secretary of the Interior's Professional Qualifications for prehistoric and historic archaeology.

Selected Project Experience

San Diego Gas & Electric (SDG&E) Strategic Undergrounding Program Principal Investigator/Project Manager for utility infrastructure program in San Diego, Orange, and Imperial Counties. Managed over 85 task orders for cultural resources services for the utility's Strategic Undergrounding Program (SUG) in compliance with CEQA, NEPA, Section 106 of the NHPA. Conducted desktop reviews and record searches, identifying environmental compliance requirements, conducting archaeological surveys, testing, and data recoveries. Conducted Tribal consultations. Recommended mitigation measures including resource testing and evaluation, avoidance, and construction monitoring. Coordinated and consulted with local, state, and federal agencies, including Caltrans, California State Parks, Vista Irrigation District, City of San Diego, Bureau of Indians Affairs, Cleveland National Forest, and Bureau of Land Management. Work was performed for SDG&E as a subconsultant for AECOM.

SDG&E Sunrise Powerlink Project Adaptative Weed Control Plan and Management Strategy Cultural Resources Services Principal Investigator/Project Manager managing archaeological inventory across 1,233 acres for the utility weed control program in the County of San Diego. Identified over 75 cultural resources and managed preliminary eligibility assessments for the California Register of Historical Resources (CRHR). Prepared a Cultural Resources Management Plan to inform SDG&E of AECOM's weed control methodologies so the plan's goals were met while protecting cultural resources, including preparing and implementing the Long-Term Management Plan. Conducted Tribal consultation for the project. Work performed for San Diego Gas & Electric as a subconsultant to Petra Resources Management.

Education

Master of Arts, Anthropology, San Diego State University, 2010

Bachelor of Arts, Anthropology, University of California San Diego, 2003

Registrations/ Certifications

Registered Professional Archaeologist #3748180

Professional Affiliations

Society for Historical Archaeology Society for California Archaeology

Shelby Castells, RPA

Senior Archaeologist

Naval Facilities Engineering Systems Command Southwest (NAVFAC SW) F35 Aircraft Mishap Principal Investigator/Project Manager for aircraft archaeological survey and monitoring program, located at the Ocotillo Wells State Vehicular Recreation Area in Imperial County. Managed archeological resources in NAVFAC's compliance with Section 106 of the NRHP and NEPA on California State Parks Property, also requiring compliance with California State Parks Department of Parks and Recreation (DRP) permits and reporting. Worked performed for NAVFAC Southwest.

Montecito Ranch Conservation Bank Principal Investigator/Project Manager for an archaeological survey of a 955-acre preserve in the City of Ramona, San Diego County. Conducted services for developing the site into a mitigation and conservation bank for Marine Corps Base Camp Pendleton. Identified and recorded 48 cultural resources and made preliminary eligibility assessments to the NRHP and the CRHR. Conducted Native American consultation on behalf of Marine Corps Base Camp Pendleton. Prepared a Historic Properties Management Plan for the project to avoid impacting cultural resources. Conducted SHPO consultation. Work performed for the Endangered Habitats Conservancy for the United States Marine Corps.

McKee Orchard Center Project Principal Investigator/Project Manager for a private development project in the City of Poway, San Diego County. Conducted a data recovery of a NRHP-eligible ethnographic and prehistoric village site, including a GPR study, surface micro mapping and collection, excavation units, laboratory work, and artifact analysis. Provided Tribal consultation and repatriation assistance, and technical report preparation. Managed archaeological and Native American monitoring. Work performed for Cornerstone Communities.

Jacumba Fire Station Survey Principal Investigator/Project Manager for a cultural resources survey and technical report in support of a CEQA review for a new fire station in Jacumba under the County of San Diego. Managed the identification and recordation of a CRHR and NRHP-eligible archaeological district, identified if the project would result in adverse impacts to the archaeological district, and created mitigation measures. Work performed for Ascent Environmental.

Batiquitos Lagoon Habitat Mitigation Principal Investigator/Project Manager for a habitat mitigation project in San Diego County. Conducted an archaeological survey of the habitat mitigation project area in compliance with CEQA as part of the Carlsbad Hydrologic Unit Invasive Non-native Plant Control and Revegetation Program. Conducted a record search at the SCIC and the NAHC, an archaeological pedestrian survey, the identification of multiple cultural resources, preparation of a technical report with mitigation and avoidance measures. Work performed for Nature Collective with the County of San Diego as the lead agency.

Machado Smith Excavation, Old Town San Diego State of California Historic Park Principal Investigator/ Project Manager/Field Director for an excavation to identify the location of two 19th-century structures, evaluate the archaeological remains for eligibility to the CRHR and significance under CEQA, and assist in the recreation of the buildings in Old Town San Diego State of California Historic Park. Prepared a work plan and California State Parks permit application. Directed excavations including mechanical trenching and hand excavations. Excavated 19th century features. Directed laboratory work associated with the excavations, cataloged the artifacts, performed the artifact analysis, and prepared the artifact collection for curation. Evaluated the cultural resource for eligibility to the NRHP and CRHR and

for significance under CEQA. Prepared a technical report providing the results of the excavation, artifact analysis, and evaluation of the resources to the CRHR, provided mitigation measures, and guidance to the building recreation process. Prepared DPR 523 forms for the cultural resource. Work performed for Old Town Family Hospitality Corporation, with California State Parks as the lead agency.

Star Ranch Cultural and Historical Resources Survey and Evaluation Report Principal Investigator/Field Director/ Project Manager for a development in San Diego County. Conducted a cultural resources survey and evaluation of over 20 archaeological sites that will be impacted by the development, spread over 2400 acres. Documented, tested and evaluated prehistoric and historic period archaeological sites. Organized consultation between Native American groups, the County of San Diego, and the project proponent. Prepared DPR site forms and a technical report of the project findings. Assisted in the preparation of the EIR and the cumulative impacts analysis. Work performed for RBF with the County of San Diego as the lead agency.

Rancho Del Rio Biological Mitigation Parcel San Diego County, CA Principal Investigator/Project Manager for a development project in the City of San Diego. Conducted a cultural resource survey of the project area and prepared a technical report in compliance with the City of San Diego CEQA Guidelines. Identified a cultural resource within the project area and documented the resource on DPR 523 Forms recommended avoidance measures or evaluation of the resource to the CRHR and City Register. Work performed for Dudek with the City of San Diego as the lead agency.

Mira Mesa Community Plan Update Principal Investigator/Project Manager for the Mira Mesa Community Plan Update. Prepared a cultural resources constraints and sensitivity analysis for the project area, including archaeological record searches at the SCIC, record search of the Sacred Lands File with the NAHC, historical research and literature review and the creation of a technical report and sensitivity maps along with mitigation measures. Work performed for Dudek with the City of San Diego as the lead agency.

Heritage Road Bridge Replacement Principal Investigator/Project Manager for a bridge replacement project in the City of Chula Vista, San Diego County. Conducted a cultural resource study for the project, including delineating and mapping the area of potential effect (APE), conducting a record search and an archaeological survey of the APE, preparing the Historic Property Survey Report and the Archaeology Survey Report, and creating mitigation measures. The City of Chula Vista and Caltrans were the lead agencies.

UCSD Hillcrest Campus Off-Site Traffic Mitigation Principal Investigator/Project Manager for a hospital traffic mitigation project in the Hillcrest area of the City of San Diego. Conducted an archaeological survey of the project area and prepared a technical report. Identified eligible cultural resources which will be adversely affected by the project and recommended avoidance and mitigation measures. Work performed as a subconsultant for Harris & Associates, with UCSD as the lead agency.

Appendix B

Records Search Results
(Confidential, Bound Separately)

Appendix C

Native American Correspondence
(Confidential, Bound Separately)

Appendix E

Historic Resources Survey Report

HELIX Environmental Planning

Mesa College Comprehensive Master Plan

Historic Resources Survey Report

August 2026 | 01737.00004.001

Prepared for:

San Diego Community College District
1450 Frazee Road, Suite 500
San Diego, CA 92108

Prepared by:

HELIX Environmental Planning, Inc.
7578 El Cajon Boulevard
La Mesa, CA 91942

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TABLE OF CONTENTS

Section **Page**

EXECUTIVE SUMMARY ES-1

1.0 INTRODUCTION 1

1.1 Purpose and Scope 1
1.2 Project Location 1
1.3 Project Description 2

2.0 REGULATORY FRAMEWORK 3

2.1 Federal Regulations 3
2.2 State Regulations 5
2.3 Local Regulations 6

3.0 PREVIOUS EVALUATIONS 8

4.0 SCOPE AND METHODOLOGY 8

4.1 Project Scope 8
4.2 Methodology 9
4.3 Survey 9
4.4 Research and Outreach 9
4.5 Resource Types 10
4.6 California Historical Resource Status Codes 11

5.0 HISTORIC CONTEXT STATEMENT 12

5.1 Introduction and Overview 12
5.2 History of the San Diego Community College District 14
5.3 Early Settlement and Development in Linda Vista and Clairemont 18
5.4 Campus Development 21
5.5 Social and Cultural Development 27
5.6 Architecture and Design 30
5.7 Architects 38

6.0 SURVEY FINDINGS 44

6.1 Summary of Findings 44
6.2 Individually Eligible Resources 45
6.3 Historic Districts 48
6.4 EVALUATION CONCLUSION 49

7.0 IMPACTS ANALYSIS 50

7.1 Program-Level Impacts 51
7.2 Near-Term Project Impacts 52

8.0 CONCLUSIONS AND MANAGEMENT RECOMMENDATIONS 52

8.1 Mitigation Framework 52

TABLE OF CONTENTS (cont.)

Section		Page
9.0	REFERENCES	55
9.1	Books	55
9.2	Government Studies, Reports, and Environmental Documents	56
9.3	Newspapers and Periodicals	59
9.4	Websites and Online Articles	62

LIST OF APPENDICES

A	Resumes of Key Personnel
B	Outreach Program
C	Built Environment Inventory and Evaluations

LIST OF FIGURES

No.	Title	Follows Page
1	Regional Location	2
2	USGS Topography	2
3	Aerial Photograph	2
4	Historical Resources at Mesa College	46

LIST OF PLATES

1	Mesa College campus map, 1964	25
2	Aerial image of Mesa College, circa 1965	25
3	Building A100 east wing and entry canopy, view north, circa 1965	26
4	Mesa College campus map, 1968	26
5	El Pueblo Ribera Court, 1923, Rudolph Schindler	32
6	Eugene Brucker Education Center, 1953, Clyde Hufbauer	33
7	Salk Institute, 1959-1966, Louis Kahn	34
8	Geisel Library, 1970, William Pereira	35
9	Design Center, 1949, Lloyd Ruocco	37
10	Scripps Institute of Oceanography (SIO), Institute of Geophysics and Planetary Physics (IGPP) Munk Lab, 1963, Lloyd Ruocco	37

TABLE OF CONTENTS (cont.)

LIST OF TABLES

No.	Title	Page
1	Applicable California Historical Resource Status Codes	11
2	Disposition of Kearny Mesa Junior College Buildings Within the 1964/1965 Campus Boundary	24
3	Extant Buildings in the International Style	30
4	Inventory of Buildings and Structures at Mesa College That Were Designed by Frank L. Hope & Associates Between 1964 and 1985	38

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ACRONYMS AND ABBREVIATIONS

ACHP	Advisory Council on Historic Preservation
AHT	Animal Health Technology
AIA	American Institute of Architects
APN	Assessor's Parcel Number
BERD	Built Environment Resources Directory
c.	circa
Cal Poly	California State Polytechnic University, San Luis Obispo
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CHL	California Historic Landmark
CHRIS	California Historical Resources Information System
City	City of San Diego
CMP	Comprehensive Master Plan
County	San Diego County
CRHR	California Register of Historical Resources
DPR	Department of Parks and Recreation
ECC	Educational Cultural Complex
ELAC	English/English Language Acquisition
EOPS	Educational Opportunities Programs & Services
GSF	gross square foot/feet
HABS	Historic American Buildings Survey
HALS	Historic American Landscapes Survey
HELIX	HELIX Environmental Planning, Inc.
HRB	Historical Resources Board
HRG	Historical Resources Guidelines
HRR	Historical Resources Regulations
HRSR	Historic Resources Survey Report
I-	Interstate
LDM	Land Development Manual
LRC	Learning Resource Center
MAYA	Mexican American Youth Association
MEChA	el Movimiento Estudiantil Chicano de Aztlán

ACRONYMS AND ABBREVIATIONS (cont.)

NHPA	National Historic Preservation Act
NLT	Nursery & Landscape Technology
NPS	National Park Service
NRB	National Register Bulletin
NRHP	National Register of Historic Places
OHP	Office of Historic Preservation
PQS	Professional Qualifications Standards
project	Mesa College Comprehensive Master Plan Project
PRC	Public Resources Code
RPA	Register of Professional Archaeologists
ROTC	Reserve Officers' Training Corps
SCIC	South Coastal Information Center
SDCCD	San Diego Community College District
SDMC	San Diego Municipal Code
SDRHR	San Diego Register of Historic Resources
SDUSD	San Diego Unified School District
SHPO	State Historic Preservation Officer
SR	State Route
status codes	California Historical Resource Status Codes
TWLF	Third World Liberation Front
USC	United States Code
USD	University of San Diego
USGS	U.S. Geological Survey

EXECUTIVE SUMMARY

HELIX Environmental Planning, Inc. (HELIX) was contracted by the San Diego Community College District (SDCCD) to provide cultural resources services for the Mesa College Comprehensive Master Plan Project (project or CMP) in the City of San Diego, San Diego County, California. The project proposes a series of physical improvements across the Mesa College campus, including construction of new campus building space and the demolition of existing aging facilities and replacement with more modern facilities that are intended to accommodate existing programming. The project is conceptual in nature; the exact architectural programming and design of each project would be developed during future planning and design phases. The CMP has identified two near-term projects, the Athletics Complex and the Performing Arts and Administrative Center and Parking Structure, as well as multiple future long-term projects.

HELIX has prepared this Historic Resources Survey Report (HRSR) to evaluate the CMP, which includes the following: a literature review, an intensive-level built environment survey, campus development history, relevant historic contexts, and evaluations to determine if individual buildings, structures, or the larger campus are eligible for listing in the National Register of Historic Places (NRHP) and the California Register of Historical Resources (CRHR), and, therefore, whether any constitutes a *historical resource* for the purposes of the California Environmental Quality Act (CEQA). Potential impacts of the project to historical resources are disclosed and mitigation measures to address such impacts are recommended as appropriate. This report details the methods and results of the historic resources survey and has been prepared to comply with CEQA.

HELIX conducted an intensive-level survey of the project area (Mesa College) on February 18, 2025. The campus consists of approximately 45 buildings and/or structures, 33 of which were determined to be 40 years of age (1985) or older. From these, HELIX identified a total of 32 buildings, one structure (Mesa College sign by A100), one site (non-extant buildings T1 and T2), and two potential historic districts requiring evaluation for listing in the NRHP and CRHR. Archival research was completed in November 2025.

Historic resources are located across the Mesa College campus, including areas acquired and/or developed after the original campus development. Three individual buildings and one historic district consisting of six buildings appear eligible for listing in the CRHR, as summarized below:

- One individually eligible building is the 1977 Fine Arts Building (I300), which is located within the original campus boundary. The Fine Arts Building is a noteworthy example of Brutalism, exhibiting all of the style's character-defining features, and is also representative of master architect Frank L. Hope & Associates' body of work. Therefore, the Fine Arts Building possesses local significance and is recommended individually eligible under CRHR Criterion 3 (Architecture). The period of significance is 1977, the year of construction.

- The other two individually eligible buildings are the two Nursery & Landscape Technology (NLT) Storage buildings (P200), which are located northwest of the original campus boundary. The NLT buildings are noteworthy examples of the Post-and-Beam style, exhibiting all of the style's character-defining features applicable for the use of the buildings, and are representative of master architect Richard J. Lareau & Associates' body of work. Therefore, the NLT buildings

possess local significance and are recommended individually eligible under CRHR Criterion 3 (Architecture). The period of significance is 1976, the year of construction.

- The Mesa College Design Center Historic District (Z100-Z600) is located to the east of the main campus. The historic district is comprised of six buildings that are noteworthy examples of the International style. Therefore, the Mesa College Design Center Historic District possesses local significance and is recommended eligible to be listed in the CRHR under Criterion 3 (Architecture). The period of significance is 1954, the year of construction.

The three individually eligible buildings and those comprising the historic district are *historical resources* for the purposes of CEQA.

1.0 INTRODUCTION

1.1 PURPOSE AND SCOPE

HELIX Environmental Planning, Inc. (HELIX) was contracted by the San Diego Community College District (SDCCD) to provide cultural resources services for the Mesa College Comprehensive Master Plan Project (project or CMP) in the City of San Diego (City), San Diego County, California. The project proposes a series of physical improvements across the Mesa College campus, including construction of new campus building space and the demolition of existing aging facilities and replacement with more modern facilities that are intended to accommodate existing programming. The CMP is conceptual in nature; the exact architectural programming and design of each project would be developed during future planning and design phases. The CMP has identified two near-term projects, the Athletics Complex and the Performing Arts and Administrative Center and Parking Structure, as well as multiple future long-term projects.

HELIX has prepared this Historic Resources Survey Report (HRSR) to evaluate the CMP, which includes the following: a literature review, an intensive-level built environment survey, campus development history, relevant historic contexts, and evaluations to determine if individual buildings, structures, or the larger campus are eligible for listing in the National Register of Historic Places (NRHP) and the California Register of Historical Resources (CRHR), and, therefore, whether any constitutes a *historical resource* for the purposes of the California Environmental Quality Act (CEQA). Potential impacts of the project to historical resources are disclosed and mitigation measures to address such impacts are recommended as appropriate. This report details the methods and results of the historic resources survey and has been prepared to comply with CEQA.

HELIX Senior Architectural Historian Nelson White, who has a master's degree in Historic Preservation, conducted the survey, researched and authored the architecture historic contexts and architect biographies, and served as the primary author of this report. HELIX Senior Architectural Historian Teri Delcamp, who has a master's degree in History, contributed to the architectural styles historic contexts and architect biographies, and authored the evaluations. Both meet and exceed the Secretary of the Interior's Professional Qualifications Standards (PQS) for Architectural History. HELIX Senior Historians Thea De Armond and James Turner conducted historical research and co-authored the historic contexts including the History of the SDCCD, Early Settlement and Development, Campus Development, and Social and Cultural Development. HELIX Principal Cultural Resources Specialist Mary Robbins-Wade, M.A., RPA, provided quality control and review. She both meets and exceeds the Secretary of the Interior's PQS for History. Resumes of key personnel are included in this report as Appendix A, *Resumes of Key Personnel*.

1.2 PROJECT LOCATION

The project site is in the Clairemont Community Plan Area of the City of San Diego, in southwestern San Diego County (County; Figure 1, *Regional Location*). The project is generally located west of Interstate (I-) 805 and State Route (SR) 163, east of Genesee Avenue, and south of Balboa Avenue, in an unsectioned portion of the Pueblo Lands of San Diego within Township 16 South, Range 3 West on the U.S. Geological Survey (USGS) 7.5-minute *La Jolla, California* quadrangle (Figure 2, *USGS Topography*). The approximately 106.48-acre project site consists of eight parcels: Assessor's Parcel Numbers (APNs) 427-01-031 (55.75 acres), 427-02-029 (16.93 acres), 420-51-018 (11.76 acres), 420-57-412 (10.91 acres),

427-02-023 (8.33 acres), 427-02-035 (1.02 acres), 427-02-033 (0.89 acre), and 427-02-030 (0.84 acre). The project area is bordered by Beagle Street and Marlesta Drive to the north, Genesee Avenue to the west, Mesa College Drive to the south, and Armstrong Street to the east (Figure 3, *Aerial Photograph*).

1.3 PROJECT DESCRIPTION

Based on current campus challenges and anticipated growth, the CMP recommends a series of physical improvements across the Mesa College campus. The projects would generally demolish existing aging facilities on the campus and replace them with more modern facilities that accommodate existing programming. The CMP is conceptual in nature and describes potential projects for the campus that would assist Mesa College in meeting its educational and programming goals. Specific project designs, building footprints, architectural details, circulation and parking improvements, infrastructure alignments, and operational characteristics are expected to be refined during future planning and design phases. Specific projects identified for development under the CMP include:

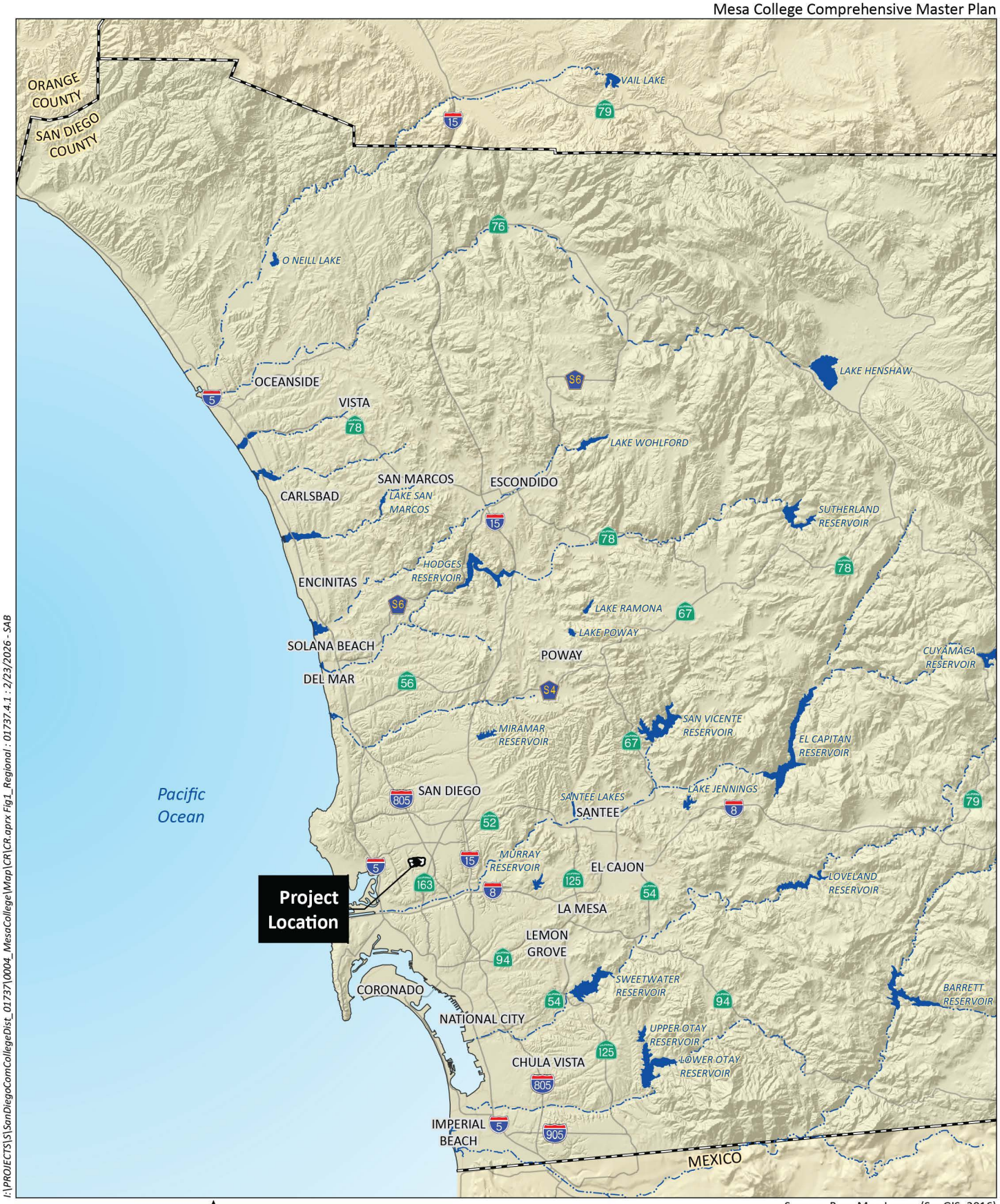
- Athletics Complex
- Performing Arts and Administration Center and Parking Structure
- English/English Language Acquisition (ELAC)/Student Resource Center replacement building
- Conference Center
- On-Campus Housing
- High School relocation
- Facilities Services relocation to dedicated area with loading and storage space
- New Welcome Center near eastern entrance
- Child Development Center relocation and expansion
- New Community Clinic
- West Entrance reconfiguration (Genesee Avenue and Marlesta Drive)

Campus-wide improvements related to utility infrastructure and circulation are also part of the CMP and could be implemented in coordination with the projects listed above or undertaken as campus-wide efforts. Interior renovations, continued maintenance, and other minor construction could also occur throughout existing campus buildings. The Athletics Complex and the Performing Arts and Administration Center and Parking Structure projects are anticipated to be designed and constructed in the near term. No specific timing or phasing is identified for the remaining projects or campus-wide improvements.

1.3.1 Near-Term Projects

1.3.1.1 Athletics Complex

A series of improvements are proposed to replace and reconfigure existing athletic, exercise science, and dance instructional and support spaces to improve connectivity and facility quality. The existing Pool, Upper Athletic Field, gym, and Physical Education building (L1) would be demolished.



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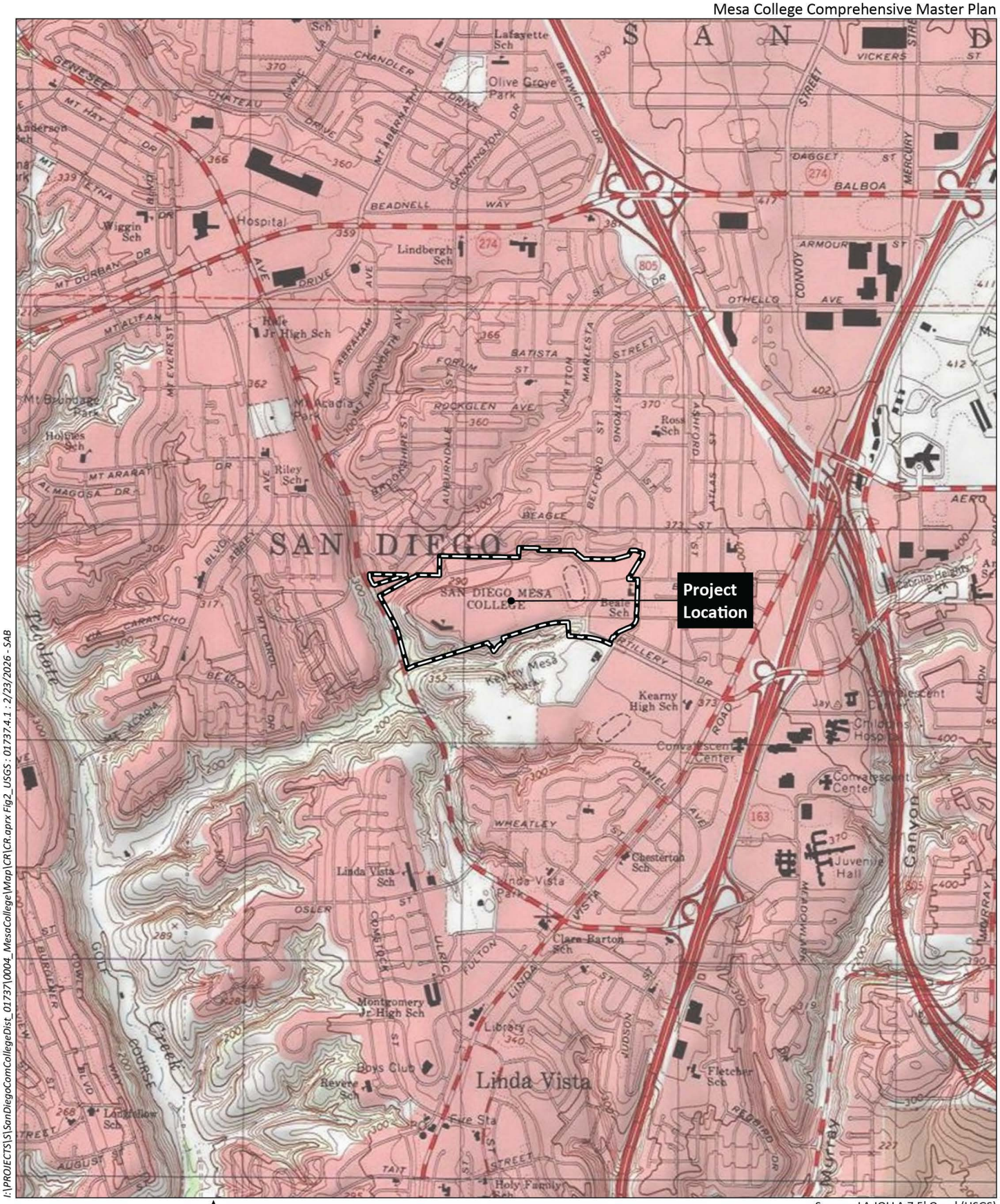
0 8 Miles

Source: Base Map Layers (SanGIS, 2016)

HELIX Environmental Planning

Regional Location

Figure 1



I:\PROJECTS\S\SanDiegoComCollegeDist_01737\0004_MesaCollege\Map\CR\CR.aprx Fig2_USGS : 01737.4.1 : 2/23/2026 - SAB

Source: LA JOLLA 7.5' Quad (USGS)

HELIX Environmental Planning

USGS Topography

Figure 2



I:\PROJECTS\S\SanDiegoComCollegeDist_01737\0004_MesaCollege\Map\CR\CR.aprx Fig3_Aerial : 01737.4.1 : 2/23/2026 - SAB

0 700 Feet

Source: Aerial (Vantor, 2025)

HELIX Environmental Planning

Aerial Photograph

Figure 3

The proposed reconfiguration would place a new three-court gym at the eastern end of the mesa top with two options for hillside extensions along the baseball field and stadium. In addition to court space, the approximately 175,000-gross-square-foot (GSF) complex would include dance studios, athletic training spaces, offices, study areas, locker rooms, team rooms, weight rooms, classrooms, press boxes, ticketing/concessions and restrooms, stadium seating, and equipment storage space. Relocated and expanded pool complex, beach volleyball, softball field, and practice fields are proposed on the west side of the new gym building. These facilities would be accessible via the pedestrian network of pathways across campus. The existing baseball field would also be reconfigured, remaining generally in its existing location, and the field house located between the baseball field and stadium would be replaced.

Track and field event spaces, including for javelin and hammer throw events, currently located on and adjacent to the Upper Athletic Field, are proposed to be relocated to the area east of the stadium where high fencing would be provided to address safety concerns related to pedestrian movement.

1.3.1.2 Performing Arts and Administration Center and Parking Structure

A new multi-story 140,000-GSF building is proposed on the north side of the mesa top and adjacent to the I-400 Student Services Center. The building would be constructed into the hillside and would therefore be accessible from both Lot 1 and the mesa level. A large main stage theater would occupy a portion of the building, with ground floor entry available from Lot 1. Theater support spaces would be constructed into the hillside while instructional labs and offices for Administration services would occur on the upper floors and be accessible from the active plaza on the mesa level of campus. Programs in the proposed Performing Arts and Administration Center would be relocated from their location in original campus buildings on the west side of campus, and these buildings would be demolished or re-purposed when future construction in this area occurs.

A multi-story parking structure is proposed adjacent to the Performing Arts and Administration Center on the east. The structure would replace all parking displaced by the construction of the new Performing Arts Center and Administration Building and would similarly be constructed into the hillside, improving access to large events at the Performing Arts and Administration Center and athletic fields.

2.0 REGULATORY FRAMEWORK

Cultural resources are defined as buildings, sites, structures, or objects, each of which may have historical, architectural, archaeological, cultural, and/or scientific importance. Significant resources are those resources that have been found eligible for listing in the NRHP, the CRHR, or for local listing, as applicable.

2.1 FEDERAL REGULATIONS

2.1.1 National Historic Preservation Act of 1966

The National Historic Preservation Act (NHPA) of 1966 (16 United States Code [USC] 470), declared a national policy of historic preservation and instituted a multifaceted program, administered by the Secretary of the Interior, to encourage the achievement of preservation goals at the federal, state, and local levels. The NHPA authorized the creation of the NRHP, established the position of State Historic Preservation Officer (SHPO) and provided for the designation of State Review Boards, set up a

mechanism to certify local governments to carry out the purposes of the NHPA, assisted Native American tribes in preserving their cultural heritage, and created the Advisory Council on Historic Preservation (ACHP).

2.1.1.1 Section 106

Section 106 of the NHPA states that federal agencies with direct or indirect jurisdiction over federally funded, assisted, or licensed undertakings must take into account the effect of the undertaking on any historic property that is included in or eligible for inclusion in the NRHP and that the ACHP must be afforded an opportunity to comment on such undertakings through a process outlined in 36 Code of Federal Regulations (CFR) Part 800. The Section 106 process involves the identification of historic properties within the area of potential effect, the determination of whether the undertaking will cause an adverse effect on historic properties, and the resolution of those adverse effects through consultation with parties to the Section 106 review process, most prominently including the California SHPO and Native American tribes.

2.1.2 National Register of Historic Places

The NRHP was established by the NHPA of 1966 as "an authoritative guide to be used by federal, state, and local governments, private groups, and citizens to identify the Nation's cultural resources and to indicate what properties should be considered for protection from destruction or impairment" (36 CFR Part 60.2).

The NRHP is the official federal list of districts, sites, buildings, structures, and objects significant in American history, architecture, archaeology, engineering, and culture. Properties can be significant at the local, state, or national level. To qualify for listing in the NRHP, properties generally must be at least 50 years old, possess historic significance, and retain physical integrity. To be eligible for listing in the NRHP, a property must be considered significant under one or more of the NRHP criteria, which include:

- Criterion A: associated with events that have made a significant contribution to the broad patterns of our history;
- Criterion B: associated with the lives of persons significant in our past;
- Criterion C: embodies the distinctive characteristics of a type, period, or method of construction, or that represents the work of a master, or that possesses high artistic values, or that represents a significant and distinguishable entity whose components may lack individual distinction; and/or
- Criterion D: has yielded, or may be likely to yield, information important in prehistory or history.

In addition to meeting these criteria, a property must retain historic integrity, which is defined in NRHP *Bulletin 15 How to Apply the National Register Criteria for Evaluation* as the "ability of a property to convey its significance" (National Park Service [NPS] 2002). To assess integrity, the NPS recognizes seven aspects or qualities that, considered together, define historic integrity. To retain integrity, a property must possess several, if not all, of these seven qualities:

1. Location – the place where the historic property was constructed or the place where the historic event occurred;

2. Design – the combination of elements that create the form, plan, space, structure, and style of a property;

3. Setting – the physical environment of a historic property;

4. Materials – the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property;

5. Workmanship – the physical evidence of the crafts of a particular culture or people during any given period in history or prehistory;

6. Feeling – a property's expression of the aesthetic or historic sense of a particular period of time; and

7. Association – the direct link between an important historic event or person and a historic property.

2.2 STATE REGULATIONS

2.2.1 California Environmental Quality Act

Pursuant to CEQA, a historical resource is a resource listed in, or eligible for listing in, the CRHR. In addition, resources included in a local register of historic resources, or identified as significant in a local survey conducted in accordance with state guidelines, are also considered historical resources under CEQA, unless a preponderance of the facts demonstrates otherwise. According to CEQA, the fact that a resource is not listed in, or determined eligible for listing in, the CRHR, or is not included in a local register or survey, shall not preclude a Lead Agency, as defined by CEQA, from determining that the resource may be a historic resource as defined in California Public Resources Code (PRC) Section 5024.1.7.

CEQA, PRC Section 21084.1, and California Code of Regulations (CCR) Title 14 Section 15064.5 address determining the significance of impacts to archaeological and historic resources and discuss significant cultural resources as "historical resources," which are defined as:

- resource(s) listed or determined eligible by the State Historical Resources Commission for listing in the CRHR (14 CCR Section 15064.5[a][1])

- resource(s) either listed in the NRHP or in a "local register of historical resources" or identified as significant in a historical resource survey meeting the requirements of Section 5024.1(g) of the PRC, unless "the preponderance of evidence demonstrates that it is not historically or culturally significant" (14 CCR Section 15064.5[a][2])

- resources determined by the Lead Agency to meet the criteria for listing on the CRHR (14 CCR Section 15064.5[a][3])

2.2.2 California Register of Historical Resources

Created in 1992 and implemented in 1998, the CRHR is "an authoritative guide in California to be used by state and local agencies, private groups, and citizens to identify the state's historical resources and to

indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change" (PRC Section 5024.1[a]). Certain properties, including those listed in or formally determined eligible for listing in the NRHP, and California Historical Landmarks (CHL) numbered 770 and higher, are automatically included in the CRHR. Other properties recognized under the California Points of Historical Interest program, identified as significant in historic resources surveys, or designated by local landmarks programs may be nominated for inclusion in the CRHR.

A resource, either an individual property or a contributor to a historic district, may be listed in the CRHR if the State Historical Resources Commission determines that it meets one or more of the following criteria, which are modeled on NRHP criteria:

- Criterion 1: It is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States;
- Criterion 2: It is associated with the lives of persons important to local, California, or national history;
- Criterion 3: It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values; and/or
- Criterion 4: It has yielded or has the potential to yield information important to the prehistory or history of the local area, California, or the nation (PRC Section 5024.1[c]).

Under 14 CCR Section 15064.5(a)(4), a resource may also be considered a "historical resource" for the purposes of CEQA at the discretion of the lead agency.

Significant resources must retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. Resource integrity, which is the authenticity of a historical resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance, is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and association. In an archaeological deposit, integrity is assessed with reference to the preservation of material constituents and their culturally and historically meaningful spatial relationships. A resource must also be judged with reference to the particular CRHR/NRHP criteria under which it is proposed for eligibility.

2.3 LOCAL REGULATIONS

Pursuant to Government Code Section 53094, local City of San Diego zoning and development regulations are not applicable to CMP development as implementation of the CMP would facilitate the education of community college students. While not subject to local regulations of the City, SDCCD may consider aspects of local plans and policies for the communities surrounding the campus when it is appropriate and feasible. Relative to historical resources, City regulations regarding the evaluation, designation, and preservation of historical resources do not apply to CMP development undertaken by SDCCD. However, localized guidance from the City relative to identification and evaluation of such resources provides relevant guidance for SDCCD in the absence of campus-specific guidelines for identification of locally significant historic resources. As such, the City's Historical Resources Regulations (HRR) and related guidance are summarized below.

2.3.1 City's Historical Resources Regulations

The purpose of the City's HRR (San Diego Municipal Code [SDMC] Chapter 14, Article 3, Division 2) is to protect, preserve, and, where damaged, restore the historical resources of San Diego, which include historical buildings, historical structures, historical objects, important archaeological sites, historical districts, historical landscapes, and traditional cultural properties (City 1997). These regulations are intended to assure that development occurs in a manner that protects the overall quality of historical resources. It is further the intent of these regulations to protect the educational, cultural, economic, and general welfare of the public, while employing regulations that are consistent with sound historical preservation principles, and the rights of private property owners.

For development projects regulated by the City, these regulations apply to proposed development when the following historical resources are present on the site: designated historical resources, historical buildings, historical districts, historical landscapes, historical objects, historical structures, important archaeological sites, and traditional cultural properties.

2.3.1.1 City of San Diego Historical Resources Guidelines

The purpose and intent of the City's Historical Resources Guidelines (HRG), located in the City's Land Development Manual (LDM), are to protect, preserve, and, where damaged, restore the historical resources of San Diego (City 1999). These guidelines are designed to implement the City's HRRs in compliance with applicable local, state, and federal policies and mandates, including, but not limited to, the City's General Plan, CEQA, and Section 106 of the NHPA. The intent of the HRG is to ensure consistency in the management of the City's historical resources, including identification, evaluation, preservation/mitigation, and development. The HRG states that if a project will potentially impact a resource 45 years or older, the resource's significance must be determined, even if it is not listed in or previously considered eligible for the California Register or a local register (LDM Section II.D.5).

To be designated as historic and potentially listed in the San Diego Register of Historic Resources (SDRHR), one or more of the following Criteria must be met:

A. Exemplifies or reflects special elements of the City's, a community's, or a neighborhood's historical, archaeological, cultural, social, economic, political, aesthetic, engineering, landscaping, or architectural development;

B. Is identified with persons or events significant in local, state, or national history;

C. Embodies distinctive characteristics of a style, type, period, or method of construction or is a valuable example of the use of indigenous materials or craftsmanship;

D. Is representative of the notable work of a master builder, designer, architect, engineer, landscape architect, interior designer, artist, or craftsman;

E. Is listed, or has been determined eligible by the NPS for listing on the NRHP, or is listed or has been determined eligible by the California State OHP [Office of Historic Preservation] for listing on the CRHR; and/or

F. Is a finite group of resources related to one another in a clearly distinguishable way, or is a geographically definable area or neighborhood, containing improvements that have a special

character, historical interest, or aesthetic value or which represent one or more architectural periods or styles in the history and development of the City.

In addition to meeting one or more of the above Criteria, an SDRHR-eligible resource must also retain sufficient integrity to convey its significance. Although the SDMC uses a 45-year threshold to review resources that may be adversely affected by development, a resource need not be 45 years of age to be eligible for listing on the SDRHR.

Eligible resources, which may include an improvement, building, structure, sign, interior element and fixture, feature, site, place, district, area, or object, are designated to the SDRHR by the City's Historical Resources Board (HRB) at a publicly noticed hearing. The City's HRG also states that if a project will potentially impact a resource, the resource's significance must be determined, even if it is not listed in or previously considered eligible for the CRHR or a local register (LDM Section II.D.5).

2.3.1.2 Historic Districts

The City's historic preservation program provides for the designation of individually significant resources as well as historic districts (LDM Section II.D.5). A historic district is defined by the SDMC as *"a significant concentration, linkage, or continuity of sites, buildings, structures, or objects that are united historically, geographically, or aesthetically by plan or physical development and that have a special character, historical interest, cultural or aesthetic value, or that represent one or more architectural periods or styles in the history and development of the City*" (SDMC Section 113.0103).

3.0 PREVIOUS EVALUATIONS

Mesa College has not been previously recorded or evaluated for built environment historic resources. No buildings, structures, objects, or sites within the campus are listed individually in the NRHP or the CRHR, or are designated on the City of San Diego Register of Historical Resources. Mesa College is not included in the California Office of Historic Preservation Built Environment Resources Directory (BERD) for San Diego County. Three individual architects of buildings at Mesa College, Frank L. Hope, Sr.; Richard J. Lareau; and Homer T. Delawie, are included in the City's 2020 *Biographies of Established Masters.*

4.0 SCOPE AND METHODOLOGY

4.1 PROJECT SCOPE

The scope of this project is a campus-wide historic resources survey of all built environment resources at the Mesa College campus that were constructed through the year 1985 (40 years of age or older). The threshold of 1985 was determined by the HELIX project team to include all resources with the potential to achieve historic significance in the next 10 to 15 years. Resources that post-date 1985 were neither surveyed nor evaluated as part of this historic resources survey. Of the approximately 45 buildings and/or structures at Mesa College, 33 were determined to be of age for evaluation. HELIX surveyed these buildings and/or structures as well as landscapes, planning features, and other elements of the campus's built environment. HELIX identified a total of 32 buildings, one structure (Mesa College sign by A100), one site (non-extant buildings T1 and T2), and two potential historic districts requiring evaluation for listing in the NRHP and CRHR.

4.2 METHODOLOGY

This evaluation was prepared in accordance with the most up-to-date standards and the best industry practices. Research, survey, and evaluation methodology were informed by the following informational materials maintained by the NPS and the California OHP.

- National Register Bulletin (NRB) 15: *How to Apply the National Register Criteria for Evaluation*
- NRB 24: *Guidelines for Local Surveys: A Basis for Preservation Planning*
- Secretary of the Interior's *Standards and Guidelines for Historic Preservation*, including standards for planning, identifying, evaluating, and documenting resources
- California OHP: *Writing Historic Contexts*
- Secretary of the Interior's *Standards and Guidelines for Historic Preservation*, including standards for planning, identifying, evaluating, and documenting resources

4.3 SURVEY

Upon completion of sufficient research to determine the age of all buildings on the Mesa College campus, HELIX conducted an intensive-level survey of its built environment. The NPS defines an intensive-level survey as one designed to identify, inspect, and document, in the field, all historic resources within a given area and to complete sufficient background research necessary to evaluate historic properties and to prepare an inventory (NPS 1985). On February 18, 2025, HELIX Senior Architectural Historian Nelson White walked the entire campus. The purpose of the survey was to identify and digitally photograph the overall campus and every building 40 years of age or older to inform the historical significance evaluations. He was equipped with current campus maps that provided basic building footprints and building names and/or numbers. He took note of the development, architectural styles, and the age and integrity of the buildings. Additional focused research was conducted for each property on the list. Recordation on California Department of Parks and Recreation (DPR) 523 series forms is outside the scope of work for this survey. All field notes, photographs, and records related to the survey are on file at the HELIX La Mesa office.

4.4 RESEARCH AND OUTREACH

HELIX conducted extensive background research to develop an understanding of the Mesa College campus, its development history and culture, and to characterize the historical development of the surrounding area. Understanding gained from this background research helped to inform the outreach efforts and, ultimately, the historic contexts and themes. HELIX consulted a variety of primary and secondary source materials, including (but not limited to) the following:

- SDCCD archives, City College Library, Mesa College Library, faculty, and staff
- Campus planning documents including the *San Diego Mesa College Student Equity Plan* (2022-2025), *San Diego Mesa College Annual Report to the Community* (2013-2014), *San Diego Mesa College Facilities Master Plan Study* (2006), environmental impact analyses, and technical reports

- History-themed videos on the official Mesa College YouTube channel
- Books, journals, periodicals, and other published sources
- Articles published in campus newspapers (*The City College Jay Sees*, *Tecolote Student Newspaper*, *The Knight Owl*, *The Olympian*)
- Articles published in local and major newspapers such as *The San Diego Union-Tribune*, the *San Diego Sun*, the *North County Times*, and the *Los Angeles Times*
- Historical photographs and maps of the campus
- Archived building plans and construction documents
- American Institute of Architects (AIA)
- Avery Index to Architectural Periodicals
- San Diego History Center
- San Diego Public Library, California Room
- Sanborn fire insurance maps
- ProQuest

HELIX conducted an outreach effort as a fundamental component of the research and information gathering for this project. An e-mail solicitation for information was issued by HELIX in September 2025 to select SDCCD faculty and staff. Respondents were asked to share relevant information about Mesa College's history and potentially significant events, themes, buildings, and places. As part of the outreach process, HELIX also submitted follow up questions to a few recipients of the original e-mail solicitation. These individuals were identified based on responses to solicitation for information, were told about the project and its goals, and were invited to elaborate on their responses based on their own knowledge of the campus and its history. Information that was gleaned from e-mail responses helped to inform the historic context statements. A list of individuals who participated in the public outreach component of this project is included as Appendix B, *Outreach Program*, of this report.

4.5 RESOURCE TYPES

In addition to individual buildings, the survey observed various other resource types including structures, objects, and sites, all of which help to tell the story of the college's development history. The following list provides a description of each resource category that was identified.

- **Building:** A *building*, such as a house, barn, church, hotel, or similar construction is created to shelter any form of human activity. *Building* may also be used to refer to a historically and functionally related unit, such as a courthouse and jail or a house and barn.
- **Structure:** The term *structure* is used to distinguish from buildings those functional constructions made usually for purposes other than creating shelter.

- **Object:** The term *object* is used to distinguish from buildings and structures those constructions that are primarily artistic in nature or are relatively small in scale and simply constructed. Although it may be, by nature or design, movable, an object is associated with a specific setting or environment, such as statuary in a designed landscape.

- **Site**: A *site* is the location of a significant event, a prehistoric or historic occupation or activity, or a building or structure, whether standing, ruined, or vanished, where the location itself possesses historical, cultural, or archeological value regardless of the value of any existing structure.

- **Historic District:** A *district* possesses a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development.

- **District Contributors and Non-Contributors** refers to the buildings, structures, site, and objects that are located within the boundaries of a historic district. Those that add to the historic significance are known as contributors. Those that do not contribute to the historic significance, be it for extensive alterations or because it was built outside the district's historic period (known as period of significance), are known as non-contributors.

4.6 CALIFORNIA HISTORICAL RESOURCE STATUS CODES

The California Historical Resource Status Codes (referred to as "status codes") were created by the California OHP in 1975 as the National Register Status Codes. They were created to provide a consistent database tool to classify and track resources identified in the state's inventory and as the original name implies, they were focused on NRHP eligibility. The CRHR was implemented in 1998. In 2003, the OHP renamed the status codes as the California Historical Resource Status Codes and substantially revised them to reflect both the CRHR and local criteria. Today's status codes convey (1) the designation level (federal, state, or local) at which a resource is determined eligible, if at all, and (2) under which program the evaluation was triggered. Status codes are used to track resources within the California Historical Resources Information System (CHRIS) and to support the CEQA review process. California Historical Resource Status Codes most likely to be applicable in evaluating Mesa College's built resources are listed in Table 1, *Applicable California Historical Resource Status Codes.*

Table 1
APPLICABLE CALIFORNIA HISTORICAL RESOURCE STATUS CODES

Code	Description
3B	Appears eligible for NR both individually and as a contributor to an NR-eligible multi-component resource like a district through survey evaluation.
3D	Appears eligible for NR as a contributor to an NR-eligible multi-component resource through survey evaluation.
3S	Appears eligible for NR individually through survey evaluation.
3CB	Appears eligible for CR both individually and as a contributor to a CR-eligible multi-component resource through survey evaluation.
3CD	Appears eligible for CR as a contributor to a CR-eligible multi-component resource through survey evaluation.
3CS	Appears eligible for CR individually through survey evaluation.
6Z	Found ineligible for NR, CR, or local designation through survey evaluation.

NR = National Register; CR = California Register

5.0 HISTORIC CONTEXT STATEMENT

5.1 INTRODUCTION AND OVERVIEW

Historic and cultural resources cannot be adequately evaluated without first taking into consideration the historic context(s) with which they are associated. Historic context statements are documents that help communities understand their past so they can identify and evaluate historic places and make informed preservation decisions. According to the National Park Service, historic context statements illuminate the major historical trends and developments that shaped a community or region and are reflected in its buildings, landscapes, and other historic resources.

A historic context statement investigates the history, culture, and geography of a specific place during a defined time period. It identifies the topography, major land-use patterns, and the different types of properties, such as homes, industrial sites, commercial buildings, or infrastructure, that contributed to the community's development and physical form. It also explains why these patterns and property types matter and outlines the typical features a property should possess to be considered representative of patterns and type.

Historic context statements are general in scope without being the all-encompassing history of a community. Instead, they are organized to give an overview of the area's development and then focus on key themes relevant to the chosen place and period. Each theme includes a list of related property types and guidance on how to determine whether those properties are historically significant. With this information, communities can conduct preservation planning, surveys, and evaluations in a consistent, well-supported way.

Six historic contexts have been identified for the evaluation of built resources on the Mesa College campus. The contexts are organized chronologically and capture major patterns and trends in the campus's development history that are expressed in its extant built resources. Within each context are one or more themes that provide a focused discussion related to a particular property type(s). For the Architecture and Design context, evaluation guidelines accompany each theme and provide a framework for evaluating resources associated with the theme. A resource may be significant under multiple contexts and themes; for instance, a particular resource may be significant as representing important trends in campus planning and design and may also be an excellent example of a particular architectural style.

The contexts and themes associated with SDCCD's Mesa College campus are summarized as follows:

- **Context: History of the San Diego Community College District**
  The San Diego Community College District, formally established in 1972, consists of three credit-granting institutions and a continuing education center, the oldest of which is San Diego City College, which opened in 1914. The others consist of San Diego Mesa College, which opened in 1962; San Diego Miramar College, which opened in 1969; and the Educational Cultural Complex, which opened in 1976. This context contains a history of SDCCD, starting with the opening of San Diego Junior College in 1914, through the modern day.

- **Context: Early Settlement and Development in Linda Vista and Clairemont**
  The communities of Linda Vista and Clairemont both date to World War II, when the aircraft manufacturing industry in San Diego boomed. Linda Vista has its roots in the Linda Vista Housing Project, one of the first projects to be initiated under the Lanham Defense Housing Act of 1940, while Clairemont grew out of a series of subdivisions built and sold to military families. As such, this context discusses the origins and expansions of both communities.
    - Theme: Linda Vista
    - Theme: Clairemont
- **Context: Campus Development**
  The San Diego Mesa College campus currently consists of approximately 45 buildings and/or structures, over half of which were built within the first two decades of the College's operation. Currently, 32 extant buildings and one structure are more than 40 years of age.
- **Context: Social and Cultural Development**
  This context discusses the social and cultural development of Mesa College. First, the Civil Rights Movement and the subsequent rise of student activism and prominent student groups on campus is discussed, followed by a discussion of the creation of Mesa College's ethnic studies program and student support services.
    - Theme: Civil Rights Movement and Student Activism
    - Theme: Initiatives in Cultural Diversity, Ethnic Studies, and Student Support
- **Context: Architecture and Design**
  This context provides an overview of the predominant architectural styles, International, Brutalism, and Post-and-Beam, which are found on the Mesa College campus. For each style, a list of character-defining features is presented to help in both identification and to help guide the evaluation of buildings and structures that may have significance for embodying the characteristics of a specific architectural style and/or form.
    - Theme: International Style, circa (c.) 1925-1965
    - Theme: Brutalism, c. 1950-1975
    - Theme: Post-and-Beam, c. 1950-1970
- **Context: Architects**
  Original building plans and other SDCCD records indicate that five different architecture firms designed the extant buildings and structures at Mesa College that were constructed between 1954 and 1985 (40 years of age or older). The firms include the following:
    - Frank L. Hope & Associates
    - Earl F. Giberson
    - William A. Richardson
    - Richard J. Lareau & Associates
    - Delawie, Macy & Henderson

5.2 HISTORY OF THE SAN DIEGO COMMUNITY COLLEGE DISTRICT

The SDCCD consists of three credit-granting institutions, San Diego City College, San Diego Mesa College, and San Diego Miramar College; and one non-credit institution, San Diego College of Continuing Education. Together, SDCCD serves approximately 90,000 students annually and is one of the largest community college districts in California (SDCCD 2026a). Its predecessors, however, which date to the early years of junior college and vocational schooling in the United States, were somewhat smaller.

The origins and aims of the United States' first junior colleges (broadly, two-year colleges founded prior to 1960) are somewhat unclear (Pedersen 2000).[1] According to historian Robert Pedersen, the traditional account is as follows:

> [C]ommunities, encouraged by prominent university men [like Stanford president David Starr Jordan (1851-1931) and University of California, Berkeley professor Alexis Lange (1862-1924)] and inspired by powerful, democratic forces within the American culture, embraced the public junior college with the intent of bringing higher education within the reach of those Americans long barred from university attendance by distance, schooling deficiencies, and poverty (Pedersen 2000:2).

This account of the origins of the junior college is in line with the aims of contemporary community colleges. However, it does not align with the fact that early junior colleges appear to have catered to the same elite as four-year universities: their student bodies were dominated by the affluent, they generally charged tuition, and their students engaged in extra-curricular activities that the working class had little time for, such as sports, newspapers, literary societies, et cetera (Pedersen 2000:49-58). Regardless, the impetus and aims underlying the establishment of early junior colleges seem to have differed greatly by location.

Education scholars Arthur M. Cohen and Florence B. Brawer identify early twentieth-century California as uniquely compatible with junior colleges: as a relatively new state (granted statehood in 1850), California had few private educational institutions that might compete with junior colleges, and the few it did have supported the establishment of a junior college system (Cohen and Brawer 2003:18). In 1907, the legislature passed the California Upward Extension Act, authorizing secondary schools to offer post-graduate courses in line with those offered in the first two years of university. Although the Act sanctioned something that was already happening, it nonetheless served as model legislation for other states (Cohen and Brawer 2003:18). In 1910, Fresno became the first city in California to take advantage of the Upward Extension Act, when it founded Fresno Junior College (today, Fresno City College), California's first junior college. The first in the U.S. was founded in 1901 (Joliet Junior College) in Joliet, Illinois (Pedersen 2000:17).[2]

[1] According to Robert Patrick Pedersen, "[a]s a general but imprecise rule, the phrase 'junior college' is used to describe both public and private two-year colleges operating before 1960; after 1960, public two-year colleges began to call themselves 'community colleges,' while private two-year colleges continued to call themselves 'junior colleges'" (Pedersen 2000:2). Accordingly, except when referring to specific two-year colleges whose names diverse from Pedersen's rule, this account of the history of junior colleges and community colleges refers to pre-1960s, public two-year colleges as "junior colleges" and post-1960, public two-year colleges as "community colleges."

[2] Pedersen locates the origins of the first junior colleges in "the fairly widespread curricular administration being undertaken by many larger public high schools in the decades around 1900" (Pedersen 2000:17). This experimentation included the introduction of college-level courses to high schools, the addition of a 13th grade, and so on. It dates as early as the 1870s, thus predating the establishment of a junior college in Joliet.

San Diego's first community college, San Diego Junior College, was founded four years later, in 1914. It opened with 34 students and five instructors (SDCCD 2023). Like other early junior colleges, San Diego Junior College was housed in the local high school, San Diego High School. It was administered by the local public school district (today, San Diego Unified School District [SDUSD]) until the early 1970s (SDCCD 2023).

According to the *San Diego Sun*, San Diego Junior College aimed "to cover all of the requirements of the University of California for the first two years of collegiate work, in the College of Liberal Arts and Sciences" (*San Diego Sun* 1919). Additionally, it included "several elective courses of a vocational and professional nature" (*San Diego Sun* 1919). A 1914 article on the college's establishment represented the new institution as broadening educational access by "bring[ing] regular college work under trained instructors within the reach of folks who aren't in a position to send their boys and girls away to an expensive college" (*San Diego sun* 1914). However, early newspaper articles about San Diego Junior College students and their activities suggest that most belonged to the City's white elite or perhaps its upwardly mobile middle class (*San Diego Sun* 1916).[3]

Somewhat more inclusive was the San Diego Adult School, which was founded the same year (1914) and was also housed at San Diego High School. According to the school's principal Arthur Gould, San Diego Adult School courses sought to "provide for that large proportion of high school pupils who [could not] or [did] not care to go to college" (San Diego College of Continuing Education 2023). Additional adult education courses were also taught at elementary schools in downtown San Diego (San Diego College of Continuing Education 2023).

World War I brought a decline in junior college enrollment across California (Toews 1964:5). San Diego Junior College was no different. In December 1917, the *San Diego Sun* reported that, "According to latest reports from San Diego junior college [sic] class, number of members is fast diminishing owing to large number of boys enlisting in army and navy (*San Diego Sun* 1917a)." Only nine months earlier, a week before the U.S. joined the war, approximately 75 seniors at the junior college had "'ditch[ed]' classes…taking hike to Adobe falls, where—in masculine and feminine relays—they enjoy[ed] 'nature swim' in the stream, under chaperonage" (*San Diego Sun* 1917b).

In the years after the war, enrollment crept up. By 1921, overcrowding resulted in San Diego Junior College relocating from San Diego High School to San Diego Normal School in University Heights (non-extant except for two ancillary buildings; the predecessor to San Diego State University) (Patrick 1991).[4] The State Normal School was being converted into a teachers college, San Diego State Teachers College.[5] The new teachers college needed liberal arts courses, which were already offered by San Diego Junior College. So, rather than having "in the city two collegiate institutions overlapping and duplicating in courses and purposes," the junior college was merged with the teachers college (McGrew 1922:276).

[3] The first graduating class at San Diego Junior College includes both men and women but none with Hispanic (or, indeed, non-Anglo-Saxon or -western European) surnames (see *San Diego Sun* 1916). Census records identify them as white and reveal them to be the children of physicians, farmers, grocers, and real estate agents.

[4] Several structures from the original Normal School are still extant, including six annex buildings and the Eugene Brucker education Center.

[5] This was the second iteration of what would later become San Diego State University. For further information, including a complete history of the University, see Seth Mallios's *Hail Montezuma! The Hidden Treasures of San Diego State University* (2012).

The extent of that merging is unclear. The physical campuses consolidated, but research to date has not revealed if the administrations were also consolidated.[6]

The 1930s, broadly, saw a rise in vocational education at junior colleges across the U.S., perhaps a partial product of the Great Depression (Drury 2003). In 1938, Walter L. Thatcher established the San Diego Vocational High School and Junior College. The vocational classes throughout the district were transferred to the newly acquired facility in an old arms plant at State and Market Streets (non-extant) (Patrick 1991). The school later collaborated with a local flying school, the Ryan School of Aeronautics, to establish an exceedingly popular Technical Institute of Aeronautics. Students spent half the day in college courses and half the day in aeronautics work. According to the *San Diego Sun*, "graduates [were] qualified for skilled aircraft work" (*San Diego Sun* 1936).

In 1933, an estimated magnitude 6.4 earthquake struck Los Angeles, resulting in 120 deaths and an estimated $40 million worth of property damage (Eaton 2026). The majority of the deaths were attributed to falling debris, though newspapers at the time noted that an even greater tragedy was averted by the fact that children fled collapsing school buildings, and factory and office workers vacated other dangerous buildings (Eaton 2026). A month later, Governor James Rolph, Jr. signed the Field Act into law; the Act required earthquake-resistant design and construction for all public school buildings (Alquist 2007). Because of this legislation, it was determined that the majority of the buildings on the site of the San Diego High School would have to be demolished and rebuilt. It was decided by the Board of Education that two smaller schools would be built elsewhere, and that the Junior College would take over the site when the high school had to be replaced (Patrick 1991).

During World War II, San Diego's population increased by two-thirds (Reft 2014). That population increase, coupled with the GI Bill, which provided money for education to veterans, and the Truman Commission Report, which advocated for the establishment of a network of free, public "community colleges," boosted enrollment at the junior college, particularly of veterans. According to the student newspaper *Jay Sees*, in 1948, 70 percent of students at San Diego Junior College were veterans of the Second World War, with 346 of them (nearly two-thirds) attending under the GI Bill (*Jay Sees* 1948).

In 1946, San Diego Junior College returned to the San Diego High School campus. Over the course of that transfer, the Junior College reorganized to include the subsidiaries: San Diego Vocational High School, San Diego College of Arts and Sciences, and San Diego Evening Junior College. A 1949 article in the *National City Star-News* testifies to the institution's provision of a range of courses, from the liberal arts, to art, millinery, sewing, and "various other cultural courses" (*National City Star-News* 1949). According to the *Star-News*, "[s]pecial naturalization classes and English classes for foreign born [had] been included in the schedules," testifying to the college's increased emphasis on access. Similarly, its principal Paul Klein stated, "that the school [was] open for the convenience of the public and that there [was] no cost" (*National City Star-News* 1949).

The 1948 San Diego Junior College Student Handbook gives some insight into what the combined campus was like. Both the Junior College and High School followed the same time schedule; college courses were held during the same time as the high school classes (San Diego City College 1948). Junior

[6] The junior college seems to have retained a separate identity from the teachers college; its sporting events and extracurriculars seem to have been reported separately from those of the teachers college, and the student newspaper *Paper Lantern* bore twin subtitles "State Teachers College" and "San Diego Junior College" for several years. However, the junior college seems to have been sufficiently superseded by the teacher's college in California's overall consciousness as to fail to make a 1927 list of California junior colleges in the *Oakland Tribune*, and Pedersen lists it as having been closed on an indeterminate date, if reopened by 1935 (Pedersen 2000:116).

College students had exclusive use of the lockers in the south and southeast corridors of the main building; however, the number of lockers was limited, and upwards of three to four students shared each one.

As the 1940s ended and the 1950s began, it was clear that the Junior College was outgrowing its facilities. In 1947, approximately 750 students attended the Junior College, and the number more than doubled the following year (*Jay Sees* 1947, 1948). City School Superintendent Will C. Crawford envisioned an educational and cultural complex encompassing the junior college on the site of San Diego High School (Patrick 1991). In 1950, Bond A passed to fund construction; as a result, Crawford directed the purchase of several city blocks south of Russ Boulevard (present site of City College), immediately south of the high school. In preparation for the new campus, the Board of Education merged the San Diego Junior College and the San Diego Vocational School, developed during World War II to produce aviation mechanics, into the San Diego Junior College and Vocational School (Schoenherr 2014).

The first two buildings constructed at the new campus of the new San Diego Junior College and Vocational School were a temporary administrative building (Building A) and a large shop building (Building T), both of which were designed by Frank L. Hope & Associates and completed in 1956 (Van Wormer 2007). These temporary buildings ultimately became permanent once it was realized that it would be politically and legally impossible to displace San Diego High School. *Brown v. Board of Education* ruled that the lawful segregation of African-American children in schools was a violation of the 14th Amendment. The two schools that were proposed to replace the existing San Diego High School would have been, based on their locations, severely racially segregated (Van Wormer 2007). On February 21, 1961, the Board of Education voted to rename San Diego Junior College to San Diego City College (Rhoades and Spoerer 2014).

Enrollment at City College soon exceeded the capacity of the existing facility. At that time, SDUSD exchanged unused city-center property with the City of San Diego for approximately 145 acres of vacant land in Kearny Mesa. Architects Frank L. Hope & Associates prepared plans for this new college, the Kearny Mesa Junior College. In 1962, San Diego Mesa College opened with an enrollment of 1,400 students at Kearny Mesa High School (Patrick 1991). In 1964, Mesa College moved to its new campus. While City College course offerings were two-thirds vocational and one-third academic, the intent was for Mesa College course offerings to be two-thirds academic and one-third vocational in order to balance the course offerings between the two colleges. The new campus also provided greater choice for students county-wide (*Ramona Sentinel* 1963).

SDUSD acquired the location of the Miramar Campus, located on the 120-acre Navy Hour Glass Field, as a surplus property donation in 1965. In 1969, the Miramar Regional Occupational Training Center accepted its first students (SDCCD 1989). This college, which would later be known as San Diego Miramar College, was geographically the largest of the colleges and offered courses in programs in criminal justice and fire science, and operated the police and sheriff's academies (Mira Mesa Recreation Council n.d.; San Diego Mesa College 2026a; SDCCD 1989, 2018). A total of 597 students attended day classes and 522 students attended evening classes.

Enrollment at City College continued to increase, necessitating another SDUSD expansion. In 1966, a downtown community group, San Diegans, Inc., proposed a major campus expansion plan; this plan, adopted by the City Council and administered by the San Diego Redevelopment Agency, was formally initiated in 1968 (Van Wormer 2007). However, funds were not made available until 1970. During this time (between 1966 and 1970), the San Diego Board of Education bond revenues were used to purchase

property and approximately eight acres were purchased using these funds. In 1970, the campus expansion began with the demolition of the existing buildings within the newly purchased city blocks, most of which were aging apartment buildings or small storefronts, between Russ Boulevard and 12th, 17th, and C Streets (Van Wormer 2007). In 1971, a second building was added to the Miramar campus to accommodate the aviation maintenance technology program, which was moved from City College.

Even as San Diego's community college system grew, it continued to be administered by the public school district, SDUSD. Only in 1972 was a separate community college district authorized: San Diego Community College District. SDCCD administers all three community colleges: San Diego City College (founded 1914), San Diego Mesa College (founded 1962), and San Diego Miramar College (founded 1969), as well as the San Diego Adult School (founded 1914).

That same year, in 1972, the SDCCD, along with the City and County of San Diego, began pooling funds to buy the Preble-Sachem Naval Housing Development in Southeast San Diego. The goal was to create an Educational Cultural Complex (ECC) which would serve the area. In 1974, the ECC's groundbreaking ceremony was held with inaugural SDCCD President Dr. Lawrence Davenport, then-San Diego Mayor Pete Wilson, San Diego Urban League Leader Clarence Pendleton, and others in attendance. The ECC, today the largest of San Diego College of Continuing Education's six campuses, opened its doors on May 15, 1976 (San Diego College of Continuing Education 2023; SDCCD 2020).

The 1980s saw the first annual Disability Awareness Week at Mesa College in 1980, and the first annual Festival of Colors, a weeklong celebration of cultures through arts, dance, and food, in 1983 (SDCCD 1989). In 1984, the Mesa Abroad program was launched, with classes in Madrid, Spain. Additionally, the first annual Mesa Humanities Appreciation Award was given to actor Cliff Robertson. Future awards would be given to Jayne Meadows and Steve Allen. In 1986, Charles M. Robertson gifted his African collection, valued at the time to be worth $70,000, to Mesa College. A donation drive was launched to fund an art gallery and museum, which now sits on the fourth floor of the Learning Resource Center.

Over the subsequent decades, all four campuses continued to evolve, with further expansion occurring at each of the campuses. Several older buildings, such as City College's A and C buildings, were remodeled or upgraded, and Mesa College's Quad was redesigned to create a more welcoming atmosphere. Miramar College nearly doubled in size from 1990 to 2020, and a new 38,000-square-foot building opened at the ECC in 2009. Today, the four institutions the SDCCD oversees are much larger, more diverse, and more concerned with providing an accessible education than were their progenitors, San Diego Junior College and the San Diego Adult School.

5.3 EARLY SETTLEMENT AND DEVELOPMENT IN LINDA VISTA AND CLAIREMONT

San Diego Mesa College is located between the City of San Diego communities of Linda Vista and Clairemont, and its history is entangled with theirs; thus, the following contexts provide a brief history of both communities.

San Diego Mesa College opened in its current location in 1964 in an attempt to ease enrollment pressures on San Diego City College (*Los Angeles Times* 1964; *The San Diego Union-Tribune* 1963).[7] At

[7] It seems that many of Mesa College's first students took classes at Kearny High School and San Diego City College while the college was being built.

the time, Linda Vista was two decades old, and Clairemont was a decade old. Had Linda Vista and Clairemont not preceded it, essentially extending the bounds of residential San Diego, Mesa College might not have been located where it was, and its history might have been quite different.

5.3.1 Linda Vista

A settlement called Linda Vista existed in the San Diego area as early as the late nineteenth century, though its location does not exactly coincide with that of modern Linda Vista (Anteon Corporation 2004:10). The earlier Linda Vista seems to have been destroyed by a flood in 1916. Its former residents integrated themselves into the adjacent communities of Serra Mesa or Clairemont Mesa.

The founding of modern Linda Vista dates to World War II, a byproduct of San Diego's strengthened ties with the military. San Diego had been founded as a presidio in 1769, the first permanent European settlement on Las Californias' Pacific coast but, following its 1850 annexation by the U.S., San Diego endured several decades as a relative backwater. However, in the early twentieth century, due to extensive lobbying by local politicians, San Diego began to develop its still-strong connection with the U.S. Navy (Reft 2014: 39). By the 1920s, the Navy had established seven bases in and around San Diego's metropolitan area, including the Naval Training Center and Marine Base. By 1930, over one-third of San Diego's citizens were employed by the Navy (Killory 1993).

At the same time, San Diego had become a center for air travel. Historian Christine Killory writes, "The same mild climate so successfully marketed to tourists and retirees also guaranteed favorable year-round flying conditions and outdoor aircraft assembly" (Killory 1993). Prior to World War II, relatively few San Diegans (half the national average) were employed in manufacturing (Linder 2001:122). However, given the massive growth in aircraft manufacturing between 1939 and 1943, San Diego's rank as an industrial center rose from 79th in the U.S. to 28th (Linder 2001:122).

Not only did resident San Diegans find work in its exploding aircraft industry; so, too, did tens of thousands of workers from across the U.S. Having relocated to San Diego to support wartime industries, transplants, often families with children, could not find anywhere to live. They camped in parks and makeshift trailer parks.[8] San Diego had no infrastructure to attend to the needs of the poor and unhoused—no subsidized housing and no housing agency (Killory 1993). So, the federal government intervened.

The Linda Vista housing project, essentially, the origins of modern Linda Vista, was the first project to be initiated under the Lanham Defense Housing Act of 1940, which financed housing for workers employed in defense industries. At the time of its construction, Linda Vista was the world's largest defense housing project and largest low-income housing development, with a projected occupancy of 13,000 people (Killory 1993). Because the project was so enormous, siting it was difficult. Ultimately, the government settled on some 1,240 acres of flat, barren land on the southwestern portion of Kearny Mesa (Engstrand 2016:160; Killory 1993).[9] Ground was broken on October 31, 1941, with 3,001 houses being constructed over 200 days (Engstrand 2016:160). In May 1941, another contract was awarded for the building of 1,846 more units (Engstrand 2016:160).

[8] Killory, "Temporary Suburbs."

[9] Iris Engstrand says that the Linda Vista housing project covered an area of 1,459 acres (Engstrand 2016:160). Possibly, Engstrand's calculation includes several phases of building at Linda Vista.

No local officials were consulted during site selection. The *New Republic* reported that San Diego's officials had been opposed to demands for housing, noting that "[i]n partial explanation of this fact, it might be pointed out that everyone in San Diego is engaged in the real-estate business" (Mayer 1978:126). At any rate, the lack of local involvement in planning of the housing project partly accounts for an initial lack of infrastructure in Linda Vista. Today, Linda Vista lies within the boundaries of the City of San Diego but, when it was first built, Linda Vista was so far from San Diego's urban core that it could not use existing police or fire departments, garbage collection services, street cleaning, ambulance services, or public transportation (Killory 1993). Entirely new systems were constructed for Linda Vista. By the early 1950s, perhaps a decade after its initial construction, "materially, Linda Vista had achieved a sort of suburban ideal" (Reft 2014:48). It had a movie theater, a community center, and one of the first shopping centers in the U.S., the Linda Vista Shopping Center (1943), inaugurated by Eleanor Roosevelt.[10]

The University of San Diego (USD; a private Catholic university) was established in 1949. Its campus, within Linda Vista, was developed in the 1950s. Multiple family development near USD increased in the 1950s through the 1980s (City of San Diego Planning Department 2020:18).

At the outset, Linda Vista was considerably more integrated than was the rest of San Diego. Between 1910 and 1950, racial covenants restricted housing throughout most of San Diego (Nelson n.d.). Black and Hispanic San Diegans were limited to crowded, substandard housing in Barrio Logan and southeast San Diego (Reft 2014:44). Government housing at Linda Vista was internally segregated; that is, certain units were reserved for certain racial groups, but the overall community was integrated. So, in the mid-1950s, when disposition brought about the privatization of Linda Vista's government housing (and residents purchased the homes they lived in), it proved to be an opportunity for Black and Hispanic homeownership. According to historian Ryan Reft, "[d]espite subsequent decades of increasing market-based segregation, by the 1980s, Linda Vista remained one of the metropolitan area's most diverse communities, including African, Asian, and Mexican communities" (Reft 2014:77).

Linda Vista's Asian community is of relatively more recent vintage than its Black and Mexican communities. It consists largely of southeast Asian refugees settled in the San Diego area in the 1970s and 1980s, particularly, after the fall of Saigon (May 1975) at the end of the Vietnam War. A 1993 *Los Angeles Times* article about Linda Vista describes it as "a polyglot community of 45,000 where 26 languages are spoken and people of Asian descent make up about one-fourth of the population" (Beyette 1993).

5.3.2 Clairemont

Like Linda Vista, Clairemont seems to have been little developed prior to the 1940s. The 2020 Clairemont Community Plan Update mentions "a short-lived real estate boom" in the Clairemont area in the late 1880s, during which the Morena Company, a developers' syndicate, surveyed and mapped the area (HELIX 2020:8). Otherwise, the years prior to World War II saw little development in the Clairemont area. In the early 1920s, oil speculators drilled several wells and installed derricks nearby. In 1926, grading was performed for a road to a yet-to-be-built country club called El Panorama, but the project appears to have failed.

In 1946, Shanghai-born businessman Carlos Tavares received a $25,000 option on property in what would become Clairemont Mesa. Four years later, with his business partner Lou Burgener, Tavares

[10] Most of the shopping center was demolished in the 1970s.

exercised that option, purchasing 1,000 acres of former cattle-grazing land. Burgener and Tavares were purportedly inspired by Tavares's wife, Claire (after whom Clairemont was named), who "suggested that the new subdivision's layout should match its terrain, with winding streets and cul-de-sacs for children to play" (Save Our Heritage Organization 2012). According to historian Lucinda Eddy, Clairemont's design "represented a new concept in community living because the developers were unwilling to impose the traditional grid system of uniform blocks and streets, but, rather, hired engineers to create a plan of gently winding streets and scenic view lots to take advantage of the deep canyons and lofty bluffs overlooking Mission Bay" (Eddy 1995).

Like Linda Vista, Clairemont was relatively isolated from the rest of San Diego and unable to be integrated into existing infrastructure. According to *San Diego Magazine*, Tavares and Burgener were required to invest some $125,000 to build a sewer, roads, and water mains, before they constructed a single house in Clairemont (*San Diego and Point Magazine* 1957). Nonetheless, Clairemont grew rapidly. Construction began around 1950. By 1954, some 18,000 residents occupied over 6,000 dwellings in Clairemont (HELIX 2020:9). The following year, the number of dwellings increased to 7,000, with an estimated population of close to 25,000 (HELIX 2020:9). A second Clairemont—East Clairemont—was constructed across Tecolote Canyon from the first Clairemont. Development in both areas peaked between 1958 and 1975 (HELIX 2020:10). Like Linda Vista's residents, Clairemont's residents were largely employed in defense industries (HELIX 2020:10).

Today, Clairemont may be best known for inspiring the journalist Cameron Crowe to write the screenplay for the 1982 movie *Fast Times at Ridgemont High* (Reno 1989). Crowe infiltrated Clairemont High School for a year in the late 1970s, with the aim of reporting on the lives of America's high schoolers. The book he wrote about his experience was optioned prior to its publication, and the movie it inspired became a hit. In 2005, *Fast Times at Ridgemont High* was added to the Library of Congress's National Film Registry list (NPR 2006).

5.4 CAMPUS DEVELOPMENT

At the time of Mesa College's planning and construction, it fell under the umbrella of the San Diego City School District; thus, all of the planning had to be approved by the City School District administrators (Heyer 1995). As a result, the buildings were designed to be austere and Mesa College opened with virtually no landscaping (Jonathan McLeod, personal communication, September 4, 2025).

In 1963, Mesa College opened with an enrollment of 1,400 students attending evening classes in temporary facilities at Kearny Mesa High School (San Diego Mesa College Communications Services 1994). The following year, in 1964, the current Mesa College campus opened with an enrollment of 1,900 students and offered 25 programs, including medical and dental assisting, typing, fine arts, and airline services. The original 13 buildings (five of which are non-extant), were all designed by Frank L. Hope & Associates and mostly in the International style (see Table 2; Plates 1 through 3). All of the original buildings had minimal insulation; according to Emeritus Professor of History Jonathan McLeod, the classrooms were insufferably hot and stuffy in the summer months, and chilly in the winter months (McLeod, pers. comm., 2025). Within just a few years, the same architects designed two more buildings at the new campus: the Trades building (K200) in 1965 and the Ornamental Horticulture Facility (P100) in 1967. The Ornamental Horticulture Facility, which exhibits the Ranch type of building form with Polynesian-inspired elements, deviates from the predominant International style employed in the early buildings.

Due to the limited physical education facilities, Mesa College did not field any athletic teams until the fall of 1964, when the new campus officially opened (San Diego Mesa College Student Handbook 1963). The first issue of the student newspaper, *Mesa College News*, was published in 1964. The content of the newspaper consisted mostly of faculty and student news, messages from the college president, interviews and profiles of staff, editorials, sports, and campus events (San Diego Mesa College Communications Services 1994). The first major drama performance, *Hippolytus*, occurred at the Apolliad Theater (C100) in 1965.

The 1970s saw the establishment of the Chicano and Black Studies programs, the counseling department, and the child development center. The Chicano and Black Studies departments were originally housed in the T-buildings, a series of temporary wooden bungalows located in the footprint of the current Social and Behavior Sciences Building (SB) (McLeod, pers. comm., 2025). These departments were later relocated to the G Building in 2002.

Eleven new buildings/structures were built in the 1970s; these buildings consisted of three storage buildings (C300, O200, O300), the swimming pool, the swimming pool service building (M200), handball courts (L200-now Facilities Maintenance), a press box (L400), a pool restroom facility (M300), the Child Development Center (R100), the Music Building (C200), two landscape buildings (collectively P200), and the Life Sciences and Student Personal Administration building (I300-now Fine Arts). Most of these buildings were designed by Frank L. Hope & Associates and are vernacular in design. The Child Development Center (R100) and Landscape buildings (P200) were designed by Richard J. Lareau & Associates in the Post Modern and Post-and-Beam styles, respectively. The pool restroom facility (M300) was designed by Delawie, Macy & Henderson. An original Animal Health Technology (AHT) facility (non-extant) was constructed in the early- to mid-1970s and was later replaced in the same location (1990s). The Life Sciences and Student Personal Administration building, the last to be constructed in the 1970s, was designed by Frank L. Hope & Associates in the Brutalist style and was noted to have poor ventilation (McLeod, pers. comm., 2025).

In 1973, the street name of Artillery Drive, so named for the National Guard Armory near Mesa College, was officially changed to Mesa College Drive; this same year, the Independent Learning Center opened within the library (SDCCD 1989).

Enrollment hit 25,000 students in the 1980s, with hundreds of Mesa College graduates participating in the new Transfer Admission Program. Four buildings were built in the 1980s. Two of these were associated with the art program: the Art Addition and Kilnyard Roof (D200 and D300, respectively). Two accessory buildings were associated with the Animal Health Technology (AHT) program: a barn (P400) and a kennel turned storage (unnumbered) that are situated immediately southwest and south, respectively, of the former and present main AHT facility. The vernacular Art Addition, now known as the Fine Arts Annex, was designed by Frank L. Hope & Associates, while the other three buildings were all designed by William A. Richardson. The Kilnyard Roof is one of Mesa's few Post-and-Beam buildings (the others are the P200 buildings).

In 1984, due to a record State budget deficit, Mesa was forced to implement fees on resident students. Because of this, enrollment dropped, and hundreds of classes were cancelled, programs were consolidated and realigned, and services were reduced across the SDCCD (Schoenherr 2014). Luckily, however, in 1988, voters passed Proposition 98, which established an annual minimum funding level for K-14 (kindergarten to associate degree) education each fiscal year. The spending supported K-12

schools, community colleges, county offices of education, and other state programs (Kaplan and Saucedo 2024).

While the original library, housed in the E-Building, had stacks holding the book and periodical collections, a Reference Desk and a Circulation Counter, numerous tables for studying, and eventually an Audio-Visual Department, the rapidly growing college soon required a larger library (Heyer 1995; McLeod, pers. comm., 2025). Minimal air circulation, coupled with a lack of air conditioning and heating, also contributed to an environment that was not overly conducive to student learning (McLeod, pers. comm., 2025).

In 1996, the new Learning Resource Center (LRC) opened, and radically changed the aesthetic and appearance of the campus. The LRC has a unique four-floor design, with a dramatically improved book stacks area and studying space for faculty and students, a computer lab, a glass gallery displaying a variety of exhibits from the African Art Collection, and a Writing Center and Tutoring Center (McLeod, pers. comm., 2025). The third floor of the LRC contains reproductions of murals produced by the Chicano Studies department that were initially on the Business Education, Humanities, and Sciences buildings, which were later demolished for the construction of the current Math and Science Complex (MS) (Alessandra Moctezuma, personal communication, September 2, 2025). A replacement AHT facility was also completed in the 1990s, and the Mesa College Institute opened as a regional center of the California Humanities Project.

The 2000s and 2010s saw a partial redevelopment of the campus; the new Allied Health building, San Diego Police Department station, and a new parking structure were completed in 2009. The Rosa Parks Transit Center and Memorial was built in 2010 to honor the civil rights activist Rosa Parks, who visited the campus several times in the early 1990s (Moctezuma, pers. comm., 2025).

In 2011, the Mesa College Design Center opened; the center consists of the former Edward F. Beale Elementary School (later Linda Vista Elementary School #1) (buildings Z100-Z600) (Showley 2011). The six buildings were constructed in 1954 (the school closed in 1982) and were designed by architect Earl F. Giberson in the International style. Following the closure of Linda Vista Elementary School #1, the buildings housed the John Muir School for Humanistic Studies, until it closed in 2004 following the acquisition of the property by SDCCD. The buildings housed the Mesa College Technology Center until 2010, when the Technology Center was relocated and the buildings went through a redesign for the Mesa College Design Center, which opened in 2011 (Delawie Wilkes Rodrigues Barker 2006). The Merrill Douglas Stadium received upgrades in 2012. In circa 2018, the Fine Arts Building (I300) was extensively renovated. In recent years, the new Math and Natural Sciences Complex (MS), the Social-Behavioral Sciences Building, Mesa Commons, and the Center for Business and Technology were all completed.

5.4.1 Mesa College Design Center Buildings (1954)

As noted above, the Mesa College Design Center (Z100-Z600) comprises a series of six buildings dating to 1954. Although the original elementary school use of the buildings and associated site improvements are non-extant, the original buildings remain intact. The International-style buildings designed by Giberson include an irregular-shaped building (Z100) and an L-shaped building (Z200) fronting Armstrong Street, and four parallel, elongated rectangular buildings to the west. The buildings are connected by covered walkways supported by pipe columns, or *pilotis*. The buildings exhibit character-defining features of the International style, including horizontal orientation; an emphasis on simple, geometric volumes with square corners; exterior stucco; a lack of applied ornament except for the

pilotis; horizontal bands of metal-framed windows; and flat roofs with parapets and cantilevered slabs. The only readily discernible exterior modifications are wood slat roof equipment screens on Building Z200.

5.4.2 Kearny Mesa Junior College/Mesa College Establishment (1964-1965)

The preliminary name for the college during design of the initial campus buildings was Kearny Mesa Junior College. Frank L. Hope & Associates designed the main buildings for the new campus, 13 of which opened in 1964 and one in 1965 (see Plates 1 through 3). The original main campus buildings were located on the flat plateau, or mesa, circumscribed by Mesa College Circle to the southwest, south, and east, and the northerly internal campus drive south of the original parking lot (hereinafter referred to as the 1964/1965 campus boundary). Frank L. Hope & Associate's architectural drawing key site plan and Mesa College's 1968-1969 handbook map (see Plate 4) were cross-referenced with a current campus map to identify the 13 original main buildings located within the 1964/1965 campus boundary. The disposition of the original buildings utilizing the handbook map's identifiers and names, construction date, and the current Mesa College map's identifiers and names for extant buildings is presented in Table 2, *Disposition of Kearny Mesa Junior College Buildings Within the 1964/1965 Campus Boundary.*

Table 2
DISPOSITION OF KEARNY MESA JUNIOR COLLEGE BUILDINGS
WITHIN THE 1964/1965 CAMPUS BOUNDARY

Year Built	Original ID & Name	Current ID & Name	Extant?
1964	A – Administration	A100 –Administration	Y
1964	B – Home Economics/Vocational Nursing	B100 – Home Economics/Nursing Classrooms	Y
1964	C – Drama/Music	C100 – Music/Drama Classrooms/Theatre	Y
1964	D – Fine Arts	D100 – Fine Arts Classrooms	Y
1964	E – Library	N/A	N
1964	F – Business Ed./Medical Dental Assisting	N/A	N
1964	G – Humanities	N/A	N
1964	H – Cafeteria/Student Services	N/A	N
1964	I – Sciences	N/A	N
1964	K – Technical Arts	K100 – The Stand/Honors/Tech. Classrooms	Y
1964	L – Physical Education	L100 – Exercise Science	Y
1964	J – Faculty Offices/Custodial Services	N/A	N
1964	M – Gymnasium	M100 – Main Gymnasium	Y
1965	K2 – Trades & Apprenticeship	K200 – Building Trades/MET High School	Y

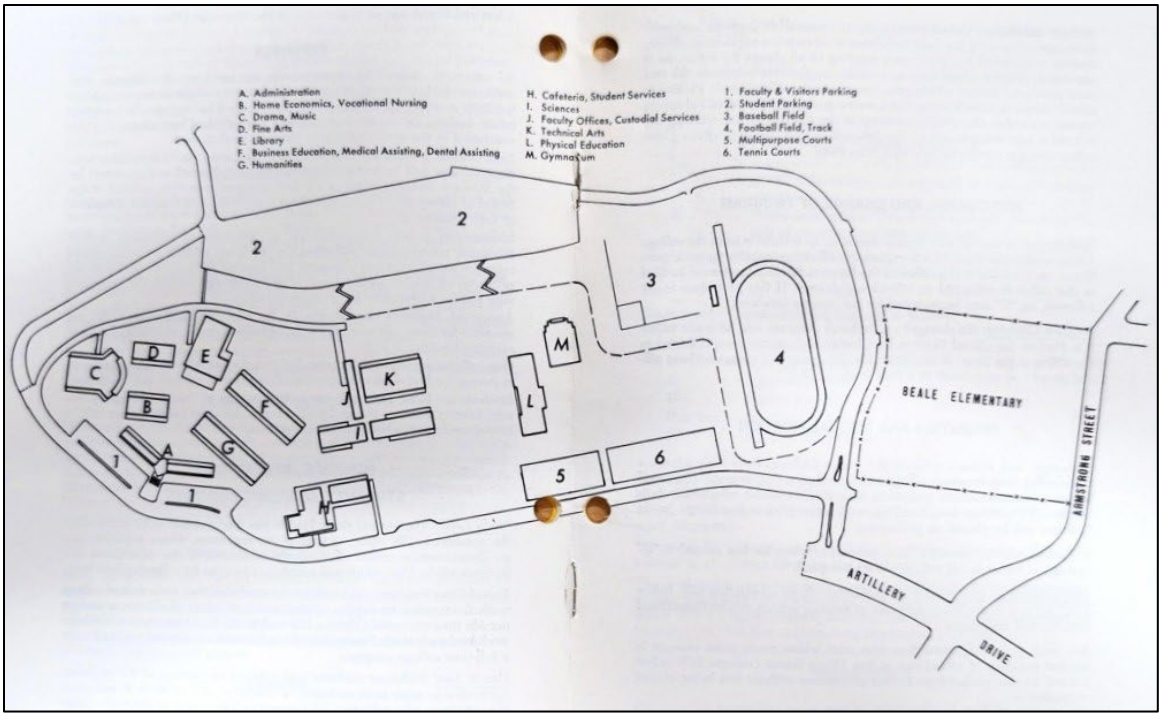


Plate 1. Mesa College campus map, 1964 (San Diego Mesa College Student Handbook, 1964-65).

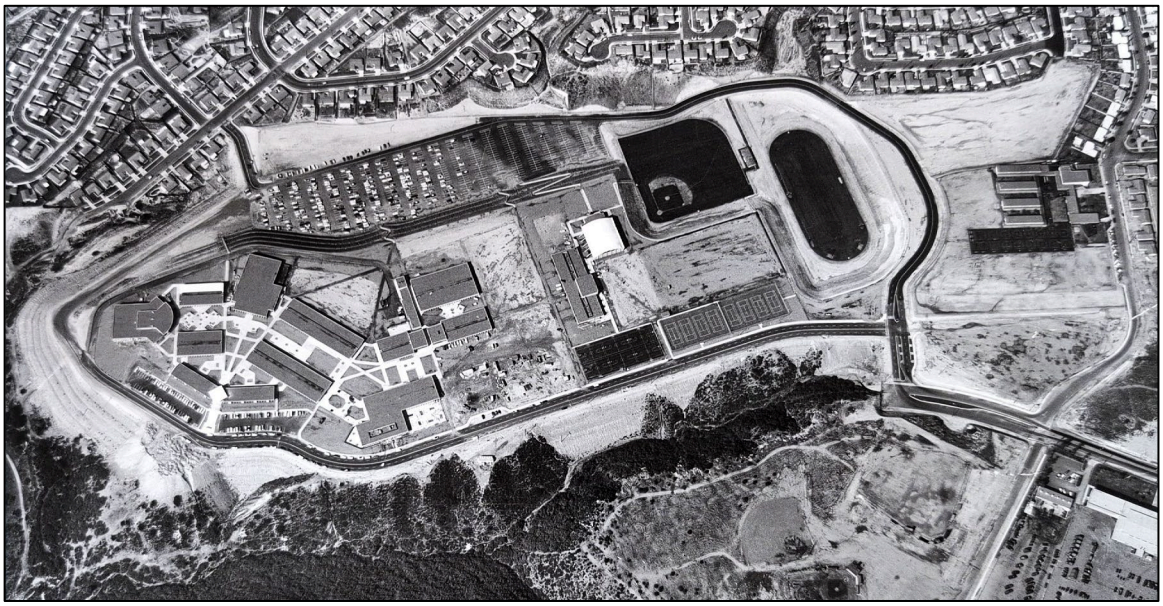


Plate 2. Aerial image of Mesa College, circa 1965 (Mesa College Archives).



Plate 3. Building A100 east wing and entry canopy, view north, circa 1965 (Mesa College Archives). Note: this elevation has since been modified with window shade screens.

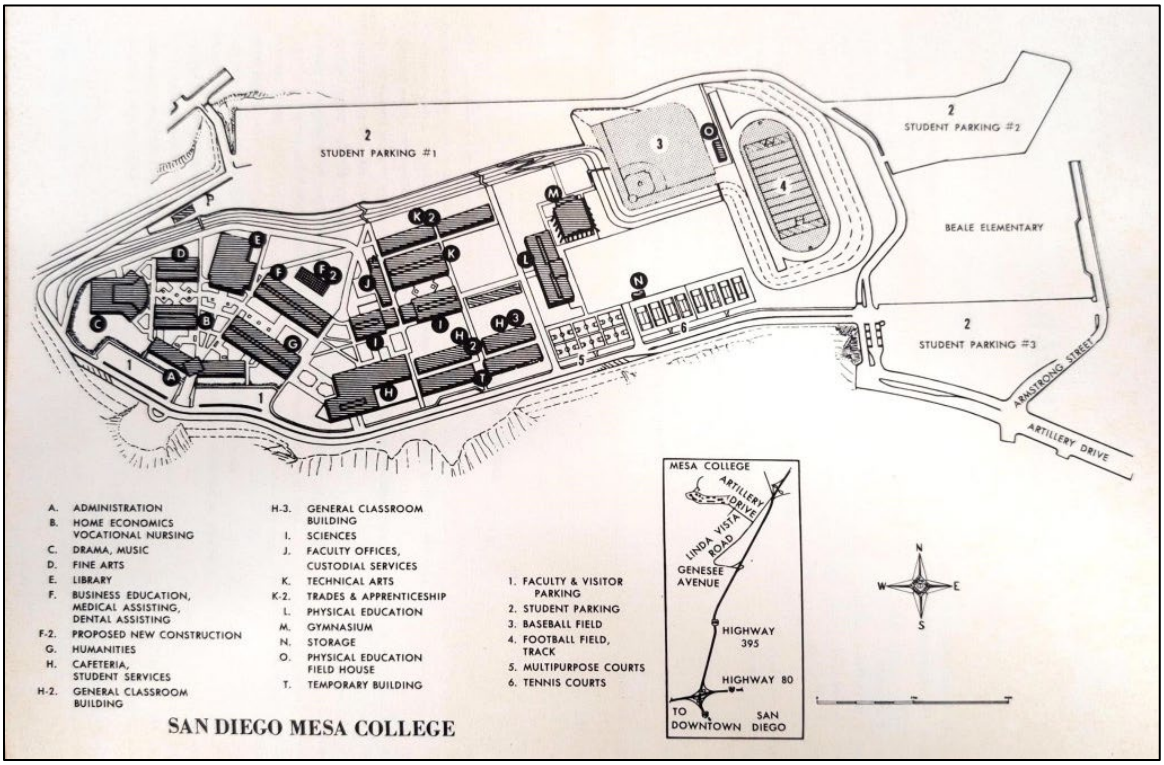


Plate 4. Mesa College campus map, 1968 (*San Diego Mesa College Student Handbook, 1968-69*). Note: the addition of Buildings F200, H200 and H300, K200, N, and T. Buildings E, F, G, H1-H3, I, and T are non-extant.

5.5 SOCIAL AND CULTURAL DEVELOPMENT

5.5.1 Civil Rights Movement and Student Activism

In the 1960s and 1970s, U.S. colleges and universities were important sites of political activism. Students organized sit-ins, teach-ins, rallies, and demonstrations concerning issues like women's liberation, the draft, U.S. imperialism, and civil rights. California was an epicenter of student protests, with the University of California, Berkeley earning the particular ire of future U.S. president Ronald Reagan, who, during his 1966 campaign for California governor, castigated the "small minority of beatniks, radicals and filthy speech advocates [who] have brought…shame to and…loss of confidence in a great University" (Reagan 1966).

Upon opening in 1964, Mesa College was rapidly swept up in the activist fervor of the times. In January 1967, Mesa College students rallied in opposition to one of Ronald Reagan's first acts as California governor: tuition hikes in the University of California and California State College/University systems (*Corsair* 1967; *Los Angeles Times* 1967). Though Mesa College students' education was and would remain tuition-free, according to Mesa College's then-president James McCamey, the rally was an act of solidarity between community college and four-year university students (*Los Angeles Times* 1967). Mesa College students also engaged in activism that school administrators didn't approve of. In December 1967, the radical, socialist Peace and Freedom Party held a rally at Mesa College (*Imperial Beach Star-News* 1967). According to the party's representative Robert Avakian, college administration immediately disbanded the student organization that had invited it (*Imperial Beach Star-News* 1967).

The Peace and Freedom Party had been formed, in part, from opposition to the Vietnam War (Peace and Freedom Party 2008). Its visit to Mesa College was not the only occasion in which Mesa College students protested U.S. intervention in southeast Asia. On October 15, 1969, Mesa College students joined nationwide Moratorium Day protests to end the Vietnam War (Stone 1969). Less than a year later, in May 1970, Mesa College students joined San Diego State College (now, San Diego State University) students' two-day occupation of their Business Administration and Math Building (today, Lamden Hall), where the Air Force Reserve Officers' Training Corps (ROTC) offices were located (*San Diego Evening Tribune* 1970).

Mesa College activists were also inspired by Berkeley, California's Free Speech Movement. In 1969, Mesa College students constructed a "primitive People's Park" on campus, modeled on Berkeley's well-known site of student protest (San Diego Mesa College n.d.:4). Over the course of the 1970s, "[a]t least twice weekly, Mesa College faculty and students took to a newly constructed, but non-extant, free-speech stage, that was situated outside of the original Campus Bookstore and Cafeteria, to express opinions and debate social issues" (McLeod, pers. comm., 2025; San Diego Mesa College n.d.).

Activism at Mesa College was supported by a range of student groups, including the Black Student Union, Mexican American Youth Association (MAYA), and el Movimiento Estudiantil Chicano de Aztlán (MEChA, a later iteration of MAYA). All three groups appeared at Mesa College in the late 1960s or early 1970s and were local branches of nationwide student organizations. In addition to engaging in more straightforward political activism, they organized a wide range of events and activities: in December 1969, the Black Student Union organized a Christmas party for the San Diego Girls Club; in May 1970, MEChA organized "Semana de la Raza," a week-long series of cultural events (*San Diego Union* 1969, 1970).

Mesa College also had a prominent Black Faculty Association. In the late 1970s, it sued the college for discrimination in staff hiring and promotion (*Daily Times Advocate* 1978). When the lawsuit was filed, only one of Mesa College's 97 part-time teachers was Black (Garlington 1978). At the time, according to the Black Faculty Association, Mesa College administrators wrote job descriptions "to favor specific white candidates and made 'summary appointments' to college administrative posts," instead of opening them to competition (and to Black applicants) (Garlington 1978). Although the lawsuit did not achieve all of its aims—namely, it did not result in the removal of a purportedly unqualified white administrator in favor of a more qualified Black administrator—it did cause Mesa College to alter its hiring plan (*Los Angeles Times* 1978; Vollmer 1979). A year after the lawsuit was first filed, five of 76 part-time teachers were Black, and nine of 221 full-time teachers were Black (Brown 1979).

5.5.2 Initiatives in Cultural Diversity, Ethnic Studies, and Student Support

5.5.2.1 Cultural Diversity and Ethnic Studies

Perhaps the longest-standing outcome of student activism at Mesa College is its robust ethnic studies program. Broadly, ethnic studies examines the histories, cultures, and experiences of minoritized ethnic-racial groups in the U.S., particularly people of color. Education scholars Thomas J. La Belle and Christopher R. Ward partially locate the origins of ethnic studies programs in "the dissatisfaction registered among minority students and faculty with their lack of impact on higher education…and…the wider civil rights and international liberation movements in the Third World" (LaBelle and Ward 1969:70). The establishment of ethnic studies programs was facilitated by an overall growth in higher education during the 1960s and 1970s (LaBelle and Ward 1969:70). That growth brought resources that could be invested to support new programs, as well as students and faculty of color.

Just as California was a center of student protest, it was also significant in the growth of ethnic studies. The first ethnic studies program in the U.S. was established in 1967 at Oakland's Merritt College, a community college (People's Minister of Information JR 2015).[11] The college offered a comprehensive associate's degree in Afro American Studies (Katungi and Kim 2021). Two years later, San Francisco State College (today, San Francisco State University) established the first ethnic studies program at a four-year institution, following a six-month strike by students and faculty, and led by a student group known as the Third World Liberation Front (TWLF) (San Francisco College of Ethnic Studies n.d.). The TWLF demanded equal access to public higher education, more senior faculty of color, and a new curriculum that would embrace the history and culture of all people including Ethnic Minorities (Diaz 2026). By the late 1970s, a wide variety of ethnic studies programs had been established across the U.S., but most were located in California (LaBelle and Ward 1969:71).

In 1969, students of the SDCCD demanded Black and Chicano Studies be taught at both City and Mesa colleges. The SDCCD met these demands with two new departments over the next three years: Chicano Studies in 1970, and Black Studies in 1971 (Katungi and Kim 2021). The establishment of Black Studies at Mesa College was preceded by a 1969 conference among San Diego's Black Student Unions in Southcrest Park in southeast San Diego. According to Mesa College's student newspaper, *The Olympian*, "The conference was held for the first time to get black students to join in an effort to collaborate on the problems of the Black Student Unions on the various campuses," with topics at the conference including "Black Curriculum" (*The Olympian* 1969a).

[11] San Francisco State College is more frequently identified as the location of the first ethnic studies program in the U.S.

Mesa College's Chicano Studies Department was established in 1970, following a "concurrent and coordinated presentation of Chicano Studies proposals at San Diego State, Mesa, and UC San Diego" (*The Olympian* 1969b). According to one of its founding faculty members, Gracia Molina Enriquez de Pick, it may have been the first Chicano Studies program at a U.S. community college (Wilkens 2019). Molina de Pick, for whom Mesa College's Molina de Pick Glass Gallery is named, wrote much of the then new department's curriculum. She was an activist, who supported feminist and anti-war causes, and an early faculty member at the University of California, San Diego's Third College (now Thurgood Marshall College), a college with "a multi-cultural emphasis on creating 'engaged citizens who are committed to serving society'" (Wilkens 2019). Initially housed in temporary wooden bungalows, both the Black Studies and Chicana/o Studies Departments now reside in a common Ethnic Studies space (McLeod, pers. comm., 2025).

Today, in addition to its Black and Chicana/o Studies Departments, Mesa College has coursework in Asian American and Pacific Islander studies and Native American studies. In January 2024, the San Diego Mesa College Ethnic Studies Faculty Council was awarded the California Community Colleges Board of Governors' Exemplary Program Award (Katungi and Kim 2021). The award reflects the advocacy of Mesa College's Ethnic Studies Faculty Council for the advancement of ethnic studies, not only in San Diego, but across California.

5.5.2.2 Student Support

Student support is not a modern invention. In the first 200 years of American higher education, faculty was responsible for both the students' intellectual and moral development (Doyle 2004). However, as higher education began to change during the late nineteenth and early twentieth centuries, the focus of faculty shifted to research and scholarly work and many colleges and universities hired student services specialists to monitor and discipline the students for their behavior outside of class. This led to the creation of Student Affairs in many universities and colleges, which would provide the adjunct services necessary to ensure students' readiness for the classroom (Doyle 2004).

Post-war enrollments in colleges and universities swelled in the 1930s. These dramatic increases in enrollments continued through the 1960s, when the impact of expanding college access to new populations combined with the effects of student movements to generate the first widespread concerns over student attrition (Venit 2016). Over the 1970s and 1980s, numerous socioecological models describing students' commitment to earning their degrees were produced, and researchers began noticing trends regarding certain demographics graduating at lower rates. This led to programs and services which targeted these demographics; soon, however, the focus shifted to retention of first-year students and preventing drop-outs (Venit 2016). Researchers have determined that colleges and universities should focus on smaller class sizes and the financial constraints of the students as a means to increase retention and graduation rates (Millea et al. 2018).

The concept of student support was limited in Mesa College's early years. In the 1960s, first-year students were required to take a course in psychology, and the psychology instructors served as student advisors in "orientation and in vocational and educational planning" (San Diego Mesa College 1963, 1964). Students who needed to discuss personal issues were directed to their advisors or to the Dean of Students, but there was no concrete counseling or support service.

In 1975, the Educational Opportunities Programs & Services (EOPS) was instituted at Mesa College. EOPS was designed to provide counseling, retention, and support services to increase college enrollment for

those individuals who had previously not considered college as an option (San Diego Mesa College Communications Services 1994; SDCCD 2026b). Four years later, in 1979, the Bridging Lab opened on campus; this facility began offering remedial instruction in basic subjects (San Diego Mesa College Communications Services 1994). Both of these programs resulted in a higher retention and graduation rate for underrepresented groups.

Today, Mesa College's Student Success and Equity department offers numerous services to assist students in their educational endeavors. Mesa College's 2022-2025 Equity Plan states that the campus utilizes a student-based approach to "fostering a culture of success for historically marginalized students." The main goal, according to the plan, is to "make sure everyone has what they need to succeed during their time at Mesa College" (San Diego Mesa College 2026b).

5.6 ARCHITECTURE AND DESIGN

Mesa College exhibits a variety of architectural styles. Of the 33 extant buildings and structures that were constructed in the period from 1954 to 1985 (the 40-year age threshold of this report), the majority were designed in the International style. Several buildings exhibit elements of Post-and-Beam. Therefore, the following presents a brief synopsis of the most prevalent style and form exhibited at the campus. Other styles and forms that are minimally present at Mesa College include Brutalist, Contemporary, Ranch, and Post Modern. The three primary architectural styles exhibited at Mesa College are discussed in the following contexts.

5.6.1 International Style, c. 1925-1965

The predominant architectural style exhibited at Mesa College is the International style, which is exhibited in 13 extant buildings (see Table 3, *Extant Buildings in the International Style*). Therefore, the following presents a brief synopsis of its origin and defining characteristics.

Table 3
EXTANT BUILDINGS IN THE INTERNATIONAL STYLE

Original ID & Name	Year Built	Current ID & Name
Linda Vista Elementary School #1 (Edward F. Beale Elem. Opened 9/13/1954)	1954	Z100-Z600 - Design Center
A – Administration	1964	A100 – Administration
B – Home Economics/Vocational Nursing	1964	B100 – Home Economics/Nursing Classrooms
C – Drama/Music	1964	C100 – Music/Drama Classrooms/Theatre
D – Fine Arts	1964	D100 – Fine Arts Classrooms
K – Technical Arts	1964	K100 – The Stand/Honors/Tech. Classrooms
L – Physical Education	1964	L100 – Exercise Science
K2 – Trades & Apprenticeship	1965	K200 – Building Trades/MET High School

The international style originated in Western Europe in the 1920s and 1930s. The term "internationalism" as it relates to architecture was first used by German American architect Walter Gropius (1883-1969). His seminal text entitled *Internationale Architektur*, which he edited in 1925 for the Bauhaus School in Weimar, Germany, characterized the new, modern aesthetic that was being promoted by the Bauhaus and other schools as "international and unbounded by place or culture" (Architectural Resources Group and ICF International 2021:28). The style transcended any national or regional identity because it made no reference to local vernaculars or traditional buildings forms (City

2007:58). It was in part introduced to the U.S. when, in 1932, the Metropolitan Museum of Art in New York mounted the influential "Modern Architecture: International Exhibition." Architectural historian and critic Henry-Russell Hitchcock and architect Philip Johnson authored the exhibition's accompanying book *The International Style: Architecture since 1922*. The authors identified three key design principles of the style:

1) Architecture as volume – thin planes or surfaces create the building's form, as opposed to a solid mass;

2) Regularity in the façade, as opposed to building symmetry;

3) No applied ornament (Architectural Resources Group and ICF International 2021:28; Chicago Architecture Center 2026).

European born and trained architects, such as Rudolph Schindler (immigrated 1920) and Richard Neutra (immigrated 1925), were already designing in the style in the U.S. However, it was notably further popularized in the U.S. as European architects emigrated in the years before World War II. Among these were luminaries Walter Gropius (1937) and Marcel Breuer (1937) who settled in Massachusetts and taught at Harvard, Ludwig Mies van der Rohe (1938) and Lazlo Moholy-Nagy (1937) who settled in Chicago, and William Lescaze (1920) who settled in New York City (Architectural Resources Group and ICF International 2021:28). The principles of the International style and Modernism in general spread across the U.S. In Los Angeles and Southern California, the principles were introduced in the 1920s with the arrivals of Viennese architects Schindler and Neutra (Architectural Resources Group and ICF International 2021:28). The style emerged in San Diego later than elsewhere, with most examples built after 1935 (City 2007:58). The style generally reached its zenith in the U.S. in the years after World War II with Mies van der Rohe and others, and waned by the mid-1960s (Fleming et al. 1998:286). In contrast, the *San Diego Modernism Historic Context Statement* indicates its local end generally occurred by 1955. San Diego has few examples of true International-style architecture, and what is present is generally exhibited in the form of commercial or institutional buildings, such as schools. Notable examples within San Diego include the following: Pueblo Ribera Court by Schindler (1923, HRB no. 117; see Plate 5), Caltrans building by C.J. Paderewski (1953-non-extant), Education Center by Clyde Hufbauer (1953; see Plate 6), and surpassing the aforementioned San Diego end date by eight years, the Chamber Building by Palmer & Krisel (1963) (City 2007:59-60).

Character-Defining Features

- Horizontal orientation
- Emphasis on simple, geometric volumes with square corners
- Common exterior materials include concrete, brick, and stucco
- Lack of applied ornament
- Asymmetrical façades
- Horizontal bands of flush mounted windows, typically metal-framed casement
- Flat roofs (cantilevered slabs or parapets)

Evaluation Criteria

The *San Diego Modernism Historic Context Statement* provides the following guidance on evaluation criteria for the International Style buildings in San Diego.

> Examples of this style in San Diego are limited; therefore retention of good examples is important. Eligible resources should retain the majority of their character defining features, although some impact or loss to character defining features may be acceptable when comparative analysis demonstrates that the resource is a rare example of the type.
>
> Location and setting are particularly relevant for International style resources which are institutional and related to a "campus" environment, and the preservation of the surrounding site may be important to the overall significance of the resource (City 2007:59).

Typically International style buildings will be significant individually due to their limited number and the rarity of resources gathered in a sufficient concentration to warrant district designation. However, tracts exhibiting an International theme, such as the one in the Rolando Village area, may be eligible for district designation (City 2007:59).



Plate 5. El Pueblo Ribera Court, 1923, Rudolph Schindler (HRB no. 117 – Google Street View).



Plate 6. Eugene Brucker Education Center, 1953, Clyde Hufbauer (Google Street View).

5.6.2 Brutalism, c. 1950-1975

One major building at Mesa College (I300 – Fine Arts) exhibits characteristics of the Brutalist style. Therefore, the following presents a brief synopsis of its origin and defining characteristics.

Brutalism began in the early 1950s in England by young architects who were disenchanted with the country's establishment architects. In the years after World War II the establishment advocated for softened and more picturesque Modernism for the masses. These "new Brutalists" argued for architecture that was more honest and direct, and therefore more ethical. Husband and wife architects Peter and Alison Smithson are credited with designing the earliest example of Brutalism: Hunstanton School (1951-1954) in Hunstanton, United Kingdom. Architectural historian Reyner Banham described the Brutalist approach as follows (ICF International 2020:26):

> What has caused hesitation to lodge in the public's gullet is the fact that it is almost unique among modern building in being made of what it appears to be made of. Whatever has been said about honest use of materials, most modern buildings *appear* to be made of whitewash or patent glazing, even when they are made of concrete and steel. Hunstanton *appears* to be made of glass, brick, steel, and concrete, and is in fact made of glass, brick, steel, and concrete (ICF International 2020:26).

The name Brutalism originated from the French *béton brut*, meaning raw concrete, which rapidly became Brutalism's defining and primary material. In Brutalism's early days in recovering post-war Europe concrete was more affordable than the glass and steel indicative of the International style. As a style, Brutalism often applied one material, usually exposed concrete, across the entirety of a building with bold, oversized, angular shapes that either broke the typical rectangular form or handled that form in a sculptural manner (ICF International 2020:28).

Notable examples within San Diego include the Salk Institute by famed architect Louis Kahn (1959-1966, HRB no. 304; see Plate 7) and the non-extant Qualcomm Stadium by Gary Allen, of Frank L. Hope &

Associates (1965). The University of California, San Diego features 11 Brutalist buildings that were constructed between 1958 and 1975. Among these are Muir College residence hall by Dale Naegle (1967) and the often-photographed Geisel Library by William Pereira (1970; see Plate 8) (City 2007:79).

Character-Defining Features

- Exposed and expressive structural system
- Monumental massing
- Angular and rectangular forms
- Unpainted exposed concrete, raked or smooth, dominating visible elevations
- Intentional avoidance of traditional elements or ornament
- Typically displays bold oversized angular shapes with sculptural and distinctive geometric forms to break apart the rectangular form

Evaluation Criteria

The *San Diego Modernism Historic Context Statement* provides the following guidance on evaluation criteria for the Brutalist Style buildings in San Diego.

> Location and setting are particularly relevant for Brutalist resources which are institutional and related to a "campus" environment, and the preservation of the surrounding site may be important to the overall significance of the resource.



Plate 7. Salk Institute, 1959-1966, Louis Kahn (HRB no. 304 – Wikipedia).



Plate 8. Geisel Library, 1970, William Pereira (Wikipedia).

5.6.3 Post-and-Beam, c.1950-1970

A few buildings at Mesa College exhibit characteristics of the Post-and-Beam style (D300 and P200). Therefore, the following presents a brief synopsis of its origin and defining characteristics.

Post-and-beam refers to a method of construction that is indicative of various Modern styles; however, in San Diego it is sufficiently prevalent to be treated as a style in its own right. Therefore, the following provides a brief context of the style excerpted from the *San Diego Modernism Historic Context Statement.*

> Post-and-Beam is a method of construction in which the structural framing consists of load bearing beams supported by columns rather than solid bearing walls. This method has been used for centuries in wood-frame and heavy-timber construction. In Modern design, post-and-beam construction was used as a means of limiting the need for solid load-bearing walls, which allowed for expansive use of glass along the perimeter of the building where one would normally find an opaque wall. In fact, extensive use of glass including entire walls of floor-to ceiling glass is a primary characteristic of this style. Simplified aspects of Japanese and Ranch design are frequently seen in Post-and-Beam architecture.
>
> Post-and-Beam Modern houses are characteristically rectilinear with open floor plans that are grid-like in layout and based on a consistent module or beam length. The roofs are generally flat, although there are some examples of Post-and-Beam Modern construction with gabled roofs. Roof lines frequently include wide overhangs. The structural members may be wood or steel. Used in both residential and commercial

> design, Post-and-Beam architecture is generally custom designed and involves a high degree of individualization (City 2007:69).

Notable institutional examples within San Diego include the following: the Design Center by Lloyd Ruocco (1949, HRB no. 434; see Plate 9), which is widely viewed as the "catalyst" for the style in San Diego, and the Institute of Geo-Planetary Physics, Scripps Institution of Oceanography by Ruocco (1963; see Plate 10) (City 2007:69).

Character-Defining Features

- Direct expression of the structural system, usually wood or steel frames
- Horizontal massing
- Flat or shallow pitch roofs (with deep overhangs or no parapet)
- Floor-to-ceiling glass
- Repetitive façade geometry
- Minimal use of solid load bearing walls
- Absence of applied decoration
- Strong interior/exterior connections
- Open interior floor plans
- Exterior finish materials usually include wood, steel, and glass

Evaluation Criteria

The *San Diego Modernism Historic Context Statement* provides the following guidance on evaluation criteria for Post-and-Beam buildings in San Diego.

> Due to the relative rarity of this sub-style and high degree of individualization any extant examples should be considered for historic designation. District designations may also be considered in instances where examples are found grouped in later communities such as Alvarado Estates, Del Cerro, and Mt. Helix, which were developed in the 1950s and 1960s and offered lots for high-end custom residential development.
>
> In evaluating integrity, expression of the structural system through expansive floor-to-ceiling glass and wood or steel framing is critical to conveying the style.
>
> Due to the transparent nature of these glass-walled structures the contextual relationship and landscape setting is of extreme importance to the overall character of these properties. Surrounding landscapes associated with Post-and-Beam architecture should be considered in historical designations and rehabilitation projects. Any intact landscapes, especially those that can be attributed to the architect or a landscape architect, should be retained (City 2007:68).

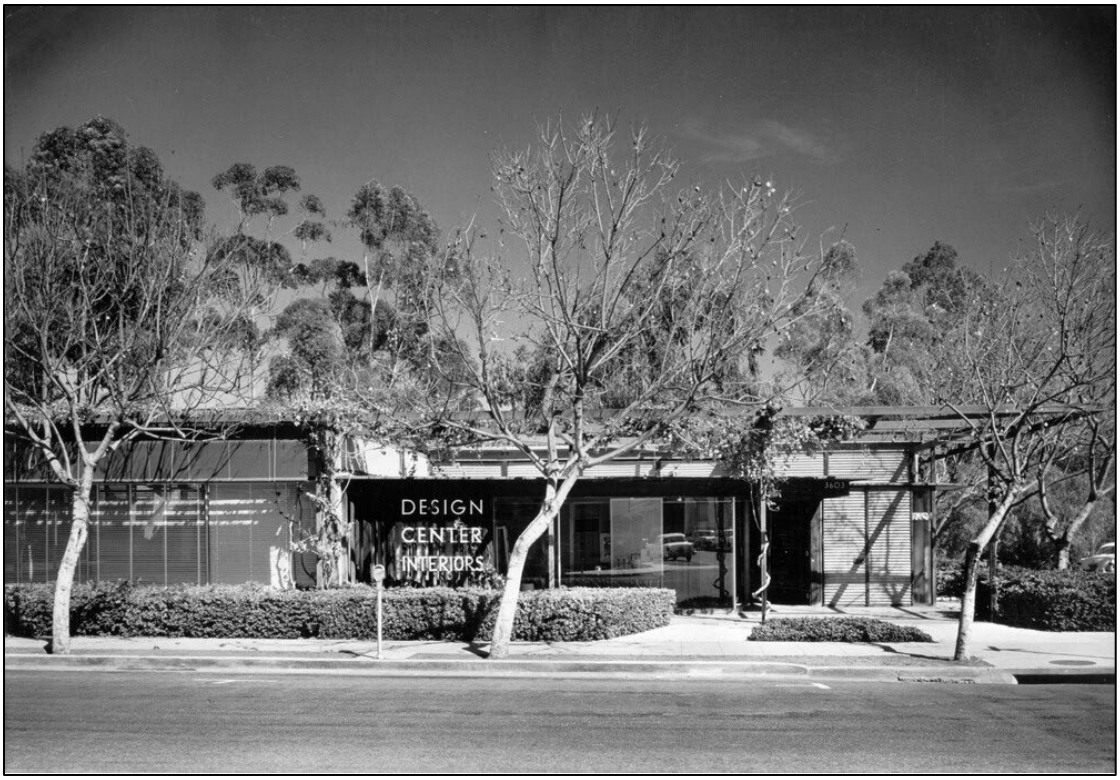


Plate 9. Design Center, 1949, Lloyd Ruocco (HRB no. 434 – San Diego Historical Society, ID no. OP 1727-52).



Plate 10. Scripps Institute of Oceanography (SIO), Institute of Geophysics and Planetary Physics (IGPP) Munk Lab, 1963, Lloyd Ruocco (Heritage Architecture & Planning).

5.7 ARCHITECTS

Original building plans and other SDCCD records indicate that five different architecture firms designed the extant buildings at Mesa College that were constructed between 1954 and 1985 (40 years of age or older). Therefore, the following presents a brief biography of each firm in descending order of their commissions at present day Mesa College.

5.7.1 Frank L. Hope & Associates

Frank L. Hope & Associates designed the 11 extant original buildings and structures and many of the other earliest extant buildings at Mesa College; therefore, the following provides a synopsis of the firm's work. A complete list of the extant buildings and structures designed by the firm is presented in Table 4, *Inventory of Buildings and Structures at Mesa College That Were Designed by Frank L. Hope & Associates Between 1964 and 1985*.

Table 4
INVENTORY OF BUILDINGS AND STRUCTURES AT MESA COLLEGE THAT WERE DESIGNED BY FRANK L. HOPE & ASSOCIATES BETWEEN 1964 AND 1985

Building ID No.	Year	Current Name	Historic Name
N/A	1964	College Sign (by A100)	College Sign (by A100)
N/A	1964	Entry Canopy (A100)	Mushroom Cover (A100)
A100	1964	Administration	Kearny Mesa Junior College – Admin
O100	1964	Phys Ed Storage	Kearny Mesa Junior College – Phys Ed Field House
D100	1964	Fine Arts	Kearny Mesa Junior College – Fine Arts
M100	1964	Gymnasium	Kearny Mesa Junior College – Gymnasium
B100	1964	Home Econ/Nurse Prog	Kearny Mesa Junior College – Home Econ/Vocational Nursing
C100	1964	Music/Drama	Kearny Mesa Junior College – Music/Drama
L100	1964	Phys Ed	Kearny Mesa Junior College – Phys Ed
K100	1964	Technical Arts	Kearny Mesa Junior College – Technical Arts
K200	1965	Building Trades (METHS)	Kearny Mesa Junior College – Trades & Apprenticeship
P100	1967	Landscape Tech	Ornamental Horticulture Facility
O200	1973	PE & Plant Storage	Independent Storage Building
O300	1973	Gardening Storage	Independent Storage Building
L400	1973	Press Box	Press Box
L200	1975	Facilities Maintenance	Handball Courts
M200	1975	Swimming Pool Service	Expansion Phase I
C200	1976	Music Classrooms	Music Building
I300	1977	Fine Arts Building	Life Science/Student Personal Admin Bldg.
D200	1980	Fine Arts Annex	Art Addition

The firm was founded by Frank Lewis Hope, Sr., in 1928, who is included in the City's 2011 *Biographies of Established Masters.* His sons Frank L. Hope, Jr. and Charles Hope eventually joined the firm and, in the 1960s, leadership passed to his son Hope, Jr. Known in its later years as Hope Consulting Group, then Hope Design Group, the firm was dissolved in 1993.

Frank L. Hope, Sr. (1901-1994) was born on June 1, 1901, in San Bernardino, California (City 2020:26). In 1913 he moved to San Diego with his family. Hope's architecture education included two years at the

University of California, Berkeley, and one year at the Carnegie Institute of Technology (Koyl 1955:256). After school he returned to San Diego, where he started his architecture career working for master architect Richard Requa. After passing his architectural exam, Hope, Sr. opened his own firm, Frank L. Hope & Associates, Architects & Engineers (City 2020:26).

The firm designed a myriad of building types across San Diego including residential, commercial, and institutional. Early residential commissions were largely designed in revivalist styles, especially Spanish Colonial Revival. As architectural preferences changed, so did the firm's work; much of it in contemporary styles (City 2020:26). The firm's early work also included several buildings for the San Diego Roman Catholic Diocese: the Spanish Revival-style Carmelite Monastery in Normal Heights (1930), Sacred Heart Catholic Church in Ocean Beach (1946), Our Lady of the Sacred Heart Catholic Church in City Heights (1947), the San Diego College for Women (1950), and the Immaculata at the University of San Diego (1964) (City 2020:26). As the practice grew, commissions included Scripps Memorial Hospital, La Jolla (1949, 1975); Children's Hospital (1954); Home Federal Savings & Loan Association (1966), and Point Loma Community Presbyterian Church (1955) (Koyl 1955:256; Sutro 2024). Academic commissions included 10 buildings at Kearny Mesa Junior College, present day Mesa College (A100, B100, C100, D100, K100, K200, L100, M100, N100, and O100; 1954) (SDCCD 2025).

Six of the firm's early commissions have been listed in the San Diego Historical Resources Register under Criteria C and D (among other criteria), for their design/construction and as the work of a master: the First National Bank Building at 500-522 Broadway (1940 remodel, HRB no. 65); the Contemporary Ranch-style Frank L. Hope Residence at 371 San Fernando Street (1947, HRB no. 803), which in 2007 established him as a Master Architect by the HRB; the Spanish Revival-style Luigi and Louise Perna/Frank L. Hope Residence at 2320 Hickory Street (1928, HRB no. 1065); the Spanish Revival-style Lawrence and Mary Oliver/Frank L. Hope Residence at 815 Armada Terrace (1935, HRB no. 1169); the Monterey Revival-style Mary Lynch/Frank L. Hope House at 371 San Fernando Street (1947, HRB no. 1459); and the Spanish Revival-style Edward Molloy/Frank L. Hope Residence at 2702 Willow Street (1928, HRB no. 1284) (City 2020:26). Hope, Sr. received an honor award from the AIA San Diego and he was posthumously described as the "grandfather of architecture in San Diego" and that he and his firm "helped shape San Diego from a small town in the late 1920s to a modern city aware of its regional prominence" (Koyl 1955:256; *The San Diego Union-Tribune* 1994).

In 1951, Frank L. Hope, Jr. (1930-2024) earned his bachelor's degree in architecture from the University of California, Berkeley and, in 1955, he joined his dad at the firm (Koyl 1962:324-5, 1970:420). Hope, Sr. retired in 1965 and, under his son's leadership, the firm continued to evolve and expand its footprint. The firm, rebranded as Hope Design Group, grew to 150 employees and had offices in Southern California, San Francisco, and Saudi Arabia (Sutro 2024). The firm's later commissions included San Diego Convention Hall (1963), San Diego's first modern high-rise Home Tower (1963), Modernist-style Timken Museum of Art (1965), Mercy Hospital (1966), the former San Diego Stadium that was awarded an AIA National Honor Award (1967; aka Jack Murphy, Qualcomm, SDCCU Stadium), National Cash Register Electronics Manufacturing Facility (first increment, 1968), Union-Tribune Building (1974), and the San Diego Marriot (1984) (Koyl 1962:324-5, 1970:420; Sutro 2024).

Academic commissions included the University of California, San Diego's Brutalist-style McGill and Mandler Halls (1969), which are "modernist structures of concrete and fluted precast panels" (Sutro 2024). Such "first-class" buildings as these were reported to have been "assets in recruiting prominent faculty such as brain scientist George Mandler" (Sutro 2024). Later academic commissions include nine buildings at San Diego Mesa College (Buildings D200, C200, I300, L200, L400, M200, O200, O300, and

P100; 1967-1980) and five buildings at San Diego City College (Buildings L, C, H, M, and D; 1970-1977) (SDCCD 2025). The City College commissions are reported to have been designed by architect Gary Allen, who had previously studied with Isamu Noguchi and worked for Philip Johnson (Sutro 2024).

One of the firm's later commissions has been listed in the San Diego Historical Resources Register under Criterion C for design/construction: the Post-and-Beam architecture, with International-style influences, Frank and Barbara Hope, Jr. House at 3430 Bangor Place (1967, HRB no. 1069). Frank L. Hope, Jr. won numerous AIA awards including an award of merit for the Regional Center Study-Downtown San Diego (1964); first honor awards for the Bureau of Commercial Fisheries (date unknown, now California Fish & Wildlife), the Naval Facility Engineering Command (1965), and for San Diego Stadium (1969); and lastly an award of excellence for the Bureau Commercial Fisheries (1965) (Koyl 1962:324-5, 1970:420).

5.7.2 Earl F. Giberson

Earl F. Giberson designed the former Edward F. Beale Elementary School (later Linda Vista Elementary School #1) in 1954, which is now the Mesa College Design Center (Z100-Z600; acquired by SDCCD in 2004); therefore, the following provides a brief synopsis of his career.

Earl Finch Giberson (1894-1957) was born on February 23, 1894, in Petaluma, California (Ancestry.com 2000). Giberson was raised in Petaluma before earning his certificate in architecture in 1917 from the University of Pennsylvania (Ancestry.com 2006; Maxwell 1922:278). After his schooling, he worked for the U.S. government on various military projects in Philadelphia and Boston (*Petaluma Daily Morning Courier* 1918). The earliest newspaper mention of Giberson as an architect was in 1937 in the form of an advertisement in the *National City Star-News* (1937). Much of Giberson's work appears to have been located in Chula Vista.

Giberson designed many schools, churches, shopping centers, commercial buildings, and residences (*Los Angeles Times* 1957). Among these are the Ingle-Trippet Building (railway office and shops), 5th Avenue, San Diego (1937); Birney School/Horace Mann Jr. High School teachers cafeteria building (circa 1940); Hilltop Circle Village recreation center, Chula Vista (1943); Linda Vista Shopping Center (1943); Safeway, Chula Vista (1952); The Quad shopping center, Clairemont (1954); First Church of Christ Scientist at 440 S. Broadway, Escondido (1955); and Pilgrim Lutheran Church, Chula Vista (1956) (*The Architectural Forum* 1937a:104; *The Chula Vista Star-News* 1943, 1952, 1956; *Daily Times Advocate* 1955; *Los Angeles Times* 1954; Pacific Coast Architectural Database 2026). Giberson is reported to have participated in the design of Grauman's Chinese Theater, Los Angeles (1926) (*Los Angeles Times* 1957). In 1935 he earned an honorable mention in the Pittsburgh Glass Institute Competition for his design of the Ingle-Trippet Building and, in 1947, Giberson earned an AIA honor award for the Linda Vista Shopping Center (*The Architectural Forum* 1937b).

5.7.3 William A. Richardson

William A. Richardson designed three buildings at Mesa College: Art Kiln Annex (D300), the Horse Barn (P400), and the Kennel/Storage (P500); therefore, the following provides a brief synopsis of his career.

William "Bill" Alan Richardson (1930-1999) was born on September 13, 1930, in Philadelphia, Pennsylvania. He earned his associate's degree in architecture in 1950 from San Diego City College and his bachelor's degree in architecture in 1954 from the University of California. From 1954 to 1956 he served in the U.S. Army Corps of Engineers, and from 1957 to 1960 he worked for the SDUSD. He

became a member of the AIA in 1961. In 1967, he joined Richard J. Lareau at his then-new firm. By 1970, Richardson's titles included partner, principal, and executive vice president (Koyl 1970:760). Research to date suggests that, by 1980, Richardson became the in-house architect at the SDCCD, which may explain why there are only two published credits of his work: Hilltop-Telegraph Canyon Park youth center in Chula Vista (1970) and McKinley Elementary School (1975) (*The Chula Vista Star-News* 1970; McKinley Park Elementary n.d.).

5.7.4 Richard J. Lareau & Associates

Richard J. Lareau & Associates designed several buildings (P200 [two buildings] and R200) at Mesa College in the 1970s; therefore, the following provides a synopsis of the firm's work. Lareau is included in the City's 2011 *Biographies of Established Masters.*

Richard John "Dick" Lareau (1927-2022) was born on October 17, 1927, in Bremerton, Washington, and was raised in Chula Vista (Ancestry.com 2012; City 2020:33; Koyl 1962:405; Modern San Diego 2026a). Lareau attended the University of California, Berkeley from which he earned his bachelor's and master's degrees in architecture in 1954 and 1955, respectively (Koyl 1962:405; Showley 2022). His early training included various designer and draftsman roles for Kitchen & Hunt in San Francisco and afterward for Paderewski, Mitchell & Dean in San Diego (Koyl 1962:405). In 1957, Lareau established his own firm. Lareau's practice grew to a staff of 15 at its peak. The firm trained a number of the region's architects including Alfonso Macy, Paul McKim, George Hartley, Bill Richards, and Paul Thoryk (Modern San Diego 2026a).

Lareau designed a wide variety of building types including single- and multi-family residential homes, retirement communities, public schools, libraries, colleges, hospitals, religious buildings, commercial buildings, industrial buildings, and military buildings (City 2020:33). His work was predominantly Modernist in style. Inspired by the work of Harwell Hamilton Harris, Lareau's work expressed the structure of his buildings, which frequently feature flat roofs with wide eaves and projecting beams, natural wall materials, and large expanses of glass that respond to the site's geography and/or vistas (City 202:33). Lareau was also known for his circular-shaped public buildings including the 4,500-square-foot Mission Bay Visitor's Center (1969), which he likened to a "sculptural seashell" (Showley 2022). It was inspired by Frank Lloyd Wright's Guggenheim Museum in New York City (Showley 2022).

Lareau's commissions include numerous residences across San Diego County, the East San Diego Branch Library (1961), Saint John's Evangelical Lutheran Church & School Classrooms (1964), Pacific Beach Community Congregational Church (1966), various buildings for the military, and the Barnes Tennis Center in Ocean Beach (1995). Academic commissions include California Western University's (now Point Loma Nazarene University) campus master plan (1958) and several buildings including dorms and cafeteria (1959-1962), Little Theater (1960), Ryan Library (1962), gymnasium (1962), science building (1967), and fine arts and music (1969); United States International University's (now Alliant University) campus master plan and several buildings including administration, library and learning resource center, science building and lecture hall, and academic classroom cluster (1970); Mesa College's Child Development Center and landscape building (both 1976); and San Diego City College's Morley Field dugouts and snack bar/press box (1978) (Koyl 1962:405; Showley 2022).

Two of Lareau's commissions have been listed in the San Diego Historical Resources Register under Criteria C and/or D for their design/construction and/or as the work of a master: the Michael and Clara Brown House at 5645 Taft Avenue (1968, HRB no. 1246) and the Rose Vollmer/Richard Lareau House at

4514 Ladera Street (1964, HRB no. 1344); both of which are designed in the Post-and-Beam architectural style (City 2020:33). Lareau's Contemporary style Pan-Pacific House at 6361 Elmhurst Drive in Del Cerro (1958) was featured in the San Diego Parade of Homes and was recognized at the 1964 United Masonry Association of San Diego for its incorporation of numerous indoor-outdoor spaces (Showley 2022).

5.7.5 Delawie, Macy & Henderson

In 1976 Delawie, Macy, & Henderson designed the physical education restrooms (M300) at Mesa College; therefore, the following provides a synopsis of the firm and its partners. Comprised of partners Homer T. Delawie (1927-2009), Alfonso Macy (1928-2014), and John D. Henderson (1933-2023), the firm originated in 1961 as Homer T. Delawie, AIA, Architects. In 1966, Delawie's longtime colleague Macy became a partner and the firm rebranded as Delawie & Macy (1966-1968). During that time, Henderson joined the firm and so, in 1968, it rebranded again as Delawie, Macy & Henderson, with Delawie serving as the senior partner. In December 1975, the firm divided into two entities: (1) Delawie, Bretton, Wilkes and Baker, AIA, and (2) Macy, Henderson & Cole, AIA" (Koyl 1970:586; Modern San Diego 2026b).

Homer T. Delawie

Founding partner of Delawie, Macy & Henderson, Homer Torrence Delawie (1927-2009), who is included in the City's 2011 *Biographies of Established Masters,* was born on September 24, 1927, in Santa Barbara, California. Delawie earned his bachelor's degree in architecture and engineering in 1951 from California State Polytechnic College (Cal Poly) San Luis Obispo (Modern San Diego 2026b). He was not only a member of the second graduating class but was the first of that class to receive his license to practice. Delawie trained as a draftsman, designer, and job captain at several California firms before joining Lloyd Ruocco in 1956. For a brief period from 1960 to 1961, the two partnered as Ruocco & Delawie. In 1961, Delawie left the partnership to open his own firm, Homer T. Delawie, AIA, Architects (American Institute of Architects n.d.; City 2020:12; Modern San Diego 2026b). Delawie served on the San Diego Planning Commission, Historical Resources Board, and on the boards of San Diego Parks and Recreation, San Diego Mayor's Housing Appeals & Advancement, San Diego Housing Task Force, among others (City 2020:12; Koyl 1970:586).

Delawie's early work was largely residential in contemporary styles of the period, particularly Post-and-Beam. As his career progressed, his work expanded to include multi-family housing, park and zoo facilities, commercial, religious, educational, and various building types for the U.S. Navy. Among Delawie's many commissions were various buildings for California General (dates unknown); numerous projects for the San Diego Zoo including enclosures for the apes, elephants, giraffes, emus, monkeys, gibbons, baboons, and chimpanzees, and various support buildings (various years); various buildings for the University of California, San Diego, including Marshall College Residence Halls, Warren College Residence Halls, and Canyon Vista Dining Terrace (various years); various buildings for the University of California, Irvine (various years); and the Wherry Housing at United States Marine Corps Base Camp Pendleton (1961) (City 2007:88, 2020:12; Koyl 1970:586, Modern San Diego 2026b).

Seven of Delawie's commissions have been listed in the San Diego Historical Resource Register under Criteria C and/or D (among other criteria), for their design/construction and as the work of a master. Three of these were designed in the Contemporary (Modernist) style while he was briefly partnered with Ruocco: the Park Garden Apartments/Lloyd Ruocco and Homer Delawie Building at 1740 Upas Street (1960, HRB no. 1271); the Ruth Smith and Louise Neece /Lloyd Ruocco and Homer Delawie Duplex

at 8015-8017 El Paseo Grande (1960, HRB Site no. 1340); and the Jackson Johnson III/Lloyd Ruocco & Homer Delawie House at 8272 El Paseo Grande (1961, HRB no. 1228).

Three other commissions were designed while Delawie was in solo practice: the Post-and-Beam Louis & Bertha Feller/Homer Delawie House at 3377 Charles Street (1962, HRB no. 844), which established him in 2007 as a Master Architect by the HRB; the Post-and-Beam Russell and Rosemary Lanthorne/Homer Delawie House at 7520 Mar Avenue (1963, HRB Site no. 1105); and the Contemporary (Modernist) style Robert and Alma Lard/Homer Delawie and Lloyd Ruocco House at 2218 Vallecitos (1965, HRB no. 1297). A seventh listed commission was designed while Delawie was partnered with Macy and Henderson: the Post-and-Beam Delawie Residence III - The Village at 2749 Azalea Drive (1975, HRB no. 845) (City 2020:12).

Delawie's work was often recognized by his peers at the AIA. By the time he was elected to the AIA's College of Fellows in 1972 he had won 16 awards including an award of excellence for the Delawie offices at 2827 Presidio Drive (1962); awards of merit for the Delawie residence (1966) and the Andrussen residence (1968); an award of honor for the Naval Hospital Medical Library (1968); a first honor award for an office of civil defense (1969); and an honor award for the Unit Masonry Association (1970) (American Institute of Architects n.d.; Koyl 1962:162, 1970:586). Other awards were bestowed upon him by the AIA/*House & Home* and *Sunset Magazine*. In 1973, the Cal Poly School of Architecture gave Delawie the distinguished alumni award. In 1997, the AIA gave him their lifetime achievement award and, in 2003, the Save Our Heritage Organization gave him its Lifetime Achievement Award (City 2020:12). At least 31 of Delawie's commissions have received awards and his work has been published in such notable publications as *Architecture West*, *Arts & Architecture*, *House & Home*, *San Diego Union-Tribune*, and *Sunset Magazine*, among others (Burke Lia 2007; City 2007:87). Delawie served on the San Diego Planning Commission for 13 years and the San Diego Historical Resources Board for eight years (City 2007:87).

Alfonso Macy

Alfonso Macy (1928-2014) was born on February 1, 1928, in Cleveland, Ohio. Macy earned his bachelor's degree in architecture in 1952 from the Carnegie Institute of Technology. He began his career in 1960 at Ruocco & Delawie. When Homer Delawie left in 1961 to establish his own firm, Macy followed. While part of Delawie, Macy & Henderson, Macy led much of the firm's work for the U.S. Navy and he was instrumental in the preservation and creation of the Old Town San Diego Historic District (Koyl 1970:586; Modern San Diego 2026b; *The San Diego Union-Tribune* 2023).

Among Macy's principal works are the Rees Stealy Medical Clinic (1966); a master plan for the Naval Air Station at Imperial Beach (1967); barracks for the naval air stations at Imperial Beach and North Island (1968 and 1969, respectively); and Holy Angels Byzantine Catholic Church and Social Hall in Serra Mesa (1978), which is said to have been designed to resemble the old wooden churches of the Carpatho-Russian area of Eastern Europe (*The Fallbrook/Bonsall Enterprice* 1978; Koyl 1970:586). He also designed St. Leo's Catholic Church in Solana Beach, for which he received an award in 1966 from the 37th Annual National Conference on Religious Architecture. An article on the award noted that Macy achieved "maximum results under absolutely minimum conditions" (*Coast Dispatch* 1966). The design, featuring trellises and a bell tower, was, by intent, so sufficiently simple that it could be constructed by the parishioners from scrap lumber (*Coast Dispatch* 1966).

John D. Henderson

John Drew Henderson (1933-2023) was born on July 3, 1933, in St. Louis, Missouri. Henderson earned his bachelor's degree in architecture in 1956 from the University of Illinois. He moved to San Diego in 1957 and, in June of 1964, he joined Homer T. Delawie, AIA, Architects (Koyl 1970:397; Modern San Diego 2026b; *The San Diego Union-Tribune* 2023). In addition to practicing architecture, Henderson was a researcher and writer who specialized in historic preservation projects and nominations for federal, state, and local historic listings and designations. He served as chair of the California State Historical Resources Commission and as president of the San Diego History Center. In 1980, he was elected to the AIA's College of Fellows (*The San Diego Union-Tribune* 2023).

Among Henderson's principal works are the barracks for the naval air stations at Imperial Beach and North Island (1968 and 1969, respectively); U.S. Naval Hospital Medical Library, San Diego (1968); and U.S. International University music & fine arts building, Matthews Campus, San Diego (1968) (Koyl 1970:397).

Henderson received various awards including the AIA San Diego Award of Excellence for an office building (1962), merit awards for commercial and residential projects (1964), and an AIA/*House & Home* first honor award for a residence (1964) (Koyl 1970:397). In 2019, the Save Our Heritage Organization gave him their Lifetime Achievement Award (*The San Diego Union-Tribune* 2023).

6.0 SURVEY FINDINGS

6.1 SUMMARY OF FINDINGS

In summary, HELIX identified a total of 32 buildings, one structure (Mesa College sign by A100), one site (non-extant buildings T1 and T2), and two potential historic districts within the project site (Mesa College campus) that are 40 years of age (1985) or older and thus required evaluation for listing in the NRHP and CRHR.

Three resources appear eligible for listing in the CRHR, as follows:

- 3 individually eligible buildings
    - Fine Arts Building (I300)
    - Nursery & Landscape Technology (NLT) Storage (P200; two buildings)

- 1 eligible historic district: Mesa College Design Center Historic District (Z100-Z600)

Historic resources are located across the Mesa College campus, including in areas acquired and/or developed after the original campus development. One individually eligible building is the 1977 Fine Arts Building (I300) that is located within the original campus boundary. The other two individually eligible buildings are the two Nursery & Landscape Technology Storage buildings (P200), located northwest of the original campus boundary. The six buildings that comprise the Mesa College Design Center (Z100-Z600) to the east of the main campus are contributors to an eligible historic district. All of the individual buildings that were evaluated as significant for their architectural merit are designed in two iterations of Modernism: Post-and-Beam and Brutalism. In both cases, these buildings are important examples of a City of San Diego master architect's body of work. The eligible historic district has been evaluated as significant for its concentration of resources united aesthetically by their International style architectural

design. These findings are presented in the following aerial image of the campus (Figure 4, *Historical Resources at Mesa College*). The remaining resources evaluated in this survey were determined not eligible for listing in the CRHR based on factors such as not being noteworthy examples of the relevant architectural style, lack of integrity, or not representing the work of their architect.

All 33 buildings/structures and one site were evaluated for individual listing in the CRHR. A complete list of survey findings and evaluations is included in this report as Appendix C, *Built Environment Inventory and Evaluations.*

6.2 INDIVIDUALLY ELIGIBLE RESOURCES

6.2.1 Fine Arts Building (I300)

The Fine Arts Building (I300) was designed by Frank L. Hope & Associates as part of the later expansion of the campus buildings in the 1970s. The building opened in 1977 as the Life Science/Student Personal Administration Building and was later repurposed for the current fine arts and art gallery use. The building is a noteworthy example of the Brutalist architectural style.

The building is laid out on an irregular plane with four levels that step up an approximate 50-foot slope from north to south. Exterior walls are a combination of exposed, smooth finish concrete and sections of smooth cement plaster. Primary roofs are flat with concrete parapets; small roof decks are located on levels three and four.

The main entrance elevation faces north and exhibits all four levels. This elevation expresses an asymmetrical façade that steps from levels four to three east to west. A small first level entrance extension on the west side protrudes to the north with a shed roof covered in flat tile and a mural on the façade, “Art Gallery.” The westerly portion of the second level, and easterly portion of levels three and four, on the north elevation, are punctuated by horizontal bands of replacement spandrel glazing. A large, recessed void occupies the first and second levels at the east side. A distinctive semicircular projection extends to the west on the fourth level. Both sides of the building feature open stairways to the fourth level, with solid exposed concrete railings that extend around radial landings and create an elegant counterpoint to the more monolithic, horizontal building elements.

The east and west elevations of the building feature predominantly solid concrete and cement plaster-clad walls as they step up the slope. The east elevation exhibits wall voids at the third and fourth levels, with one window at the third level and a set of windows and doors at the first level entrance projection. The west elevation does not contain any voids, but features a window and door to access the roof deck on the fourth level, as well as one window at the third level and a set of windows and doors at the first level entrance projection.

The south elevation features only the fourth level façade. This elevation is slightly asymmetrical with a flat roof, and primarily blank walls clad in cement plaster. A large quarter-circular roof parapet that screens roof-mounted equipment is visible beyond the edge of the roof and features a painted mural. A set of glazed entrance doors and transom occurs at the east end, and the open stairway element is visible beyond. Other solid entrance doors occur on this elevation. The original glazed greenhouse in the center of the south elevation has been re-roofed in corrugated metal and re-clad in metal mesh screening.

The building exhibits character-defining features of the Brutalist style, including an exposed and expressive structural system; monumental massing; angular and rectangular forms; unpainted, exposed smooth concrete and cement plaster dominating visible elevations; and the intentional avoidance of traditional elements and ornament. As is typical with the Brutalist style, the building also expresses the character-defining features of bold, oversized, angular shapes with sculptural and distinctive geometric forms to break apart the rectangular form, especially notable in open stairways and circular roof elements.

The Fine Arts Building is the only Brutalist style building constructed within the historic period (prior to 1986). Frank L. Hope & Associates is considered a master architect by the City of San Diego. The building is a noteworthy example of Brutalism, exhibiting all of the style's character-defining features. Spandrel glazing was replaced within original openings on the north elevation in 2018-2019, and the small greenhouse element on the south elevation was reclad at the same time. These alterations are minor given that all other key building elements appear to be intact. Thus, the building retains integrity and is able to convey its architectural significance. The building is also representative of master architect Frank L. Hope & Associates' body of work, which includes the former Jack Murphy/Qualcomm Stadium (non-extant). Therefore, the building possesses significance at the local level and is recommended individually eligible under CRHR Criterion 3 (Architecture). The period of significance is 1977, the year of construction.

Character-Defining Features

- Brutalist details including:
    - Exposed and expressive structural system
    - Monumental massing
    - Angular and rectangular forms
    - Unpainted, exposed smooth concrete and cement plaster dominating visible elevations
    - Intentional avoidance of traditional elements and ornament
    - Bold oversized angular shapes with sculptural and distinctive geometric forms to break apart the rectangular form, especially notable in open stairways and circular roof elements
- Irregular plan with four levels that step up an approximate 50-foot slope from north to south.
- Flat roofs with concrete parapets; small roof decks located on levels three and four.

6.2.2 Nursery & Landscape Technology (NLT) Storage (P200)

The Nursery & Landscape Technology (NLT) Storage (P200) comprises two adjacent buildings located between Mesa College Circle and Marlesta Drive and west of P100. The buildings were designed by Richard J. Lareau & Associates as part of the later expansion of the campus buildings in the 1970s. The buildings opened in 1976 as Landscape Buildings to support programming and provide storage adjacent to P100, the Ornamental Horticulture Facility built in 1967 (unfortunately, P100 that is now a classroom building, is not eligible for listing because it is not a noteworthy example of Ranch style with a Polynesian bungalow form). The NLT buildings are noteworthy examples of the Post-and-Beam architectural style.

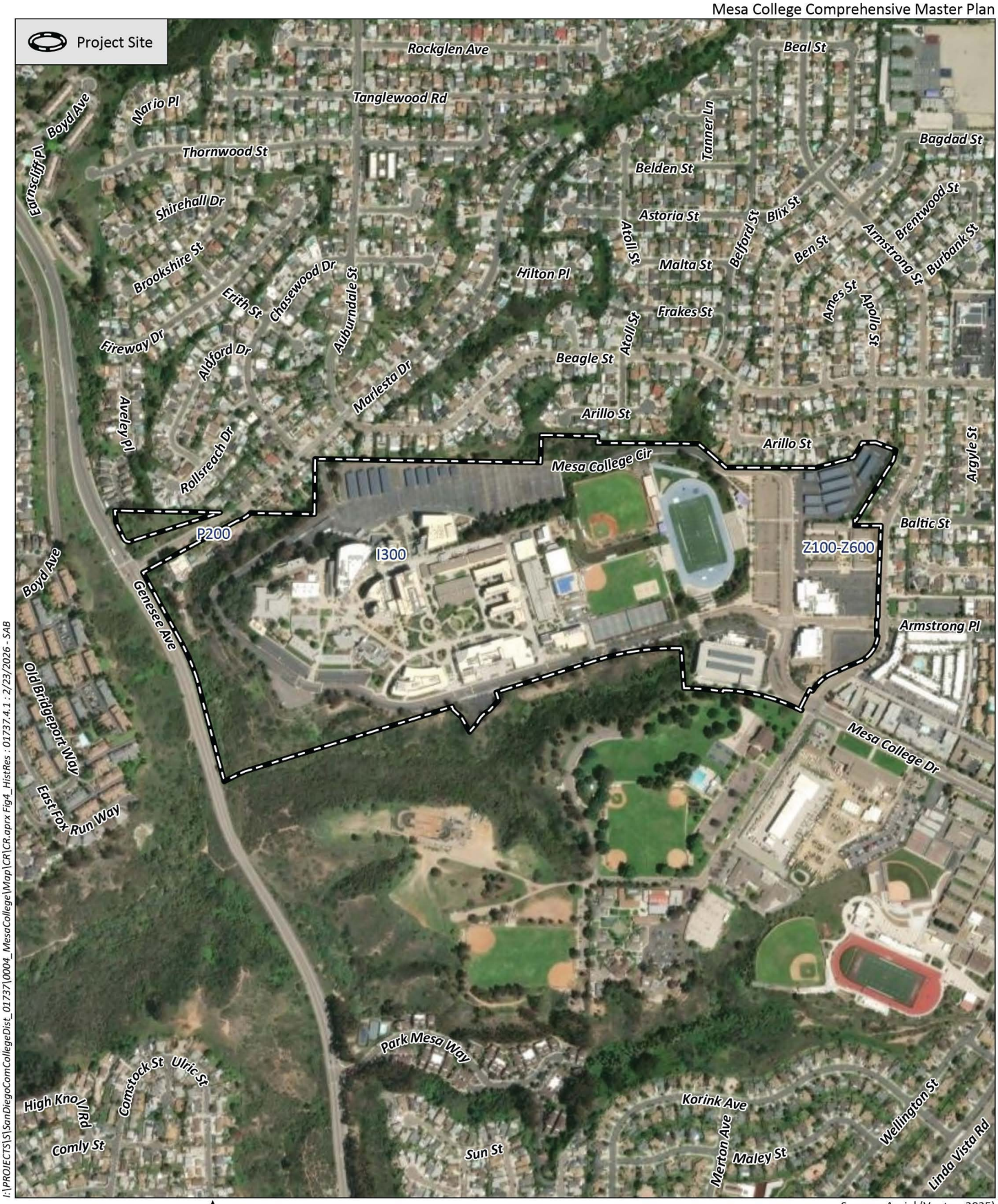
The buildings are set on a northeast to southwest axis. The northeasterly building is rectangular in plan at dimensions of 44 feet wide and 20 feet deep. It was described as a patio building on the original as-built plans. The southwesterly building is a shorter rectangle at just over 29 feet wide and 20 feet deep and was described as a storage building. Access to the buildings during the survey was limited for some elevations due to proximate fencing and mature vegetation. However, key features of the building designs were visible and discernible by referencing the as-built plan details.

The storage building is constructed of 4-by-8 posts that support five 4-by-14 beams under a flat roof. Two additional 4-by-14 beams under 42-inch roof overhangs at the east and west ends are supported by 3-by-12 ledger beams along the sides of the building and extend 1.5 feet beyond the roof. The 4-by-14 beams extend beyond the north and south walls to support two-foot roof overhangs and 36-inch-deep open trellises topped by 2-by-4 rafters, plus an additional nine inches. The exterior walls are clad in vertical grooved plywood between the exposed posts. The south elevation is blank according to the as-built plans. The north elevation features one door and two sections of horizontal wood louver vents that extend to the roof. The west and east elevations feature the same plywood cladding, with a person door and a wider roll-up door.

The patio building is similarly constructed of 4-by-8 posts, supporting seven 4-by-14 beams under a flat roof. The structure is further supported by cross braces in the last sections at the building corners. Two additional 4-by-14 beams under 42-inch roof overhangs at the east and west ends are supported by 3-by-12 ledger beams along the sides of the building and extend 1.5 feet beyond the roof. The 4-by-14 beams extend beyond the north and south walls to support two-foot roof overhangs and 36-inch-deep open trellises topped by 2-by-4 rafters, plus an additional nine inches. Two skylights, approximately 7.5 feet by four feet, are centered in the roof toward the east and west ends. The exterior north wall is clad in vertical grooved plywood between the exposed posts up to the ledger beams. Chain link covers the openings under the roof on this elevation, and may cover all of the south wall openings. The west and east ends are open and enclosed by chain link fence and gate panels.

The buildings exhibit character-defining features of the Post-and-Beam style, including the direct expression of their wood-framed structural system involving heavy posts and beams; horizontal massing; flat roofs with deep overhangs; repetitive façade geometry; no solid load bearing walls; absence of applied decoration; open interior floor plans; and wood exterior finish materials. The buildings do not feature floor-to-ceiling glass or strong interior/exterior connections, but this is due to their completely functional purpose as storage buildings.

The NLT comprises two of three Post-and-Beam buildings constructed on the campus within the historic period (prior to 1986). The only other Post-and-Beam building is the Art Kiln Annex Classrooms building (D300) built in 1981. The D300 building is not noteworthy because it does not express key features of the Post-and-Beam style; it also was not designed by a master architect. The architecture firm for the NLT buildings, Richard J. Lareau & Associates, is considered a master architect by the City of San Diego. The buildings are noteworthy examples of the Post-and-Beam style, exhibiting all of the style's character-defining features applicable for the use of the buildings. The only apparent changes are replacement of person doors of the storage building, and the addition of chain link at the original openings in the patio building. These alterations are minor given that all other key building elements appear to be intact. Thus, the buildings retain integrity and are able to convey their architectural significance. The buildings are also representative of master architect Richard J. Lareau & Associates' body of work which includes 5645 Taft Avenue, San Diego (HRB no. 1246) and 4515 Ladera Street, San Diego (HRB no. 1344). Therefore, the NLT buildings possess local significance and are recommended



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0 700 Feet

Source: Aerial (Vantor, 2025)

HELIX Environmental Planning

Historical Resources at Mesa College

Figure 4

individually eligible under CRHR Criterion 3 (Architecture). The period of significance is 1976, the year of construction.

Character-Defining Features

- Two adjacent small one-story rectangular buildings
- Post-and-Beam details including:
    - Direct expression of their wood-framed structural system involving heavy posts and beams
    - Horizontal massing
    - Flat roofs with deep overhangs
    - Repetitive façade geometry
    - No solid load bearing walls
    - Absence of applied decoration
    - Open interior floor plans
    - Wood exterior finish materials

6.3 HISTORIC DISTRICTS

6.3.1 Mesa College Design Center Historic District (Z100-Z600)

As discussed in Section 5.4.1, the Mesa College Design Center, designed by Earl F. Giberson, is comprised of six buildings built in 1954: an irregular-shaped building (Z100), an L-shaped building (Z200), and four parallel, elongated rectangular buildings to the west (Z300-Z600). The buildings are connected by covered walkways supported by pipe columns, or *pilotis*. The collection of buildings embodies distinctive character-defining features of the International style, including horizontal orientation; an emphasis on simple, geometric volumes with square corners; exterior stucco; a lack of applied ornament except for the *pilotis*; horizontal bands of metal-framed windows, and flat roofs with parapets and cantilevered slabs. The only readily discernible exterior building modifications are wood slat roof equipment screens. The buildings are no longer used as an elementary school, but together they are a significant concentration of buildings that are linked and united aesthetically by their architectural style. Although the original elementary school use of the buildings and associated site improvements are no longer extant, the original buildings remain intact. The buildings are a noteworthy example of the International style of architecture and retain their integrity.

Therefore, the Mesa College Design Center Historic District possesses local significance and is recommended eligible to be listed in the CRHR under Criterion 3 (Architecture). The period of significance is 1954, the year of construction.

Character-Defining Features

- Six one-story buildings; four parallel rectangles, one L-shape, one irregular; all one-story
- Orientation around a central courtyard

- International style details including:
    - Horizontal orientation
    - Emphasis on simple, geometric volumes with square corners
    - Stucco cladding
    - Lack of applied ornament except for the *pilotis*
    - Horizontal bands of metal-framed windows
    - Flat roofs with parapets and cantilevered slabs

6.3.2 Kearny Mesa Junior College/Mesa College Establishment (1964-1965)

As discussed in Section 5.4.2, only eight of the 14 original main buildings designed by Frank L. Hope & Associates within the 1964/1965 campus boundary are extant, while the other six have been demolished (two extant structures are also part of the original campus design: the entrance sign and entry canopy near A100). Moreover, the demolitions have occurred primarily within the central core of the 1964/1965 campus boundary.

Additionally, a comparative review of historic and current-day aerial photographs shows that most of the original designed hardscape and landscape areas are no longer extant; only a small section at the westerly end of the 1964/1965 campus boundary remains. Although it was noted previously that minimal landscaping was present when the college opened, aerials indicate an aesthetically-designed network of walkways with landscaping that filled in over time. Due to the loss of the majority of the original designed hardscape and landscape areas, this component no longer retains integrity.

The 1964/1965 campus boundary was redeveloped with the addition of 11 new main buildings built almost exclusively between the 1970s and the past decade. Appendix C includes evaluation of three of the 11 new main buildings that were added during the historic period up to 1985. The remaining eight new main buildings located within the 1964/1965 campus boundary were all added within the modern period after 1985.

The 1964/1965 campus boundary has been evaluated for its potential eligibility as a historic district related to the Kearny Mesa Junior College/Mesa College 1964/1965 context. Such a district would only feature eight contributing buildings but 11 non-contributing buildings. Thus, the ratio of contributing buildings to non-contributing buildings would be less than 50 percent, which is an industry standard minimum threshold for contributors to establish a district. The low number of contributors represents a significant loss of integrity.

Therefore, the 1964/1965 campus boundary no longer has sufficient integrity to establish an eligible historic district under any criteria.

6.4 EVALUATION CONCLUSION

HELIX conducted an intensive-level survey of the project area (Mesa College) on February 18, 2025. The campus consists of approximately 45 buildings and/or structures, 33 of which were determined to be 40 years of age (1985) or older. From these, HELIX identified a total of 32 buildings, one structure, one former site, and two historic districts requiring evaluation for listing in the NRHP and CRHR. Archival research was completed in November 2025.

Historic resources are located across the Mesa College campus including areas acquired and/or developed after the original campus development. Three individual buildings and one historic district consisting of six buildings appear eligible for listing in the CRHR, as summarized below:

One individually eligible building is the 1977 Fine Arts Building (I300), which is located within the original campus boundary. The Fine Arts Building is a noteworthy example of Brutalism, exhibiting all of the style's character-defining features, and is also representative of master architect Frank L. Hope & Associates' body of work. Therefore, the Fine Arts Building possesses local significance and is recommended individually eligible under CRHR Criterion 3 (Architecture). The period of significance is 1977, the year of construction.

The other two individually eligible buildings are the two Nursery & Landscape Technology (NLT) Storage buildings (P200), which are located northwest of the original campus boundary. The NLT buildings are noteworthy examples of the Post-and-Beam style, exhibiting all of the style's character-defining features applicable for the use of the buildings, and are representative of master architect Richard J. Lareau & Associates' body of work. Therefore, the NLT buildings possess local significance and are recommended individually eligible under CRHR Criterion 3 (Architecture). The period of significance is 1976, the year of construction.

The Mesa College Design Center Historic District (Z100-Z600) is located to the east of the main campus. The historic district is comprised of six buildings that are noteworthy examples of the International style. Therefore, the Mesa College Design Center Historic District possesses local significance and is recommended eligible to be listed in the CRHR under Criterion 3 (Architecture). The period of significance is 1954, the year of construction.

The three individually eligible buildings and those comprising the historic district are *historical resources* for the purposes of CEQA.

7.0 IMPACTS ANALYSIS

A "substantial adverse change in the significance of an historical resource" reflecting a significant effect under CEQA means "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired" (CEQA Guidelines Section 15064.5[b][1]; PRC Section 5020.1[q]). In turn, the significance of a historical resource is materially impaired when a project does any of the following:

(1) Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register; or

(2) Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to Section 5020.1(k) of the PRC or its identification in a historical resources survey meeting the requirements of Section 5024.1(g) of the PRC, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or

(3) Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register.

Campus improvements implementing the CMP and affecting the contributing buildings, structure, and sites within the eligible historic district could result in potentially significant impacts to a historical resource. Potential impacts are further discussed below at the program-level of CMP implementation and at the project-level for each of the near-term projects.

7.1 PROGRAM-LEVEL IMPACTS

As described above, the Fine Arts Building (I300), Nursery & Landscape Technology (NLT) Buildings (P200), and buildings contributing to the Mesa College Design Center Historic District (Z100-Z600) are *historical resources* and changes to these existing buildings could result in impacts to a historical resource. Projects implemented under the CMP with potential to affect historic resources are anticipated to be categorized as: (1) minor alterations, (2) alterations to character-defining features, or (3) new construction adjacent to historical resources. Impacts to historical resources are evaluated in these three categories below by determining the potential for these project types to affect the integrity and character-defining features of historical resources.

7.1.1 Minor Alterations

Projects involving routine maintenance, minor system upgrades, changes to secondary spaces (i.e. restrooms or storage spaces), or changes to spaces that as an existing condition contain no character-defining features are assumed not to result in adverse changes to the character-defining features of a historical resource. Impacts would be less than significant for projects implemented under the CMP that result in no permanent change to the character-defining features of a historical resource.

7.1.2 Alterations to Character-Defining Features

A project that requires either extensive alteration (such that the resource would no longer convey its historic significance) or demolition of a historic resource would result in a potentially significant impact to that resource. Such projects may also include renovation activities that require alterations involving character-defining features, result in a change of use, or are additions that may be incompatible with the resource. While the Fine Arts Building, Nursery & Landscape Technology Buildings, and buildings contributing to the Mesa College Design Center Historic District (Z100-Z600) are not specifically planned for replacement under the CMP, alterations to character-defining features could result from renovations, additions, and/or changes in use of these buildings and would result in a potentially significant impact. The reconfiguration of circulation elements associated with the West Entrance project is shown to result in the removal of the Nursery and Landscape Technology Storage buildings (Building P2) in the CMP; however, the final design for this long-term project is not determined at this stage of planning. Therefore, mitigation measures provided below include the requirement for a Project Impact Analysis to determine whether the project meets, or could be redesigned to meet, the *Secretary of the Interior's Standards for the Treatment of Historic Propertie*s (Standards). If a project does not meet the Standards, additional measures require implementation of a documentation plan, prepared by a qualified architectural historian retained by SDCCD, to fully document the historical resource prior to alteration or demolition. The potential for relocation or commemoration of the resource would also be considered under the mitigation framework.

7.1.3 Projects Adjacent to a Historical Resource

New construction adjacent to a historical resource also has the potential to result in significant indirect impacts to the historical resource if such new construction is incompatible with the historical resource in terms of bulk, scale, massing, height, and/or style such that the setting, feeling, and/or association of the historical resource is impaired. Mitigation measures provided below regarding evaluation under the Standards and, if a project does not meet the Standards, additional measures for documentation, relocation, and/or commemoration of the resource would apply.

7.2 NEAR-TERM PROJECT IMPACTS

Athletics Complex

A series of improvements are proposed to replace and reconfigure existing athletic, exercise science, and dance instructional and support spaces to improve connectivity and facility quality. The existing Pool, Upper Athletic Field, gym, and Physical Education building (L1) would be demolished. These existing buildings were not identified as individual historical resources or contributing buildings to the recommended eligible Mesa College Design Center Historic District. This area is also separated from such resources by intervening campus development and would not result in indirect effects. Therefore, the Athletics Complex project would not result in changes to historical resources, and no mitigation measures would apply.

Performing Arts and Administration Center and Parking Structure

A new multi-story, 140,000-GSF building is proposed on the north side of the mesa top and adjacent to the I-400 Student Services Center. No existing buildings or structures would be demolished to accommodate the new building; therefore, no historical resources would be directly affected. This area is also separated from historical resources by intervening campus development, including the I-400 Student Services Center, which would remain between the Fine Arts Building and proposed Performing Arts and Administration Center and Parking Structure. Therefore, this project would not result in changes to historical resources, including indirectly, and no mitigation measures would apply.

8.0 CONCLUSIONS AND MANAGEMENT RECOMMENDATIONS

Implementation of the CMP has the potential to result in significant impacts to historical resources: the Fine Arts Building, Nursery & Landscape Technology Buildings, and buildings contributing to the Mesa College Design Center Historic District (Z100-Z600). To ensure compliance with CEQA and provide a structured approach for identifying, evaluating, and addressing potential impacts to historic resources, the following mitigation framework defines the review processes and treatment protocols that shall be applied to individual CMP projects.

8.1 MITIGATION FRAMEWORK

To mitigate future potential adverse impacts to *historical resources* located on the Mesa College campus, the following mitigation measures are recommended for proposed alterations, additions, demolitions, and/or construction involving any of these resources: the Fine Arts Building (I300),

Nursery & Landscape Technology Buildings (P200), and buildings contributing to the Mesa College Design Center Historic District (Z100-Z600). This includes projects that require the temporary removal of character-defining features, for which SDCCD should ensure the safe removal, storage, and reinstallation of the features(s).

As defined in CCR Section 15126.4(b)(2), "in some circumstances, documentation of a historical resource, by way of historic narrative, photographs or architectural drawings, as mitigation for the effects of demolition of the resource will not mitigate the effects to a point where clearly no significant effect on the environment would occur" (14 CCR Division 6, Chapter 3, Section 15126.4[b][2]). However, pursuant to the PRC, documentation of a historical resource, by way of historic narrative, photographs, or architectural drawing, can still serve to reduce the effect of the demolition of the resource, even though it will not mitigate the effects to the point where clearly no significant effect on the environment would occur. Thus, "CEQA requires that all feasible mitigation be undertaken even if it does not mitigate below a level of significance. In this context, recordation serves a legitimate archival purpose" (State of California 2026). The following mitigation measures would reduce potential impacts on historic resources to the extent feasible; however, impacts would remain significant and unavoidable after mitigation for future projects that do not comply with the Standards as determined under mitigation measure HIST-1.

HIST-1 Project-level Historic Properties Project Impacts Analysis. During initial project planning for projects that may result in changes to a historical resource, including but not limited to the Fine Arts building (Building FA), Nursery and Landscape Technology Storage buildings (Building P2; two buildings), and buildings contributing to the Mesa College Design Center Historic District (Buildings Z1-Z6; six buildings), the project plans shall be reviewed by a qualified architectural historian (meeting the Secretary of the Interior's Professional Qualifications Standards for Architectural History) for the potential to affect character-defining features of that resource as defined in Section 6.2.1.1 of the Historic Resources Survey Report. If the architectural historian determines that the minor changes to an eligible historic resource would result in no permanent changes to the character-defining features of the resource, no further analysis or mitigation measures are required for the minor renovation projects.

For projects that may involve altering character-defining features, either directly or indirectly, a Project Impacts Analysis shall be prepared by a qualified architectural historian during the project design phase to identify potential direct and indirect impacts, as defined by the California Environmental Quality Act (CEQA), utilizing the *Secretary of the Interior's Standards for the Treatment of Historic Propertie*s (Standards). If the Project Impacts Analysis concludes that the project meets the Standards, no further analysis or mitigation measures are required.

If the Project Impacts Analysis concludes that the project, as designed, does not comply with the Standards, it shall be further reviewed by the same qualified architectural historian to determine if the resource would retain its overall eligibility as a historical resource, even if the project does not strictly comply with the Standards. Examples of such projects might include major interior spaces that require the loss or removal of important character-defining features, and large building additions that alter a secondary façade.

SDCCD shall also evaluate if the project can be redesigned to meet the Standards. If such project changes are determined by SDCCD to be feasible, changes shall be incorporated into the project to the satisfaction of the qualified architectural historian and documented in the Project Impacts

Analysis or a subsequent memorandum. If such changes are incorporated and the project complies with the Standards, no further analysis or mitigation measures are required.

If the project cannot be redesigned to meet the Standards, SDCCD shall implement mitigation measure HIST-2 to document the resource and shall consider the feasibility of mitigation measures HIST-3 and HIST-4 for the project.

HIST-2 HABS or HALS Documentation for Historic Resources. SDCCD shall commission the preparation of Historic American Buildings Survey (HABS) or Historic American Landscapes Survey (HALS) Level II documentation by a qualified architectural historian for any historical resource that would be impacted by the project. Documentation of the existing conditions shall be undertaken prior to the commencement of construction in accordance with the Level II documentation procedures. Level II documentation shall include select existing drawings, photographs, and a written history and resource description. The HABS or HALS documentation shall be submitted to the Mesa College campus archive and to the San Diego History Center and/or to the South Coastal Information Center (SCIC) at San Diego State University, which is the California Historical Resources Information System (CHRIS) Information Center for San Diego County.

HIST-3 Relocation of a Historical Resource. If a project would result in the unavoidable demolition or removal of a historical resource, then SDCCD, in consultation with a qualified architectural historian, shall consider relocating the resource to an appropriate receiver site, if any such site is available, and relocation is feasible (i.e., buildings and structures of a suitable size). The receiver site shall constitute an appropriate historic setting for the relocated historical resource(s) as determined by a qualified architectural historian. For historic district contributors, the receiver site shall fall within the historic district boundaries to retain the associative qualities between the contributor and the historic district within which it is located.

HIST-4 Interpretation/Commemoration of a Historical Resource. If a project would substantially alter a historical resource, then SDCCD, in consultation with a qualified architectural historian, shall prepare interpretive and/or commemorative materials of the building or structure. Interpretive displays in the public areas of significant buildings, landscapes, and sites shall be installed as deemed appropriate and feasible by the District.

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Appendix A

Resumes of Key Personnel

EDUCATION

Master of Arts, Anthropology, San Diego State University, 2018

Bachelor of Arts, Biology and Anthropology, San Diego State University, 2015

REGISTRATIONS/ CERTIFICATIONS

Registered Professional Archaeologist No. 17338

PROFESSIONAL AFFILIATIONS

Society for Historical Archaeology

Society for California Archaeology

JAMES TURNER

Senior Archaeologist



Mr. Turner is a Registered Professional Archaeologist (RPA) with a Master's degree in Anthropology and field and college-level teaching experience in archaeology. He has more than six years of experience in Section 106, the Native American Graves Protection and Repatriation Act (NAGPRA) and writing detailed reports. Mr. Turner has archaeological research and fieldwork expertise throughout southern California. He has also received training in identifying and analyzing animal remains in archaeological contexts, historic artifact identification, and technical writing. Mr. Tuner's experience meets the Secretary of the Interior's Professional Qualification Standards for archaeology.

Coronado Strand Main Replacement. Archaeologist for a 46,300 linear-foot water main replacement in the City of Coronado, San Diego County. Prepared the cultural resource survey report. Work performed for Brown and Caldwell.

Casa de las Campanas Project. Archaeologist for a 10.1-acre expansion of the Casa de las Campanas Continuing Care Facility in San Diego, California. Conducted a field survey of the proposed project areas, as well as assisted with the production of the Archaeological Resources Report Form. Work completed for Casa de las Campanas.

Haymar Easement Protection Project. Archaeologist for an emergency easement erosion prevention project. Prepared cultural resources monitoring report. Work performed for the United States Army Corps of Engineers.

Ocean Beach Dog Beach Accessibility Improvements. Archaeologist for the implementation of Americans with Disabilities Act upgrades to an existing pathway at the Ocean Beach Dog Beach, located in the City of San Diego. Created Monitoring Work Plan. Work performed for the City of San Diego.

Southcrest Green Infrastructure Project. Staff Archaeologist for the replacement and installation of new storm drains and green infrastructure facilities in the community of Southcrest, San Diego. Prepared Native American Heritage Commission Sacred Land File search request. Work performed for the City of San Diego.

Sewer and AC Group 793. Staff Archaeologist for sewer line replacements and improvements in the City of San Diego. Prepared Native American Heritage Commission Sacred Land File Search request letter. Work performed for the City of San Diego.

Bounty & Waring Navajo Canyon Long Term Access Project. Archaeologist for the repair of erosion on a long-term access path for the sewer infrastructure in Navajo Canyon. Performed an intensive pedestrian survey of the project area. Work performed for the City of San Diego.

Stowe Trail Cultural Resources Assessment. Archaeologist for a proposed trail alignment in the Mission Trails Regional Park. Performed background research and assisted with report writing. Work performed for the City of San Diego Parks and Recreation Department.

Clairemont Community Plan Update EIR Phase 1. Archaeologist for the Clairemont Community Plan Update. Performed background research and assisted with preparing the Community Plan Update cultural resources section. Work performed for the City of San Diego.

Aliso Creek Canyon Restoration Project. Archaeologist for an erosion repair project in Lake Forest. Conducted a field survey of the project area, performed background research, and produced a cultural resources report. Work performed for the Orange County Department of Public Works.

Peutz Valley Preserve Cultural Surveys and Report. Archaeologist for the proposed construction of an ecological preserve located in the community of Alpine. Conducted historical and archival research regarding the area surrounding the proposed preserve. Work conducted for the County of San Diego.

Santa Ysabel Nature Center Monitoring. Archaeologist for a proposed 3-mile hiking trail in the unincorporated community of Julian. Performed background research and assisted with report writing. Work performed for the County of San Diego Department of Parks and Recreation.

Lakeside Equestrian Facility Monitoring. Archaeologist for the construction of a 13.91-acre equestrian facility in Lakeside, California. Created cultural resources monitoring plan. Work performed for the County of San Diego.

Greg Cox Bike Skills Park Construction Monitoring. Archaeologist for the construction of a 3.2-acre bike park facility in the Otay Valley Regional Park, San Diego, California. Created cultural resources monitoring plan. Work performed for the County of San Diego.

Diaz Road Expansion, PW17-25. Archaeologist for proposed city infrastructure improvements associated with the widening and/or construction of Diaz Road in the city of Temecula. Prepared cultural resources survey report. Work performed for David Evans and Associates, Inc.

San Jacinto Las Colinas DD. Archaeologist for a development project in the community of San Jacinto. Prepared a due diligence cultural assessment. Work performed for David Evans and Associates, Inc.

Downtown Riverside Metrolink Station Track & Platform Project. Archaeologist for the construction of an additional rail platform and tracks and extension of an existing pedestrian bridge at the existing Riverside-Downtown Station, Riverside. Assisted with report preparation. Work performed for the Riverside County Transportation Commission.

Painted Hills. Archaeologist for a proposed bridge repair program in the Temescal Valley area in Riverside County. Prepared the Phase IV cultural resources monitoring report. Work performed for KB Home.

Temescal Canyon - TR 37153. Archaeologist for a due diligence constraints assessment related to cultural resources for an approximately 14.8-acre property located in an unincorporated area of Riverside County, California. Performed constraints assessment and produced a due diligence report. Work performed for KB Home.

Wasson Canyon Project. Archaeologist for a due diligence constraints assessment related to cultural resources for an approximately 74.6-acre property located in the City of Lake Elsinore, Riverside County, California. Performed constraints assessment and produced a due diligence report. Work performed for KB Home.

Rosetta Hills Project. Archaeologist for a due diligence constraints assessment related to cultural resources for an approximately 49.6-acre property located in the City of Lake Elsinore, Riverside County, California. Performed constraints assessment and produced a due diligence report. Work performed for KB Home.

Lake Morena's Oak Shores Eastside Pipeline Looping Project. Archaeologist for the Lake Morena's Oak Shores Mutual Water Company Eastside Pipeline Looping and Pipeline Abandonment Project. The project consisted of improvements to the existing water distribution system. Conducted archaeological monitoring and wrote a letter report summarizing the methods and results of the monitoring program. Work performed for Lake Morena's Oak Shores Mutual Water Company.

Escondido Country Club. Archaeological monitor for the redevelopment of the Escondido Country Club. Performed construction monitoring. Work performed for Lennar Homes.

Broadway Channel Improvements - Phase A. Archaeologist for an earthen channel improvement project in the city of El Cajon. Performed background research and prepared cultural resource survey report. Work performed for City of El Cajon.

Seawater Controls Project. Archaeologist for a proposed tank installation near the Scripps Institute of Oceanography in La Jolla. Performed monitoring of geotech borings and conducted a site survey. Work performed for University of California, San Diego.

Carmel Mountain Road Life Sciences Project. Archaeologist for a proposed commercial development project in the Torrey Hills Community Plan area. Responsibilities included performing background and archival research and producing an archaeological resources report. Work performed for Allen Matkins Leck Gabme Mallory & Natsis, LLP.

Parkway Drive and Alvarado Road Trunk Sewer Phase 3 Upgrade Project. Archaeologist for a sewer infrastructure improvement project in the city of La Mesa, San Diego County. Performed construction monitoring. Work performed for the City of La Mesa.

Diamond Sports Complex. Archaeologist for the construction of a sports complex in Lake Elsinore. Assisted with report preparation. Work performed for the City of Lake Elsinore.

City of Escondido's Trunk Sewer Main Replacement Environmental Services. Archaeologist for the replacement of the City of Escondido's trunk sewer main. Wrote a memo summarizing the methods and results for the records search and Sacred Lands File search. Work performed for Infrastructure Engineering Corporation, with the City of Escondido as the lead agency.

Mountain View Connector Pipeline Cultural Monitoring. Archaeologist for a waterline replacement project in the community of Alpine. Conducted cultural resource monitoring and prepared the final monitoring report. Work performed for Padre Dam Municipal Water District.

Cordial Road Pipeline. Archaeologist for a pipeline replacement project in the unincorporated portion of the City of El Cajon. Performed background research and field survey. Other responsibilities included the production of a letter report detailing the methods and results of the survey, as well as the completion of a site record update to submit to the South Coastal Information Center. Work performed for the Padre Dam Municipal Water District.

The Triangle Project. Archaeologist for an approximately 40.6-acre development center consisting of restaurant, commercial/retail, theater/entertainment, hotel, and office uses in Temecula, Riverside County, California. Prepared the cultural resources study update report and the records search update memo. Work performed for Domenigoni-Barton Properties, LLC.

EDUCATION

Master of Arts, History, California State University San Marcos, 2015

Bachelor of Arts, Liberal Studies (History), California State University Long Beach, 1986

PROFESSIONAL AFFILIATIONS

American Planning Association

National Trust for Historic Preservation

California Preservation Foundation

AWARDS

Association of Environmental Professionals, Merit Award, Carlsbad Tribal, Cultural and Paleontological Resources Guidelines

American Institute of Architects San Diego Chapter, Divine Detail Award, Montanez Adobe, San Juan Capistrano, CA

TERI DELCAMP

Senior Architectural Historian



Ms. Delcamp is a qualified historian/architectural historian who meets the Secretary of the Interior's standards for her profession. Ms. Delcamp has 24 years of professional experience in preparing history and architectural history studies in California. She has served as Principal Planner for the City of Carlsbad, Senior Planner (Historic Preservation) for the City of Riverside, Historic Preservation Manager for the City of San Juan Capistrano, and Senior Planner for the cities of San Diego, Oceanside, and San Clemente. Ms. Delcamp's experience includes a wide range of study types, from the preparation of historic context studies to historic built environment evaluations.

Tijuana River Valley Regional Park Brown Fill Property (2022 - 2023). Senior Architectural Historian for a cultural resources study in support of a potential restoration project at the Brown Fill Property within the Tijuana River Valley Regional Park in San Diego County. Conducted a literature review and archival research, review of historic maps and aerials, and desktop survey. Prepared the historic significance evaluation section of a cultural resources technical report in compliance with state and federal regulations and prepared California DPR forms. Work performed for the County of San Diego.

Tijuana River Valley Regional Park Smuggler's Gulch and Pilot Channel Dredging Compliance Review (2023).

Pittsburg Bay Walk Mixed Use Development (2023). Architectural Historian for the 950-acre Pittsburg Bay Walk Mixed Use Project within the City of Pittsburg, Contra Costa County. The site was historically the Pittsburg Power Plant and approximately half the site consists of wetlands. Prepared the historic evaluation section of the cultural resources study. Work performed for Integral Communities with the City of Pittsburg as the lead agency.

Pasadena Water & Power Sunset Reservoir Replacement Historical Resources Evaluation (2022 - 2024). Senior Architectural Historian assisting in preparation of a Historic Resource Evaluation Report, including impact analysis and mitigation measures, as well as the cultural resources and alternatives sections of an EIR for a reservoir replacement project in the City of Pasadena. A historic district eligible for the national, state, and local registers was identified and documented. Work performed as a subconsultant with the City of Pasadena as the lead agency.

Elsinore Valley MWD Canyon Lake Water Treatment Plant Phase I Improvements Environmental (2023 - 2025). Senior Architectural Historian for a water treatment plant project involving upgraded treatment systems in the City of Lake Elsinore. Conducted a literature review and archival research, review of historic maps and aerials, field surveys, and preparation of a Historic Resource Evaluation Report in

support of CEQA and Section 106 of the National Historic Preservation Act. Work performed as a subconsultant for the Elsinore Valley Municipal Water District.

MWD District Housing and Property Improvement Program IS/MND (2022 - 2024). Senior Architectural Historian for a housing improvement project within the Gene, Iron Mountain, Eagle Mountain, and Julian Hinds pump station villages in Riverside and San Bernardino counties. Conducted archival research in support of the built environment survey and assisted in preparation of a draft cultural resources technical report.

MWD Copper Basin Dam Valve Replacement Historical Resources Technical Report (2022). Senior Architectural Historian in support of historic resources documentation for the Copper Basin Dam Valve Replacement Project involving the in-kind replacement of a large-scale water valve known as the "Howell-Bunger" valve. Conducted a built environment survey and archival research, and prepared a Historic Resource Evaluation Report.

Alexan Residential Multi-Family Technical Studies (2023).

Shady View Residential Project Environmental Impact Report (2022). Architectural Historian for a Cultural Resources Survey and Historical Evaluation report in support of the proposed development of 159 single-family homes, open space and recreational amenities, and associated street, utility/infrastructure, and drainage improvements in the City of Chino Hills. Prepared the historic evaluation section of the technical report and DPR Form in compliance with state and federal regulations, which included a cultural resources records search, literature review and archival research, review of historic maps and aerials, field survey, and historic significance evaluation in support of the project EIR. Work performed for the City of Chino Hills.

Granite Grammar School Cultural and Historical Resources Assessment (2022 - 2023). Architectural Historian for cultural resources assessment report to meet CEQA and NHPA compliance requirements. Located in the Folsom Historic District, Granite Grammar School was originally constructed in 1915 and consists of a Spanish architectural style with Gothic Revival influences. The School is currently configured and used as commercial office space. The proposed project would subdivide the existing lot into three parcels; the historic building would remain with its current use, while the subdivided vacant lots would be intended as future residential parcels consistent with the Single-Family High Density General Plan land use and Single-Family Dwelling Small Lot zoning designations of the property. Prepared an archaeological assessment and built environment evaluation for the City and project applicant's consideration. Work performed for the City of Folsom.

Marysville Parks & Open Space Master Plan (2021 - 2021). Architectural Historian who assisted in the preparation of the Historic Resource Evaluation Report for the City of Marysville Parks and Open Space Master Plan project, consisting of minor upgrades to Ellis Lake Park, including rerouting and widening pathways and adding a series of benches, exercise stations, a playground, and an event stage. The project included in-depth historical research and preparation of the final Historic Resource Evaluation Report for Ellis Lake Park. Work performed for the City of Marysville.

Calimesa Boulevard Realignment Draft CEQA Addendum (2023).

Chevron Fuel Station and Power Market Convenience Store IS/MND (2022 - 2023). Architectural Historian for CEQA documentation for the proposed demolition of an existing convenience store and fueling station on 0.5-acre and construction of a Chevron Fuel Station and Power Market Convenience Store located in the City of Union City, Alameda County. Conducted a historic evaluation to determine if the site is historically significant under CEQA based on the eligibility criteria of the National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR), and local designation criteria. Work performed for the City of Union City.

Munoz Second Story Addition Historic Architecture Assessment (2022). Architectural Historian for a Historic Resources Evaluation for a project applicant's proposed modification to construct a second story addition and a

two-car garage to an existing residence located on 10th Street in Union City. A historical evaluation of the subject property was completed in 1998, and it was determined to be eligible as a contributor to the Old Decoto Historic District. Prepared Historic Resources Evaluation to determine if the residence still qualifies as a contributing element of the District and/or meets the criteria for listing on the California Register of Historical Resources. Work performed for the City of Union City.

Copper Cove Water System Improvements (2022 - 2023). Senior Architectural Historian in support of a Cultural Resources Assessment for proposed infrastructure improvements to maintain potable water services for the expanding community. Water system improvements included replacement of an existing redwood water tank, welded steel, and clearwell tanks, booster pump station and transmission main, as well as construction of an emergency intertie at Lake Tulloch and tank overflow improvements. Prepared the historic built environment evaluation section of the report for the redwood water tank, including a literature review and archival research, review of historic maps and aerials, and desktop survey. Work performed as a subconsultant to Peterson Brustad with Calaveras County Water District as the lead agency.

Old Juvenile Hall Building Historic Built Environment (2023). Architectural Historian for the Old Juvenile Hall building located in Martinez, Contra Costa County which is over 50 years old and is proposed to be demolished. Prepared a historic built environmental assessment to determine if the building is eligible for listing under the National Register of Historic Places and/or the California Register of Historical Resources under CEQA. Work performed for the County of Contra Costa.

Camino Tassajara Realignment Cultural Resources Evaluation (2023). Senior Architectural Historian for the realignment, widening, and reconstruction project on a portion of Camino Tassajara Road in the City of Dublin, Contra Costa County. Prepared the historic built environment evaluation section of the Cultural Resources Assessment in support of CEQA and Section 106 of the NHPA. Work performed for Contra Costa County Public Works Department.

Oak Grove Mental Health Facility Cultural and Historic Resources Evaluation (2023). Architectural Historian for renovation of existing County Public Works Department and Behavioral Health buildings using federal grant funding located in the City of Concord, Countra Costa County. Prepared a historic built environment assessment of a 1960s era building to be renovated to determine if the building is eligible for listing under the National register of Historic Places and/or California Register of Historical Resources for CEQA and to satisfy federal grant requirement for consultation with the State Historic Preservation Office. Work performed for Contra Costa County Public Works Department.

Coachella Canal Storage Archaeological & Biological Assessments (051021) (2021 - 2022). Architectural Historian for the Mid-Canal Reservoir Storage Project, proposed as an inline reservoir on the Coachella Canal that will be formed by removing the existing embankment between the existing lined canal with the original earthen canal section to form a single wide trapezoidal section. Responsible for reviewing extant data on the historicity of the National Register of Historic Places (NRHP)-eligible Canal, surveying the project, and completing an impacts/effects analysis utilizing the data from the survey and the literature review. Work performed as a subconsultant to Harvey Consulting Group, with Coachella Valley Water District and Bureau of Reclamation as the lead agencies.

Orleans Mutual Water Company, Water Treatment and Storage Improvements IS/MND (2022 - 2023). Senior Architectural Historian in support of the Cultural Resources Assessment for the replacement of an existing in-line filtration plant and water distribution system with a new water treatment plant system and storage in the unincorporated community of Orleans, Humboldt County. Prepared the historic evaluation section of the cultural resources letter report for the replacement of the existing 20,000-gallon Redwood Water Storage Tank within the project APE in support of CEQA and Section 106. Work performed as a subconsultant to an engineer

prime with Orleans Mutual Water Company as the project owner, and State Water Resources Control Board as the lead agency.

7-Eleven at 43 Middle Rincon Road (2022).

Finks Road Bridge Project (2023).

San Marcos Industrial Park IS/MND (2023 - 2024). Senior Architectural Historian for the evaluation of two built environment resources in the City of San Marcos. Performed background research and prepared a historic building evaluation for a circa 1927 silk factory with an associated mulberry plantation and a circa 1964 Teledyne Ryan metal fabricating facility. Both were determined to be ineligible for listing on the California Register. Work performed for Caprock Partners with the City of San Marcos as the lead agency.

Modera Neptune Mixed Use Redevelopment Class 32 Categorical Exemption (2023).

14060 Oak Glen Cultural Resources Survey (2022).

Sunny Sands/Quail Springs Archaeological and Historic Surveys (2023).

Front Street Mixed-Use Project Environmental Services [CONFIDENTIAL] (2022 - 2023).

Eucalyptus (Park Avenue) Historic Built Environment Review (2023).

165 Eucalyptus (Park Avenue) Historic American Building Survey (2023).

PREVIOUS PROJECT EXPERIENCE

Principal Planner, City of Carlsbad (2015 - 2020). Manage the current planning and customer service sections supervising 11 employees, including senior planners, associate planners and planning technicians. Review the most complex development projects ranging across the full spectrum of land uses and entitlements. Make CEQA determinations for both sections; provide cultural resource CEQA significance determinations for section development projects and provide internal peer review of cultural resource studies. Conduct CEQA analyses including preparation of initial studies and mitigated negative declarations. Implement and administer a variety of local land use regulations including Tribal, Cultural & Paleontological Resources Guidelines; Local Coastal Program; Habitat Management Plan and Airport Land Use Compatibility Plan. Prepare and present reports to Commissions and Council. Respond to inquiries and meet with community members to provide information and discuss land use-related concerns.

Carlsbad Tribal, Cultural, and Paleontological Resources Guidelines (2015 - 2020). Senior Planner for the update to cultural resources guidelines for the City of Carlsbad. Oversaw consultant contract, oversaw tribal consultation, collaborated and edited draft and final document, and achieved City Council adoption. Work performed for the City of Carlsbad.

City of Carlsbad Cultural Resource CEQA Determinations for Development Projects (2015 - 2020). Senior Planner for determining the need for cultural resources/historical reports for numerous projects including single family homes, historic theater, historic school campus buildings, churches, commercial and institutional sites. Work performed for the City of Carlsbad.

City of Carlsbad Tribal Consultation Projects (2015 - 2020). Senior Planner for leading or assisting City colleagues conducting AB 52 and SB 18 tribal consultations for numerous development projects, General Plan Amendments and Specific Plan Amendments. Work performed for the City of Carlsbad.

Various Tribal Consultations (2015 - 2020). Conducted or assisted in conducting tribal consultations under Senate Bill 18 and Assembly Bill 52 for Planning, Water Utilities, and Public Works Departments of local jurisdictions, including the City of San Juan Capistrano, City of Riverside, and City of Carlsbad.

City of Riverside Historic Preservation Senior Planner (2011 - 2015). Managed and oversaw day-to-day operation of historic preservation section within the Neighborhood Engagement Division. Detailed analysis and presentation of planning cases to decision-makers. Managed projects and consultant contracts for various surveys and CEQA documents. Acting Historic Preservation Officer for Administrative Certificates of Appropriateness. Prepared and secured grants and prepared progress reports and annual reports in conjunction with the Certified Local Government program. Authored and reviewed cultural resource reports submitted in support of designation, historical significance evaluations and/or in accordance with CEQA. Supervised Associate Planner and Assistant Planner. Partnered with community preservation organizations and other departments to achieve preservation goals. Provides customer service via public counter, telephone and email regarding land uses, development standards and historic preservation. Work performed for the City of Riverside.

City of Riverside Consultant Contract Management (2011 - 2015). Senior Planner focused on Historic Preservation in the City of Riverside. Prepared Requests for Proposals and managed professional consultant contracts for preparation of Environmental Impact Report and Mitigated Negative Declaration for historic resource demolition and area-wide Utility Department infrastructure improvements, respectively. Prepared Requests for Proposals and managed professional consultant contracts for preparation of historic surveys for grant funded work and Specific Plan updates. Work performed for the City of Riverside.

City of Riverside Historic Preservation Ambassador Training Program (2011 - 2015). Prepared Request for Proposals and managed consultant for new training manual and workshop series to create cohort of community preservation leaders to assist city in preservation education and advocacy. Work performed for the City of Riverside.

Relocation of the Cooper House (2011 - 2015). As Senior Planner, prepared a Cultural Resources Report and Evaluation of Impacts for the Cooper House. Work performed for the City of Riverside.

4135 Market Street, Structure of Merit Designation (2011 - 2015). Senior Planner for the preparation of a Historic Evaluation & DPR Form for a significant structure located at 4135 Market Street in Riverside.

Historic Evaluation & DPR Form Recordation for the James & Jessie Shaw Residence (2011 - 2015). Senior Planner for preparation of a historic evaluation and landmark designation for a private residence at 8410 Cleveland Avenue. Work performed for the City of Riverside.

Historic Evaluation & DPR Form Recordation for the Frank and Katherine Wells-Patsy O'Toole House (2011 - 2015). Senior Planner for the preparation of a historic evaluation, DPR form and landmark designation for a private residence at 1945 Arroyo Drive. Work performed for the City of Riverside.

Historic Evaluation & DPR Form Recordation for the Mackey House (2011 - 2015). Senior Planner for the preparation of a historic evaluation, DPR form and landmark designation for a private residence at 6140 Tiburon Drive. Work performed for the City of Riverside.

Cultural Resources Report and Evaluation of Impacts, Demolition of 11134 and 11144 Pierce Street (2011 - 2015). Senior Planner for the preparation of a cultural resources report prior to the demolition of properties located at 11134 and 11144 Pierce Street. Work performed for the City of Riverside.

Riverside Mid-Century Modern Building Survey Certified Local Government Grant (2011 - 2015). Grant writer and contract and project manager for a survey and inventory of mid-century modern buildings in Riverside. Work performed for the City of Riverside.

Riverside Mid-Century Modern Subdivision Oral Histories Certified Local Government Grant, (2011 - 2015). Grant writer and contract and project manager for preparation of oral histories surrounding mid-century modern buildings in Riverside. Work performed for the City of Riverside.

American Recovery and Reinvestment Act (ARRA) Surveys (2011 - 2015). Senior Planner for the completion of historical contexts and preparation of a multiple property DPR form. Work performed for the City of Riverside.

Management of Certificates of Appropriateness (2011 - 2015). Senior Planner for the analysis, preparation for Board and Council consideration, and supervision or approval of numerous planning applications for master plans, additions, adaptive re-use, relocation and/or restoration of historic commercial, industrial, educational and residential landmarks and district contributors, including commercial offices/stores, train depots, packing houses, individual homes and college campus landmarks, etc. Work performed for the City of Riverside.

Historic Preservation Fund Grant Program (2011 - 2015). Senior Planner for the management of bi-annual General Fund competitive grant program for historic preservation projects including staff to Council-created committee for award of grants. Work performed for the City of Riverside.

Historic Preservation Manager, City of San Juan Capistrano (2005 - 2011). Solely responsible for management and administration of the City's historic preservation program. Staffed City's Cultural Heritage Commission. Reviewed complex development projects affecting designated historic sites. Managed planning, design, bid and construction phases of 7year Capital Improvement Program for City-owned historic sites (approximate budget $1.3 million). Developed and administered Historic Preservation section's annual budget and coordinated annual historic building maintenance budget and priorities with Public Works. Wrote and presented reports to Commissions, Council, community organizations and public. Coordinated with other departments and state and federal agencies on historic preservation issues and projects. Prepared, supervised and/or reviewed National Register, California Register and local nominations. Conducted historic preservation public outreach including events and workshops.

Forster Mansion Exclusive Events Conditional Use Permit (2005 - 2011). Historic Preservation Manager for controversial, complex case for outdoor special events within mixed use residential and commercial area. Work performed for the City of San Juan Capistrano.

Zoomars on Los Rios Conditional Use Permit (2005 - 2011). Historic Preservation Manager for the management of a complex expansion of non-conforming use case for petting zoo in residential historic district. Work performed for City of San Juan Capistrano.

Montanez Adobe Restoration and Seismic Repair (2005 - 2011). Historic Preservation Manager for the preparation of RFPs and managed contracts; managed design, bid and construction. Montanez Adobe project received state award 2012. Work performed for the City of San Juan Capistrano.

7-Year Capital Improvement Program for City-Owned Historic Structures (2005 - 2011). Contract & Project Manager for bid and construction projects including Harrison House Repair & Restoration, Roger Williams/Swanner House Historic Paint Restoration, Roger Williams /Swanner House and Water Tower Foundation Repairs, Roger Williams/Swanner House Interior Repairs Joel Congdon House Repairs, and Blas Aguilar Adobe Repairs. Work performed for the City of San Juan Capistrano.

Seven-Year Capital Improvement Program for City-Owned Historic Structures (2005 - 2011). Contract & Project Manager for Design RFP, Bid & Construction, including Montanez Adobe Restoration & Seismic Repair, Joel Congdon House ADA Improvements, Joel Congdon House Water Tower Restoration, Parra Adobe Seismic Repair and Restoration Historic Structure Report. Work performed for the City of San Juan Capistrano.

Seven-Year Capital Improvement Program for City-Owned Historic Structures (2005 - 2011). Contract & Project Manager for RFP for Historic Structure Report and Rehabilitation Plans, including Parra Adobe Save America's Treasures Grant, The Ecology Center at the Congdon House, Blas Aguilar Adobe Repair and Native Education Facility, Mission San Juan Capistrano: Rectory Garden; Entry Restoration and Gift Shop projects, Historic Evaluation Report, Nick's Café, 26755 Verdugo Street, SB 18 Tribal Consultation for General Plan and Specific

Plan projects, and management of Historic Preservation Week 2006, 2007, 2008, 2009. Work performed for the City of San Juan Capistrano.

Senior Planner, City of Oceanside (2004 - 2005). Under direction of City Planner, supervised the current planning and customer service section. Supervised Associate Planners and Assistant Planners, including completion of performance evaluations. Reviewed complex development projects ranging across the full spectrum of land uses and entitlements, including CEQA initial studies and documents. Implemented Local Coastal Program. Wrote and presented reports to Commission and Council. Work performed for the City of Oceanside.

Senior Planner, Historic Preservation, City of San Diego (2002 - 2004). Staffed Old Town Community group and Design Review Board; evaluated and presented planning cases to both. Managed and administered City's historic preservation program and supervised staff including Administrative Interns, Secretary and Senior Planners on team. Conducted detailed review of historic resource reports and surveys for designation. Oversaw and participated in historic resource surveys. Reviewed projects for consistency with Secretary of the Interior's Standards. Staffed Historical Resources Board. Participated in Section 106 consultation and managed MOU and PA compliance, coordinating with Port Authority, Navy Region Southwest and various historic preservation organizations, etc. Fulfilled Certified Local Government duties. Wrote and presented reports to Board, Commissions, Council, community organizations and public. Conducted historic preservation public outreach including events, training, and workshops.

Naval Training Center Historic District Plancheck Drawings (2002 - 2004). Senior Planner for an evaluation of the Liberty Station Re-Use plans for consistency with Secretary of the Interior's Standards. Work performed for the City of San Diego.

Secretary of the Interior's Standards Consistency Determinations (2002 - 2004). Senior Planner for the San Diego Zoo/Balboa Park expansion; Salk Institute Expansion; SDG&E Station A adaptive re-use; Santa Fe Depot/Museum of Contemporary Art; Coronado Belt Line bike trail; Hard Rock Hotel/Depot re-use; various rehabilitation and re-use projects in Gaslamp Historic District, Old Town San Diego, etc. Work performed for the City of San Diego.

US Navy, US Marine Corps and San Diego Airport Authority Section 106 Programmatic Agreement (PA) Compliance (2002 - 2004) Senior Planner to review proposals for consistency with the PA. Met with agency representatives and property owners.

La Jolla Intensive Historic District Survey (2002 - 2004). Senior Planner on a survey team for the La Jolla Historic District. Work performed for the City of San Diego.

Burlingame and Islenair Historic Districts (2002 - 2004). Senior Planner for the supervision of the preparation of historic contexts and historic district nominations. Work performed for the City of San Diego.

East Village, Warehouse, and African American Historic District Surveys (2002-2004). Outreach team member for inventories of historic districts in the East Village, Warehouse District, and the historic African American district of San Diego. Work performed for the City of San Diego.

Individual Historic Designations and Mills Act Program (2002 - 2004). Reviewed all historic designation requests and referrals, prepared staff reports, supervised staff and managed Mills Act contract program comprising 80-100 property evaluations per year; worked with Deputy Director, community, preservation stakeholders and Land Use Committee to develop methodology for implementing new fees for designations and Mills Act contracts.

Senior Planner, City of San Clemente (2002). As Senior Planner, supervised the current planning and customer service section. Supervised Associate Planners and Assistant Planners, including completion of performance evaluations. Reviewed complex development projects ranging across the full spectrum of land uses and entitlements, including CEQA initial studies and documents. Supervised consultant contracts on various projects including General Plan amendments, Specific Plans and implementing entitlements, grants and CEQA documents. Served as Air Quality Planner and LOSSAN rail corridor technical advisory committee member. Managed and administered Planning Commissions and Design Review Subcommittee. Fulfilled Certified Local Government duties. Wrote and presented reports to Commissions, Council, community organizations and public. Established and implemented Mills Act incentive program. Conducted public outreach including community workshops and training.

Marblehead Coastal Project (1990 - 2002). Managed mid-1990s re-activation of 117 acre, 400+ dwelling unit and 61 acre regional commercial project; supervised and coordinated consultants for General Plan Amendment, Specific Plan and EIR; managed all associated entitlements including tentative tract, site plan review, conditional use permits, design review; coordinated weekly meetings with developer team, and meetings and reviews with other agencies including Coastal Commission and Department of Fish and Game; coordinated all revised project documentation and reports through numerous public hearings; processed project through to approval by Planning Commission and City Council.

San Clemente Metrolink Station(1990 - 2002). Managed city portion of award-winning project adjacent to National Register community building; liaised with OCTA consultant; supervised separate design consultant for ancillary "depot" building; coordinated staff and community meetings; developed ancillary building budget and design priorities; completed shared parking analysis, coordinated Coastal Commission's acceptance of methodology, and conducted required monitoring.

City of San Clemente Certified Local Government (1990 - 2002). Assisted in preparation of application, program, ordinance, etc., to obtain CLG status; prepared grant application; managed OHP and consultant contracts for grant; conducted research, outreach, workshops and public hearings to adopt updated survey; conducted workshops with CLG grant consultant; planned, prepared and obtained approval for City of San Clemente's first Mills Act Contract program.

City of San Clemente Downtown/Business Park Economic Development Achievements and Housing Balance (1990 - 2002). Managed numerous retail, office and industrial from discretionary entitlements through plancheck to permit issuance for 200,000+ square feet in new projects including DeNaults Hardware; Sav-On; Rip-Curl; Rancho San Clemente Plaza Pacifica; Rancho San Clemente Industrial Park; Talega Business Park; Rancho San Clemente Business Park; as well as residential subdivisions for 500+ dwelling units throughout Forster Ranch and Rancho San Clemente Specific Plan areas, Cross Hill, and numerous individual home developments.

City of San Clemente Advanced Planning (1990 - 2002). **P**repared SCAQMD AQMP baseline analysis for City as representative to Orange County Air Quality Technical Advisory Committee; wrote Zoning Code for amended site plan review process and historic preservation incentives; member of staff advisory committee for Citywide General Plan and comprehensive Zoning Code updates, and new Urban Design Guidelines; represented City on LOSSAN rail corridor technical advisory committee which resulted in new Metrolink Station; prepared grant applications for transportation enhancement projects.

EDUCATION

Master of Science, Historic Preservation, School of the Art Institute of Chicago, 2006

Bachelor of Arts, Architectural History and Urban Design, DePaul University, 1999

PROFESSIONAL AFFILIATIONS

California Preservation Foundation

Society of Architectural Historians

NELSON WHITE

Senior Architectural Historian & Project Manager



Mr. White is a federally qualified professional, with over 20 years of experience, who exceeds the Secretary of the Interior's Professional Qualifications Standards for architectural history and history (as defined in 36 Code of Federal Regulations Part 61). He is knowledgeable in the history and development of American cities and suburbs, with a focus on residential development and design. His California state-wide experience includes managing and conducting dozens of historical resource surveys and evaluations in compliance with Section 106 of the National Histroric Preservation Act, the California Environmental Quality Act (CEQA) and local ordinances. He has prepared numerous cultural resource studies that utilize federal, state, and local designation criteria to recommend status as a historic property for the purposes of Section 106, as a historical resource for the purposes of CEQA, or as resource under local ordinances.

Mr. White utilizes his understanding of the Secretary of the Interior's Standards to facilitate effective project compliance and design review for adaptive reuse and new construction projects within urban and suburban settings. He works closely with clients, lead agencies, and architects to preserve character-defining features of buildings and structures. He is a frequent volunteer for the California Preservation Foundation (CPF) and has twice served on its annual conference steering committee.

COMMERCIAL & INDUSTRIAL

814-828 Stockton Street Historical Resource Evaluation. Project Manager for the preparation of an Historical Resource Evaluation (HRE) for a 1924 commercial building that is a contributor to the identified Chinatown Historic District in San Francisco. Evaluated the property under federal, state, and local criteria. Conducted intensive-level field survey, archival research, and evaluation. Authored the HRE and prepared DPR 523 series resource forms. Work performed for Hoy Sun Ning Yung Bene Association.

San Pedro Boat Works Historical Resources Survey. Architectural Historian for a re-evaluation of the property located in Los Angeles to inform long-term planning for the site. The 3.5-acre former boat yard featured 14 structures and vernacular-style buildings constructed between 1929 and 1967. The 2008 DPR 523 series resource forms recorded and evaluated the property as a single building. To better reflect the entire property, it was re-recorded and re-evaluated as a historic district composed of six primary contributors, six secondary contributors, and three non-contributors. Evaluated the property under federal, state, and local criteria. Conducted intensive-level survey and evaluation. Prepared DPR 523 series resource forms. Work performed as a subconsultant to CDM Smith, Inc., with the Port of Los Angeles as the project owner.

CULTURAL LANDSCAPE

18500 Tarzana Drive Historical Resource Assessment. Project Manager for the preparation of an Historical Resource Assessment (HRA) for a 3.65-acre single-family estate in Tarzana, Los Angeles County, which featured a century-old grove of exotic

trees associated with the earliest development of Tarzana, as well as a heavily altered residence. Evaluated both the trees and the existing residence under federal, state, and local criteria. Conducted intensive-level field survey, archival research, and evaluation. Co-authored the HRA. Work performed for private developers.

IMPACTS ANALYSIS

3880 Smith Street Historical Resource Evaluation and Impacts Analysis. Project Manager for the preparation of an HRE and Project Impacts Analysis of the 1926 Mission/Mediterranean Revival style, with Baroque details, former St. Anne Church-turned Mosque, located in Union City. The property had been previously evaluated in 2000. The proposed project includes the construction of a one- and two-story addition to a secondary elevation and an interior mezzanine. We re-evaluated the property under federal, state, and local historic significance criteria and prepared an impacts analysis using the Secretary of the Interior's Standards for Rehabilitation. Conducted intensive-level field survey, archival research, evaluation, project review, and impacts analysis. Authored HRE. Prepared DPR 523 series resource forms. Work performed for City of Union City.

450 Sutter Street Impacts Analysis. Project Manager for the preparation of an analysis of indirect project impacts from a proposed project adjacent to a NRHP-listed property located in San Francisco. The client's property is listed individually in the National Register at the local level of significance under Criterion C: Architecture as an important example of the work of master architect Timothy L. Pflueger and as an excellent example of Art Deco architecture. Both properties are located within, and the client's property is a contributor to, the locally designated Kearny-Market-Mason-Sutter Conservation District. The District is significant as a homogeneous collection of early-twentieth-century masonry commercial buildings that exhibit a high level of historic architectural integrity. The proposed project consisted of demolishing a two-story commercial building and replacing it with a 12-story hotel. Prepared an indirect impacts analysis of the proposed project on the client's property using the Secretary of the Interior's Standards for Rehabilitation and the Conservation District's Standards and Guidelines for Review of New Construction and Certain Alterations. Conducted archival research, an intensive-level field survey, and authored the indirect impacts analysis. Work performed for Harsch Investment Properties.

1639-1641 Abbot Kinney Boulevard Historical Resource Assessment and Impacts Analysis. Project Manager for the preparation of an HRA for a mixed-use property located in the Venice area of the City of Los Angeles, with a two- and three-story 1935 vernacular-style commercial building at the front of the parcel and a 1918 Craftsman-style bungalow at the rear. Evaluated the property under federal, state, and local criteria and prepared a project impacts analysis using the Secretary of the Interior's Standards for Preservation. Conducted intensive-level field survey, archival research, evaluation, project review, and impacts analysis. Co-authored HRA. Prepared DPR 523 series resource forms. Work performed for private developers.

INSTITUTIONAL

War Memorial Gymnasium, University of San Francisco, Historical Resource Evaluation. Project Manager for the preparation of an HRE for the Mid-Century Modern-style War Memorial Gymnasium located at 2335 Golden Gate Avenue in San Francisco. Evaluated the gymnasium under federal, state, and local criteria. At the direction of the reviewing lead agency ten additional campus buildings were also surveyed. Conducted intensive-level field survey, archival research, and evaluation. Co-authored HRE. Prepared DPR 523 series resource forms. Work performed for the University of San Francisco.

Murer House and Gardens Historic Resource Evaluation and Impacts Analysis. Architectural historian for the preparation of a HRE in advance of the City of Folsom's determination as to the appropriate level of compliance required for the proposed project under CEQA. Located on the property were two detached early twentieth century one-story buildings, which had been previously evaluated twice. They were outside of but immediately adjacent to the boundaries of the National Register/California Register-listed Murer House and Gardens (NR no.

100007367). The City proposed to demolish the two buildings and to replace them with a single new one-story visitor's center. HELIX re-evaluated the buildings under federal and state historic significance criteria both individually and as contributors to the historical resource. The evaluation was followed by an analysis of the indirect impacts of the proposed project on the historical resource, which utilized the Secretary of the Interior's Standards for Rehabilitation. Conducted intensive-level field survey, archival research, evaluation, project review, and impacts analysis. Authored HRE. Prepared DPR 523 series resource forms. Work performed for City of Folsom.

RESIDENTIAL

64 Haddon Road Historical Resource Evaluation and Preservation Services. Project Manager for the preparation of an HRE of the Italian Renaissance-style former home of industrialist Henry J. Kaiser located in Oakland, Alameda County, which was designed by master architect William E. Schirmer and completed in 1924. Evaluated the property under federal, state, and local criteria. Conducted intensive-level field survey, archival research, and evaluation. Co-authored HRE. Prepared DPR 523 series resource forms. Prepared nomination for designation as a local landmark and provided support services through the designation process. Work performed for Kaiser Permanente.

31154 Union City Boulevard Historical Resource Evaluation. Project Manager for the preparation of an HRE of the 1929 Spanish Revival-style residence located in Union City, Alameda Coutny. It was relocated to its existing site in 1952 and later expanded. Evaluated the property under federal, state, and local historic significance criteria. Conducted intensive-level field survey, archival research, and prepared the evaluation. Authored HRE. Prepared DPR 523 series resource forms. Work performed for City of Union City.

TRANSPORTATION

Morgan Territory Road Bridges 5.0 and 5.2 Replacement County Project Cultural Resource Assessment. Architectural historian for the preparation of a cultural resources assessment in support of a proposed bridge replacement project in Contra Costa County. The Contra Costa County Public Works Department proposed to remove and replace two functionally obsolete 1954 single-span timber stringer bridges. Conducted archival research and prepared the evaluation. Co-authored report. Prepared DPR 523 series resource forms. Work performed for Contra Costa County Public Works Department.

Napa County Airport Cultural Resources Survey. Architectural Historian for preparation of a Cultural Resources Survey in preparation for the proposed terminal area redevelopment program at APC. The Cultural Resources Survey was prepared to achieve National Historic Preservation Act (NHPA) Section 106 and CEQA compliance as it relates to cultural resources. Eight buildings were documented, and seven buildings of age were evaluated. Conducted intensive-level field survey and archival research. Co- Authored the report. Prepared DPR 523 series resource forms. Work performed as a subconsultant to Coffman Associates, with Napa County Airport as the project owner.

Appendix B

Outreach Program

San Diego Community College District (SDCCD) leadership provided contact information for 10 faculty/staff members at Mesa College; following the recommendation from one faculty/staff member, an additional two faculty/staff members were contacted (Table A, *Historic Site Outreach Program Responses*). These faculty/staff members were selected due to the length of their tenure at the College. Outreach to the initial list included an initial email with the following questions, followed by two rounds of follow-up emails. To date, two responses have been received.

1. **Historic Places on Campus.** Are there any places on campus you believe have historic importance? If so, why? (These could be buildings, landscapes, objects, or even specific locations where events took place)
2. **Historic Academic/Research Spaces.** What do you consider to be the most historically important academic or research spaces on campus and why? (These may include former buildings or structures that have been demolished and/or replaced)
3. **Historic Themes.** Are there any historic themes or topics on which you think we should focus? (e.g., student life, academic development, campus athletics, social movements, etc.)
4. **Underrepresented Groups and Communities.** Can you help us identify which buildings, standing or demolished, that are most strongly associated with underrepresented groups or communities?

Table A
HISTORIC SITE OUTREACH PROGRAM RESPONSES

Name	Title	Date	Outreach/Response
Leanne Kunkee	*Digital Color Assistant*	August 20, 2025 August 29, 2025 September 10, 2025	Initial outreach email sent Follow-up outreach email sent Final outreach email sent
Bruce Naschak	*Assistant Chair*, English Department	August 20, 2025 August 29, 2025 September 10, 2025	Initial outreach email sent Follow-up outreach email sent Final outreach email sent
Christine DuPraw	*Chair*, Consumer and Family Studies Department	August 20, 2025 August 29, 2025 September 10, 2025	Initial outreach email sent Follow-up outreach email sent Final outreach email sent
Judy Sundayo	*Counselor*	August 20, 2025 August 29, 2025 September 10, 2025	Initial outreach email sent Follow-up outreach email sent Final outreach email sent
Lisa Naungayan	*EOPS Student Services Technician*	August 20, 2025 August 29, 2025 September 10, 2025	Initial outreach email sent Follow-up outreach email sent Final outreach email sent
Geoff Johnson	*Faculty*, Humanities	August 20, 2025 August 29, 2025 September 10, 2025	Initial outreach email sent Follow-up outreach email sent Final outreach email sent

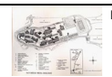
Name	Title	Date	Outreach/Response
Manuel Velez	Faculty, Chicano Studies	August 20, 2025 August 29, 2025 September 10, 2025	Initial outreach email sent Follow-up outreach email sent Final outreach email sent
Alessandra Moctezuma	Faculty, Fine Arts	August 20, 2025 August 29, 2025 September 2, 2025	Initial outreach email sent Follow-up outreach email sent **Responded with detailed information regarding potential historic locations or locations of importance**
Frank Ferndandez	Stockroom Support Supervisor	August 20, 2025 August 29, 2025 September 10, 2025	Initial outreach email sent Follow-up outreach email sent Final outreach email sent
Jonathan McCleod	Professor Emeritus of History	August 20, 2025 August 29, 2025 September 4, 2025	Initial outreach email sent Follow-up outreach email sent **Responded with detailed information regarding College's history**
Denise Rogers	*Assistant Chair*, Art/Drama Department	September 10 2025	Initial outreach email sent
Cesar Lopez	Chair, Chicano Studies Department	September 10 2025	Initial outreach email sent

Appendix C

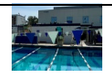
Built Environment Inventory and Evaluations

San Diego Mesa College

32 buildings, 1 structure

Bldg No.	Image	Bldg. ID No.	Current Building Name	Historic Building Name	Year Built	Architect	Style	Status Code	Criterion	Contexts	Evaluation
67		Z 100, Z200, Z300, Z400, Z500, Z600; Eligible: Mesa College Design Center Historic District	Design Center (former Muir School)	Linda Vista Elementary School #1 (Edward F. Beale Elem. Opened 9/13/54)	1954	Earl F. Giberson	International	**3CD**	**Criterion 3**	Campus Development - Mesa College Design Center Buildings (1954), **Architecture**	•Buildings Z100-Z600 exhibit key character-defining features of International style as designed by Giberson, who previously designed the Linda Vista Shopping Center. Original elementary school play grounds, soccer field, and outdoor lunch area were removed and replaced with drought tolerant landscaping, new walkways, and large parking lot along with interior building modifications to create the Design Center circa 2010. •The six buildings represent a significant concentration and linkage of buildings united aesthetically by architectural design and are an eligible historic district with a 1954 period of significance.
N/A		Potential Historic District	San Diego Mesa College Campus	Kearny Mesa Junior College Campus	1964-1965	Frank L. Hope & Assoc.	International/ Contemporary	6Z	N/A	Campus Development - Kearny Mesa Junior College/Mesa College Establishment (1964-1965)	•The 14 original campus buildings from 1964 and 1965 were built on the mesa circumscribed by Mesa College Circle to the southwest, south and east, and the northerly internal campus drive south of the original parking lot ("1964/1965 campus boundary"). Since then, 11 major buildings have been added (including nine modern buildings built after 1985) and only eight of the original 14 buildings are extant within the 1964/1965 campus boundary. Most of the original designed hardscape and landscape areas within the 1964/1965 campus boundary are not extant. For potential historic district consideration, there would only be eight contributing buildings and 11 non-contributors, or less than 50% contributors. The low percentage of contributors means there is insufficient integrity to establish an eligible historic district under any criteria for the period 1964-1965.
N/A		N/A	College Sign (by A100)	College Sign (by A100)	1964	Frank L. Hope & Assoc.	N/A	6Z	N/A	Campus Development - Kearny Mesa College/Mesa College Establishment (1964-1965)	•Ancillary structure. Not noteworthy in design and not individually significant. Potential historic district is not eligible, major loss of contributors and lacks integrity.
1		A100	Administration	Kearny Mesa Junior College - Admin	1964	Frank L. Hope & Assoc.	International (with New Formalism elements)	6Z	N/A	Campus Development - Kearny Mesa College/Mesa College Establishment (1964-1965), Architecture, Architects	•Not indivdiually significant due to loss of integrity. Window shade screen modifications create horizontal emphasis that obscures International style features and negates original verticality of New Formalism elements. •Not representative of master architect Hope & Associates' body of work. •One of 14 original buildings and entry canopy related to initial campus development. Potential historic district is not eligible, major loss of contributors and lacks integrity.
5		O100	Phys Ed Storage	Kearny Mesa Junior College - Phys Ed Field House	1964	Frank L. Hope & Assoc.	N/A (vernacular)	6Z	N/A	Campus Development - Kearny Mesa College/Mesa College Establishment (1964-1965)	•Ancillary building. Not individually significant. Potential historic district is not eligible, major loss of contributors and lacks integrity.
7		D100	Fine Arts Classrooms	Kearny Mesa Junior College - Fine Arts	1964	Frank L. Hope & Assoc.	International	6Z	N/A	Campus Development - Kearny Mesa College/Mesa College Establishment (1964-1965), Architecture, Architects	•Main façade is not a noteworthy example of International style and not representative of master architect Hope & Associates' body of work. •One of 14 original buildings related to campus development. Potential historic district is not eligible, major loss of contributors and lacks integrity.
8		M100	Main Gymnasium	Kearny Mesa Junior College - Gymnasium	1964	Frank L. Hope & Assoc.	Contemporary	6Z	N/A	Campus Development - Kearny Mesa College/Mesa College Establishment (1964-1965), Architecture, Architects	•Not a noteworthy example of Contemporary style and not representative of master architect Hope & Associates' body of work. •One of 14 original buildings related to campus development. Potential historic district is not eligible, major loss of contributors and lacks integrity.

San Diego Mesa College											
9		B100	Home Econ/Nurse Program Classrooms	Kearny Mesa Junior College - Home Econ/Vocational Nursing	1964	Frank L. Hope & Assoc.	International	6Z	N/A	Campus Development - Kearny Mesa College/Mesa College Establishment (1964-1965), Architecture, Architects	•Not a noteworthy example of International style and not representative of master architect Hope & Associates' body of work. •One of 14 original buildings related to campus development. Potential historic district is not eligible, major loss of contributors and lacks integrity.
14		C100	Music/Drama Classrooms & Apolliad Theatre	Kearny Mesa Junior College - Music/Drama	1964	Frank L. Hope & Assoc.	International	6Z	N/A	Campus Development - Kearny Mesa College/Mesa College Establishment (1964-1965), Architecture, Architects	•Not a noteworthy example of International style and not representative of master architect Hope & Associates' body of work. •One of 14 original buildings related to campus development. Potential historic district is not eligible, major loss of contributors and lacks integrity.
15		L100	Exercise Science	Kearny Mesa Junior College - Phys Ed	1964	Frank L. Hope & Assoc.	International	6Z	N/A	Campus Development - Kearny Mesa College/Mesa College Establishment (1964-1965), Architecture, Architects	•Not a noteworthy example of International style and not representative of master architect Hope & Associates' body of work. •One of 14 original buildings related to campus development. Potential historic district is not eligible, major loss of contributors and lacks integrity.
18		K100	The Stand/Honors/Technical Arts Classrooms	Kearny Mesa Junior College - Technical Arts	1964	Frank L. Hope & Assoc.	International	6Z	N/A	Campus Development - Kearny Mesa College/Mesa College Establishment (1964-1965), Architecture, Architects	•Not a noteworthy example of International style and not representative of master architect Hope & Associates' body of work. •One of 14 original buildings related to campus development. Potential historic district is not eligible, major loss of contributors and lacks integrity.
19		K200	Building Trades/MET High School	Kearny Mesa Junior College - Trades & Apprenticeship	1965	Frank L. Hope & Assoc.	Contemporary	6Z	N/A	Campus Development - Kearny Mesa College/Mesa College Establishment (1964-1965), Architecture, Architects	•Not a noteworthy example of Contemporary style and not representative of master architect Hope & Associates' body of work. •One of 14 original buildings related to campus development. Potential historic district is not eligible, major loss of contributors and lacks integrity.
21		P100	Landscape Tech Classrooms	Ornamental Horticulture Facility	1967	Frank L. Hope & Assoc.	Ranch w/ Polynesian bungalow form	6Z	N/A	Campus Development, Architecture, Architects	•Not individually significant. Not a noteworthy example of Ranch style with a Polynesian bungalow form and not representative of Hope & Associates' body of work. •Major building added during later campus development.
28		C300	Drama Storage	N/A	1971	N/A	N/A (vernacular)	6Z	N/A	Campus Development	•Ancillary building. Does not meet eligibility standards for a context significant to the history of the college.
N/A	N/A	Site at current SB	Non-Extant Buildings T1-T2	Intercultural Studies (Temporary Buildings T1-T2)	1972 - 1985	N/A	N/A	6Z	N/A	Social and Cultural Development	•Site of first dedicated but temporary classroom space for Chicano Studies and Black Studies established at Mesa College in 1970 and 1971, respectively. Classroom space moved to new Building G, Humanities & Multicultural Studies, circa 2002. No extant historic buildings associated with this context. Other undetermined areas on campus associated with rallies and protests during 1960s and 1970s, Festival of Colors Week beginning in 1982 and featuring ethnic and multi-cultural activities, and the Annual Indian Pow Wow through 1994.
32		O300	Gardening Storage	Independent Storage Building	1973	Frank L. Hope & Assoc.	N/A (vernacular)	6Z	N/A	Campus Development	•Ancillary building. Does not meet eligibility standards for a context significant to the history of the college.
46		O200	PE & Plant Storage	Independent Storage Building	1973	Frank L. Hope & Assoc.	N/A (vernacular)	6Z	N/A	Campus Development	•Ancillary building. Does not meet eligibility standards for a context significant to the history of the college.

San Diego Mesa College											
31		L400	Press Box	Press Box	1973	Frank L. Hope & Assoc.	N/A (vernacular)	6Z	N/A	Campus Development	•Ancillary building. Does not meet eligibility standards for a context significant to the history of the college.
34		L200	Facilities Maintenance	Handball Courts	1975	Frank L. Hope & Assoc.	N/A (vernacular)	6Z	N/A	Campus Development	•Ancillary building. Does not meet eligibility standards for a context significant to the history of the college.
30		M200	Swimming Pool Srvc	Expansion Phase I	1975	Frank L. Hope & Assoc.	N/A (vernacular)	6Z	N/A	Campus Development	•Ancillary building. Does not meet eligibility standards for a context significant to the history of the college.
??		C200	Music Classrooms	Music Building	1976	Frank L. Hope & Assoc.	N/A (vernacular)	6Z	N/A	Campus Development, Architecture, Architects	•Not individually significant. Not a noteworthy example of an architectural style and not representative of Hope & Associates' body of work. •Major building added during later campus development.
27		R100	Child Development Center	Child Development Center	1976	Lareau & Assoc	Post Modern	6Z	N/A	Campus Development, Architecture, Architects	•Not individually significant. Not a noteworthy example of Post Modern style and not representative of Lareau & Associates' body of work. •Major building added during later campus development.
33		P200	Nursery & Landscape Technology (NLT) Storage (2 buildings)	Landscape Buildings (2 buildings)	1976	Lareau & Assoc	Post-and-Beam	**3CS**	**Criterion 3**	Campus Development, **Architecture,** **Architects**	•Noteworthy examples of Post-and-Beam style designed for functional purposes, and representative of master architect Lareau & Associates' body of work, which includes 5645 Taft Avenue, San Diego (HRB #1246), and 4515 Ladera Street, San Diego (HRB #1344). •The period of significance is 1976, the year of construction. •Buildings added during later campus development.
37		M300	P E Restrooms (pool)	Public Toilet Facility (pool)	1976	Delawie, Macy & Henderson	N/A (vernacular)	6Z	N/A	Campus Development, Architects	•Not representative of master architect Delawie's body of work. •Ancillary building. Does not meet eligibility standards for a context significant to the history of the college.
38		I300	Fine Arts Building/Mesa Art Gallery	Life Science/Student Personal Admin Bldg	1977	Frank L. Hope & Assoc.	Brutalist	**3CS**	**Criterion 3**	Campus Development, **Architecture,** **Architects**	•Noteworthy example of Brutalist style, and is representative of Hope & Associates' body of work which includes Jack Murphy/Qualcomm Stadium (non-extant). Glazing recently replaced but building retains integrity. •The period of significance is 1977, the year of construction. •Major building added during later campus development.
41		D200	Fine Arts Annex Classrooms	Art Addition	1980	Frank L. Hope & Assoc.	N/A (vernacular)	6Z		Campus Development, Architecture, Architects	•Not individually significant. Not a noteworthy example of an architectural style and not representative of Hope & Associates' body of work. •Major building added during later campus development.
43		D300	Art Kiln Annex Classrooms	Kilnyard Roof	1981	William A. Richardson	Post-and-Beam	6Z		Campus Development, Architecture	•Not a noteworthy example of Post-and-Beam architecture due to minimal expression of posts. •Ancillary building supporting the art program designed for a functional purpose.
45		P400	Horse Barn	Animal Health Tech Barn	1982	William A. Richardson	N/A (vernacular)	6Z		Campus Development	•Ancillary building. Does not meet eligibility standards for a context significant to the history of the college.
48		P300 storage building	Storage (south of P300)	Animal Health Tech Kennel (south of P300)	1985	William A. Richardson	N/A (vernacular)	6Z		Campus Development	•Ancillary building. Does not meet eligibility standards for a context significant to the history of the college.

Appendix F

Geology and Soils Technical Study

Geology and Soils Technical Study

Mesa College Master Plan

7250 Mesa College Drive
San Diego, California

HELIX Environmental Planning

7875 El Cajon Boulevard | La Mesa, California 91942

April 13, 2026 | Project No. 110011001



Geotechnical | Environmental | Construction Inspection & Testing | Forensic Engineering & Expert Witness

Geophysics | Engineering Geology | Laboratory Testing | Industrial Hygiene | Occupational Safety | Air Quality | GIS

Ninyo & Moore

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Geology and Soils Technical Study
Mesa College Master Plan
7250 Mesa College Drive
San Diego, California

Ms. Vanessa Brice Toscano
HELIX Environmental Planning
7578 El Cajon Boulevard | San Diego, California 91942

April 13, 2026 | Project No. 110011001





Nissa M. Morton, PG, CEG
Senior Project Geologist

Jeffrey T. Kent, PE, GE
Principal Engineer

NMM/JTK/mp

CONTENTS

EXECUTIVE SUMMARY 1
1. INTRODUCTION 3
2. SCOPE OF SERVICES 3
3. SITE DESCRIPTION AND PROJECT DESCRIPTION 3
4. GEOLOGIC AND SUBSURFACE CONDITIONS 4
4.1. Regional Geologic Setting 4
4.2. Site Geology 4
4.2.1. Fill 5
4.2.2. Alluvium 5
4.2.3. Very Old Paralic Deposits 5
4.2.4. Stadium Conglomerate 5
4.2.5. Friars Formation 6
4.3. Groundwater 6
5. GEOLOGIC HAZARDS 6
5.1. Faulting and Seismicity 7
5.2. Ground Rupture 7
5.3. Ground Motion 7
5.4. City of San Diego Seismic Safety Study 8
5.5. Liquefaction and Seismically Induced Settlement 8
5.6. Landsliding and Slope Failure 9
5.7. Tsunamis 9
5.8. Flood Hazards 9
5.9. Expansive Soils 9
5.10. Corrosive Soils 9
5.11. Soils 10
5.12. Mineral Resources 10
6. CONCLUSIONS 10
7. PRELIMINARY RECOMMENDATIONS 11
8. IMPACT ANALYSIS 12
8.1. Significance Thresholds 13

8.2. Project Impacts and Significance 13
9. LIMITATIONS 16
10. REFERENCES 17

FIGURES

1 – Site Location
2 – Site Aerial
3 – Fault Locations
4 – Geology
5 – Geologic Hazards
6 – USDA (SSURGO) Soil Survey

EXECUTIVE SUMMARY

Ninyo & Moore has performed a Geology and Soils Technical Study for the Mesa College Master Plan project for the campus located at 7250 Mesa College Drive in the City of San Diego, California (site). The site consists of eight irregular shaped parcels that comprise approximately 106.5 acres. The site was originally developed as Mesa College in the 1960's with improvements constructed on three relatively level terraces. The upper terrace supports various classroom and administrative buildings, a multi-purpose athletic field, tennis courts, a swimming pool, a parking structure, asphalt concrete (AC) roads and parking lots, and solar shade structures. The intermediate terrace supports an athletic stadium and baseball field. The lower terrace is developed as an AC parking lot with solar shade structures and also supports a few smaller buildings and the Student Services Center. In addition, landscape and veterinary classroom buildings and sheds are present in the northwest corner of the campus, in a low-lying area adjacent to Marlesta Drive and Genesee Avenue. A drainage channel that parallels Genesee Avenue on the western margin of the campus flows southeast toward Tecolote Canyon. While details are not available at this time, we understand that as part of the Mesa College Master Plan, new buildings and other structural improvements may be proposed.

In general, the following geologic and geotechnical constraints for the project include:

- Surface and near-surface earth materials at the project site are mapped as alluvium, very old paralic deposits, and materials of the Friars Formation and Stadium Conglomerate (Kennedy and Tan, 2008). Fill materials associated with the construction of the existing buildings, athletic fields, pavements, and utilities are also anticipated. Geotechnical constraints related to soils include the following:
  - *Soft Ground* – Soft ground or loose soils may be located in areas underlain by existing fill and alluvium.
  - *Expansive Soils* – The soils at the project site are expected to have a very low to high potential for expansion.
  - *Corrosive Soils* – Based on previous work in the project area, the site soils may be classified as corrosive.
  - *Fill Soils* – Man-made fill soils placed without engineering supervision may be loosely or inadequately compacted, may contain oversize materials unsuitable for reuse in engineered fills, and may contain unsuitable organic or expansive materials and debris that may preclude their use in engineered fills.
- The closest known major active fault is the Rose Canyon Fault, located approximately 2.4 miles west of the project site. Geotechnical constraints related to faulting and seismic events at the site are:
  - *Ground Shaking* – The site has a moderate potential for strong ground motions due to earthquakes on nearby active faults

    - *Liquefaction* – The western portion of the site has a potential for liquefaction due to the presence of alluvial soils and shallow groundwater.

- Surface water was observed within the drainage channel along the western margin of the site. As measured in monitoring wells and borings drilled in and around the site, groundwater is anticipated at depths ranging from approximately 15 to 34 feet.
- The potential for landsliding at the project site is considered low to moderate.
- The site is not mapped within a tsunami inundation hazard zone.
- The site is located in Zone X Area of Minimal Flood Hazard.

The conditions related to soils and geology, identified in this technical study report, would increase the cost and duration of grading and construction, but would not preclude the feasibility of future campus development projects.

1. INTRODUCTION

Ninyo & Moore has completed a Geology and Soils Technical Study for the Mesa College Master Plan project located at 7250 Mesa College Drive in San Diego, California (Figure 1). Our evaluation is based our review of published and non-published reports, aerial photographs, in-house data, a site reconnaissance, and the assessment of the potential geologic hazards in the project area. The purpose of this study was to evaluate the potential for existing environmental impacts related to geological or soils conditions that can affect the project site and adjoining areas, and to discuss measures that can be implemented to reduce or mitigate the potential impacts with respect to the design and construction of campus projects.

2. SCOPE OF SERVICES

Ninyo & Moore's scope of services for this geologic study have included the activities listed below:

- Review of readily available regional, local, and site-specific geologic, geotechnical, fault hazard, and environmental reports.
- Review of readily available background information including topographic, soils, mineral resources, geologic, and seismic and geologic hazard maps, and stereoscopic aerial photographs.
- Performance of a site reconnaissance by a professional from our office.
- Compilation and analysis of the data obtained from our background review and site reconnaissance.
- Preparation of this report presenting our findings, conclusions, and preliminary recommendations regarding potential geologic and soil impacts at the site.

3. SITE DESCRIPTION AND PROJECT DESCRIPTION

The site consists of eight irregular shaped parcels that comprise approximately 106.5 acres that are generally located north of Mesa College Drive, west of Genesee Avenue, south of Beagle Street, and east of Armstrong Street in the City of San Diego, California (Figures 1 and 2). The site was originally developed as Mesa College in the 1960's with improvements constructed on three relatively level terraces with elevations of approximately 300, 325, and 350 feet above mean sea level (MSL). The upper terrace supports various classroom and administrative buildings, a mutli-purpose athletic field, tennis courts, a swimming pool, a parking structure, AC roads and parking lots, and solar shade structures. The intermediate terrace supports an athletic stadium and baseball field. The lower terrace is developed as an AC parking lot with solar shade structures and also supports a few smaller buildings and the Student Services Center. In addition, landscape and veterinary classroom buildings and sheds are present in the northwest corner of the campus,

in a low-lying area adjacent to Marlesta Drive and Genesee Avenue. A drainage channel that parallels Genesee Avenue on the western margin of the campus flows southeast toward Tecolote Canyon. Vegetation consists of grass lawn areas, various shrubs, and small to large trees in developed areas, and grass, weeds, brush, and trees in undeveloped areas.

While details are not available at this time, we understand that as part of the Mesa College Master Plan, new buildings and other structural improvements may be proposed.

4. GEOLOGIC AND SUBSURFACE CONDITIONS

Our findings regarding regional and site geology (Figure 3) and groundwater are provided in the following sections.

4.1. Regional Geologic Setting

The project area is situated in the San Diego County coastal section of the Peninsular Ranges Geomorphic Province. This geomorphic province encompasses an area that extends approximately 900 miles from the Transverse Ranges and the Los Angeles Basin south to the southern tip of Baja California (Norris and Webb, 1990; Harden 2004). The province varies in width from approximately 30 to 100 miles. In general, the province consists of rugged mountains underlain by Jurassic metavolcanic and metasedimentary rocks, and Cretaceous igneous rocks of the southern California batholith. In the coastal plain portion of the province where the project is located, Quaternary-age sedimentary deposits overlie Tertiary- and Cretaceous-age sedimentary units.

The Peninsular Ranges Province is traversed by a group of sub-parallel faults and fault zones trending roughly northwest (Jennings, 2010). Several of these faults are considered active faults and shown in Figure 3. The Elsinore, San Jacinto, and San Andreas faults are active fault systems located northeast of the project area. The Rose Canyon, Coronado Bank, San Diego Trough, and San Clemente faults are active faults located west of the project area. The Rose Canyon Fault Zone, the nearest active fault system, has been mapped approximately 2.4 miles west of the project site. Major tectonic activity associated with these faults within this regional tectonic framework consists primarily of right-lateral, strike-slip movement. Further discussion of faulting relative to the site is provided in the Faulting and Seismicity section of this report.

4.2. Site Geology

Based on our review of published geologic maps (Figure 4) and onsite and nearby geotechnical reports (Ninyo & Moore, 2004, 2008, 2009, and 2010), and our site reconnaissance, soils

underlying the site are generally anticipated to consist of fill materials, alluvium, very old paralic deposits, and materials of the Friars Formation and Stadium Conglomerate. A brief description of these units, as described in the cited literature or as observed on the site, is presented below.

4.2.1. Fill

Fill soils are anticipated to underlie portions of the site area due to previous land use, building construction, and burial of underground utility lines. The fill was placed in several pre-existing valleys along the perimeter of the site to create level pads as well as the football and baseball fields. Fill depths of up to approximately 17 feet have been previously encountered at the site in the northern parking lot and up to approximately 26 feet in the northeastern parking lot (Ninyo & Moore, 2010). As observed at the site and encountered in borings previously drilled onsite, the fill soils are generally anticipated to include loose to very dense, silty sand and clayey sand with gravel and cobbles (Ninyo & Moore, 2004, 2008, 2009, and 2010). Scattered construction debris has also been encountered in the fill material.

4.2.2. Alluvium

Quaternary-age alluvium is mapped in the low-lying areas on the western side of the site (Figure 4). The alluvium is anticipated to consist of poorly consolidated sand, silt, and clay with gravel and cobbles.

4.2.3. Very Old Paralic Deposits

Middle to early Pleistocene-age very old paralic deposits, also referred to as the Lindavista Formation, are mapped across much of the site. As described by Kennedy and Tan (2008), very old paralic deposits generally consist of poorly sorted, moderately permeable, reddish-brown, interfingered strandline, beach, estuarine, and colluvial deposits composed of siltstone, sandstone, and conglomerate. As encountered in previous subsurface explorations at the site very old paralic deposits are described as weakly to moderately cemented, silty sandstone, clayey sandstone, and sandy gravel and cobble conglomerate (Ninyo & Moore, 2004, 2008, 2009). The very old paralic deposits unconformably overlie the Stadium Conglomerate and Friars Formation in the site vicinity.

4.2.4. Stadium Conglomerate

Middle Eocene-age materials of the Stadium Conglomerate are mapped to underlie the very old paralic deposits in the southernmost portion of the site. As described by Kennedy and Tan (2008), the Stadium Conglomerate consists of a massive cobble conglomerate

with a dark-yellowish-brown, coarse-grained sandstone matrix. The Stadium Conglomerate conformably overlies the Friars Formation.

4.2.5. Friars Formation

The Eocene-age Friars Formation are mapped as underlying the very old paralic deposits and Stadium Conglomerate at the site. As described by Kennedy and Tan (2008), the Friars Formation consists of a medium-grained, massive, poorly indurated non-marine and lagoonal sandstone and claystone with tongues of cobble conglomerate. As encountered in previous site explorations, the Friars Formation is described as weakly to strongly cemented, silty sandstone and sandy siltstone (Ninyo & Moore, 2010).

4.3. Groundwater

Surface water was observed within the drainage channel along the western margin of the site. Seasonal shallow groundwater is anticipated in and around this channel. Sources provided by the California Water Data Library Resources (DWR) and the California State Water Resources Control Board (SWRCB) were also reviewed for information pertaining to groundwater quality and occurrence in the vicinity of the project. Based on review of nearby monitoring well data southeast of the site, groundwater has been observed at depths ranging from approximately 29 to 34 feet (Geotracker, 2025). Perched conditions have also been encountered in borings drilled on the Mesa campus at depths as shallow as approximately 15 feet (Ninyo & Moore, 2010). Perched conditions and zones of seepage should be anticipated, particularly at the contact between fill material and very old paralic deposits and/or Friars Formation and Stadium Conglomerate. Groundwater levels can fluctuate due to seasonal variations, groundwater withdrawal or injection, and other factors. Groundwater is expected to flow generally west and south towards Tecolote Canyon.

According to the SWRCB Water Quality Control Plan for the San Diego Basin, the site is located within the Tecolote Hydrologic Area within the Penasquitos Hydrologic Unit. This hydrologic area is indicated by the Regional Board as being excepted from municipal and domestic supply beneficial use (SWRCB, revised 2021).

5. GEOLOGIC HAZARDS

In general, potential geologic hazards at the site include faulting and seismicity as they relate to seismic design of structures. These considerations and other geologic hazards such as liquefaction, landsliding, slope failure, and tsunamis, are discussed in the following sections.

5.1. Faulting and Seismicity

The site is located in a seismically active area, as is the majority of southern California, and the potential for strong ground motion at the site is considered significant. The Rose Canyon fault zone, the nearest active fault zone, consists of predominantly right-lateral strike-slip faults that extend south-southeast through the San Diego metropolitan area. The subject site is not located within a State of California Earthquake Fault Zone (formerly known as an Alquist-Priolo Special Studies Zone; Hart and Bryant, 2007). The active Rose Canyon Fault is located approximately 2.4 miles west of the site.

5.2. Ground Rupture

Based on our review of the referenced literature and maps surface rupture due to active faulting is not considered a design consideration due to the absence of any known active faults underlying the site. However, lurching or cracking of ground surface as a result of nearby seismic events is possible.

5.3. Ground Motion

Considering the proximity of the site to the Rose Canyon fault which is capable of producing a maximum moment magnitude of 6.9, the project area has a high potential for experiencing strong ground motion. The 2025 California Building Code (CBC) specifies that the risk-targeted maximum considered earthquake (MCE_R) ground motion response accelerations be used to evaluate seismic loads for design of buildings and other structures. Based on our review of CGS's shear wave velocity map, the average shear wave velocity in the upper 30 meters (100 feet) of the subsurface profile (V_{s30}) is estimated to be 447 meters per second (1,467 feet per second) (CGS, 2015). In accordance with Chapter 20 of the American Society of Civil Engineers (ASCE) Publication 7-22 (2022) for the Minimum Design Loads and Associated Criteria for Building and Other Structures, the site classification is Site Class C.

The 2025 CBC specifies that the potential for liquefaction and soil strength loss be evaluated, where applicable, for the Maximum Considered Earthquake Geometric Mean (MCE_G) peak ground acceleration with adjustment for site class effects in accordance with the ASCE 7-22. The MCE_G peak ground acceleration is based on the geometric mean peak ground acceleration with a 2 percent probability of exceedance in 50 years. The MCE_G peak ground acceleration with adjustment for site class effects (PGA_M) was evaluated as 0.63g using the 2025 ASCE seismic design tool (web-based). Proposed structures should be designed to mitigate strong ground motion.

5.4. City of San Diego Seismic Safety Study

Per the City of San Diego Safety Study, Geologic Hazards and Faults (2008), and as shown in Figure 5, much of the site is mapped within hazard category 51, which is defined as “level mesas – underlain by terrace deposits and bedrock, nominal risk.” However, other areas of the site, generally below the upper terrace of the campus, are located within Categories 52, 32, 24, 23, and 12. Category 52 is defined as other level areas, gently sloping to steep terrain with favorable geologic structure and low risk. The low-lying, westernmost portions of the side adjacent to Genesee Avenue are located within hazard category 32, which designates a low potential for liquefaction due to presence of “fluctuating groundwater, minor drainages”. Other portions of the site are located in Hazard Categories of slide-prone formations underlain by the Friars Formation with neutral or favorable geologic structure (Category 23) and unfavorable geologic structure (Category 24). As mapped, Friars Formation with unfavorable geologic structure is located in the northwest portion of the site.

5.5. Liquefaction and Seismically Induced Settlement

Liquefaction is the phenomenon in which loosely deposited, saturated granular soils (located below the water table) with clay contents (particles less than 0.005 mm) of less than 15 percent, liquid limit of less than 35 percent, and natural moisture content greater than 90 percent of the liquid limit undergo rapid loss of shear strength due to development of excess pore pressure during strong earthquake-induced ground shaking. Ground shaking of sufficient duration results in the loss of grain-to-grain contact due to rapid rise in pore water pressure, and it eventually causes the soil to behave as a fluid for a short period of time. Liquefaction is known generally to occur in saturated or near-saturated cohesionless soils at depths shallower than 50 feet below grade. Factors known to influence liquefaction potential include composition and thickness of soil layers, grain size, relative density, groundwater level, degree of saturation, and both intensity and duration of ground shaking. Based on the relatively dense nature of underlying very old paralic deposits, Stadium Conglomerate, and Friars Formation at the site, it is our opinion that the risk for liquefaction and seismically induced settlement is generally low across the site. However, as mentioned previously, the low-lying, westernmost portions of the site are designated by the City of San Diego Safety Study (2008) as having a low potential for liquefaction. In this area, the alluvial soils above and below the shallow groundwater table may experience liquefaction and seismically induced settlement. It is the responsibility of the geotechnical engineer of record to verify the potential for liquefaction and dynamic settlement and to provide appropriate design recommendations after performing a complete geotechnical evaluation for proposed improvements in this area.

5.6. Landsliding and Slope Failure

Landslides have not been mapped on or adjacent to the site and evidence of landsliding was not observed in our review of aerial photographs or during our site reconnaissance. Much of the site is located within an area mapped as being least susceptible to landslides, however, site slopes and lower-lying areas in the northern and western portion of the site are mapped as being most susceptible to landslides (Tan, 1995). In addition, an area of Friars Formation with unfavorable geologic structure is mapped in the northwest portion of the site (Figure 5). Slope stability at the site should be further evaluated by a comprehensive geotechnical evaluation in the vicinity of proposed structural improvements.

5.7. Tsunamis

Tsunamis are long wavelength seismic sea waves (long compared to the ocean depth) generated by sudden movements of the ocean bottom during submarine earthquakes, landslides, or volcanic activity. According to our review of the most recent available tsunami map (Graehl, and Wilson, 2022), the site is not located within a mapped tsunami hazard area.

5.8. Flood Hazards

Based on review of Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (2012), the site is generally located in Zone X Area of Minimal Flood Hazard. Based on review of the flood maps, the potential for significant flooding to impact the site is not a design consideration for the project.

5.9. Expansive Soils

Expansive soils generally result from specific clay minerals that have the capacity to shrink or swell in response to changes in moisture content. Shrinking or swelling of foundation soils can lead to damage to slabs, foundations, and other engineered structures, including tilting and cracking. In general, the soils and earth materials at the project site may be expected to have a very low to high potential for expansion. Expansive soils should be further evaluated during a geotechnical evaluation of the site and can be mitigated through selective grading techniques or special foundation design.

5.10. Corrosive Soils

Caltrans corrosion (2021) criteria define corrosive soils as soil with an electrical resistivity less than 1,500 ohm-cm, a chloride content more than 500 parts per million (ppm), more than 0.15 percent sulfates (1,500 ppm), and/or a pH less than 5.5. Based on laboratory testing

performed on soil samples from the site (Ninyo & Moore 2004, 2008, 2009 and 2010) and Caltrans corrosion (2021) criteria, soils in the general vicinity of the project site have been classified as corrosive. The potential for similar soils to occur at the project is considered high and should be evaluated during a geotechnical evaluation of the site. If corrosive soils exist on the site, a corrosion engineer should be retained to assist in the design of improvements in contact with the soil.

5.11. Soils

Based on the interactive map using the Web Soil Survey website (USDA, 2025), seven soil units are mapped on the project site including Carlsbad-Urban Land Complex (2 to 9 percent slopes), Chesterton Fine Sandy Loam (2 to 5 percent slopes), Chesterton – Urban Land Complex (2 to 9 percent slopes), Olivenhain Cobbly Loam (30 to 50 percent slopes), Olivenhain – Urban Land Complex (9 to 30 percent slopes), Terrace Escarpments, and Gaviota Fine Sandy Loam (30 to 50 percent slopes). These soil units, shown in Figure 6, are considered to generally have very high runoff and negligible erosion potential. The potential loss of native soils due to the project is considered low.

5.12. Mineral Resources

According to the City of San Diego General Plan (2008) the project site is located Mineral Resource Zone (MRZ) 3. MRZ-3 is described as areas containing mineral occurrences of undetermined resource significance (CGS, 2017).

6. CONCLUSIONS

Based on our review of the referenced background data and our geologic field reconnaissance it is our opinion that the following geological characteristics of the project site will require specific considerations when designing campus projects. These considerations include the following:

- Surface and near-surface earth materials at the project site are mapped as alluvium, very old paralic deposits, and materials of the Friars Formation and Stadium Conglomerate (Kennedy and Tan, 2008). Fill materials associated with the construction of the existing buildings, athletic fields, pavements, and utilities are also anticipated. Geotechnical constraints related to soils include the following:
  - *Soft Ground* – Soft ground or loose soils may be located in areas underlain by existing fill and alluvium.
  - *Expansive Soils* – The soils at the project site are expected to have a very low to high potential for expansion.
  - *Corrosive Soils* – Based previous work in the project area, the site soils may be classified as corrosive.

- *Fill Soils* – Man-made fill soils placed without engineering supervision may be loosely or inadequately compacted, may contain oversize materials unsuitable for reuse in engineered fills, and may contain unsuitable organic or expansive materials and debris that may preclude their use in engineered fills.

- The closest known major active fault is the Rose Canyon Fault, located approximately 2.4 miles west of the project site. Geotechnical constraints related to faulting and seismic events at the site are:
  - *Ground Shaking* – The site has a moderate potential for strong ground motions due to earthquakes on nearby active faults
  - *Liquefaction* – The western portion of the site has a potential for liquefaction due to the presence of alluvial soils and shallow groundwater.
- Surface water was observed within the drainage channel along the western margin of the site. As measured in monitoring wells and borings drilled in and around the site, groundwater is anticipated at depths ranging from approximately 15 to 34 feet.
- The potential for landsliding at the project site is considered low to moderate.
- The site is not mapped within a tsunami inundation hazard zone.
- The site is located in Zone X Area of Minimal Flood Hazard.

The conditions related to soils and geology, identified in this technical study report, would increase the cost and duration of grading and construction, but would not preclude the feasibility of campus development projects.

7. PRELIMINARY RECOMMENDATIONS

Based on the geologic and geotechnical considerations at the project site presented in the previous sections, we recommend further geotechnical evaluation of the project site, including the performance of a subsurface evaluation and laboratory testing program where campus projects may include new structural improvements. Specific recommendations to be addressed prior to issuance of grading and building permits would include:

Soft Ground – Soils in areas with soft ground or loose soils in the area of the site may be subject to settlement and provide weak bearing conditions for support of structures and other improvements. Recommendations to mitigate this condition can typically include removal and/or replacement of soils as engineered compacted fill. The extent of soft soils and recommended removals may be evaluated by subsurface exploration and laboratory testing.

Expansive Soils – Expansive soils may lead to damage to foundations and engineered structures. If expansive soils exist on site, the following recommendations may be implemented during construction: the soils may be removed from sensitive areas and placed in deeper fill areas; the soils may be excavated and removed from the site; or the expansive soils may be treated (i.e., lime

treatment) to mitigate their potential for expansion. Special foundation designs to mitigate expansive soils may also be incorporated in the final design of each development project, as applicable. The extent of expansive soils and recommended mitigation measures may be evaluated by subsurface exploration and laboratory testing.

Corrosive Soils – If corrosive soils exist on the site, a corrosion engineer may be retained to assist in the design of improvements in contact with the soil. The extent of corrosive soils and recommended mitigation measures may be further evaluated by subsurface exploration and laboratory testing.

Ground Shaking – Proposed structures should be designed appropriately to mitigate strong ground shaking in the event of an earthquake on a nearby fault.

Liquefaction – The westernmost portions of the site may be considered susceptible to liquefaction and dynamic settlement. Prior to development in this area, a geotechnical evaluation involving subsurface exploration and laboratory testing should be performed to specifically evaluate the potential for liquefaction on the project site. If such an evaluation finds that a potential for liquefaction to exist, the following recommendations may be implemented during construction: removal and replacement of soils susceptible to seismic settlement and/or liquefaction; densification or ground improvement of these soils; or utilization of special foundations to mitigate liquefaction and seismic settlement.

Shallow groundwater – Shoring and dewatering may be required if construction is proposed in areas of shallow groundwater.

Landsliding – Landslides have not been mapped on the site or reported in the available literature. However, site slopes and lower-lying areas of the site are mapped as being most susceptible to landslides and an area of unfavorable geologic structure is mapped in the northwest portion of the site. Slope stability at the site should be further evaluated by a comprehensive geotechnical evaluation in the vicinity of proposed structural improvements.

The conditions related to soils and geology, identified in conjunction with the Geology and Soils Technical Study, would increase the cost and duration of grading and construction, but would not preclude the feasibility of future campus development projects.

8. IMPACT ANALYSIS

Based upon the results of our geologic desktop assessments, our findings, conclusions, and recommendations regarding potential geological impacts to the project are summarized in the following sections.

8.1. Significance Thresholds

In evaluating the significance of potential environmental concerns in a particular study area, the criteria to consider, as they relate to geologic and soil conditions, are presented in the California Environmental Quality Act (CEQA) Guidelines (2025). In accordance with the scope of work, the findings of this study were evaluated with respect to Geology and Soils thresholds of significance within Appendix G of the CEQA Guidelines (2025).

8.2. Project Impacts and Significance

Based on the above criteria and the results of the evaluation, the potential impact by geologic and soil conditions at the project have been identified, and are discussed below.

VII. GEOLOGY AND SOILS

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

i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map, issued by the State Geologist for the area or based on other substantial evidence of known fault?

The potential for ground surface rupture due to active faulting is considered low in the project area due to the absence of known active faults in the site vicinity (less than significant impact). However, lurching or cracking of the ground surface as a result of nearby seismic events is possible. This impact is considered less than significant impact.

ii. Strong seismic ground shaking?

The project has a high potential for strong ground motions due to earthquakes on nearby active faults. The risk and appropriate design recommendations for strong ground motion is required to be evaluated for new structures in accordance with Chapter 18A of Title 24, Part 2 of the California Building Code (CBC) and CGS Note 48, which includes requirements for geotechnical evaluation of public school sites. This impact is considered less than significant impact with construction methods and specifications incorporated.

iii. Seismic related ground failure, including liquefaction?

The presence of alluvium and shallow groundwater in the westernmost portion of the site could render this area as being susceptible to liquefaction and settlement hazards. Liquefaction potential should be evaluated as part of a comprehensive geotechnical evaluation performed prior to project development, in accordance

with the requirements of Chapter 18 of the 2025 California Building Code. Such an evaluation would be performed in accordance with Chapter 18A of Title 24, Part 2 of the CBC and CGS Note 48 so an opinion can be made regarding the hazard for liquefaction and seismic settlement and that structural design and mitigation techniques can be implemented during design, as appropriate. Common and appropriate methods for evaluating and mitigating liquefaction potential and other seismic-related ground failures are provided in California Geological Survey Special Publication 117A. Mitigation for construction in liquefaction hazard areas may include in-situ ground modification, removal of liquefiable layers and replacement with compacted fill, or support of project improvements with piles to sufficient depths to mitigate damage as a result of liquefaction and make the site safe for development. This impact is considered less than significant with appropriate design and construction methods incorporated.

iv. Landslides?

Our review of geologic literature, aerial photos, and topographic maps, does not indicate the presence of mapped landslides on the project site. Additionally, landslides were not mapped by others adjacent to the project site. Therefore, the potential impact of existing landslides is considered low (less than significant impact). However, site slopes and lower-lying areas of the site are mapped as being most susceptible to landslides and an area of Friars Formation with unfavorable geologic structure is mapped in the northwest portion of the site. As such, the potential presence for landslides, the potential for deep-seated movement, and recommended construction methods and specifications should be evaluated during geotechnical evaluation of the site in the vicinity of proposed structural improvements. This impact is considered less than significant with appropriate design and construction methods incorporated.

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

If the site is developed in accordance with current building codes, industry standards, and the recommendations of a geotechnical evaluation, the potential for substantial soil erosion is considered to be low (less than significant impact). The potential for substantial loss of topsoil due to the proposed development is considered low due the previous development of the site.

C. Would the project be located on geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Based on our review of background data, site soils are not susceptible to land subsidence. However, site slopes and lower-lying areas of the site are mapped as being most susceptible to landslides and slopes in the northwest portion of the site are mapped as having unfavorable geologic structure and may be susceptible to landsliding. In addition, potential soil settlement as a result of construction dewatering and liquefaction in the westernmost portion of the site should be evaluated by a design-level geotechnical evaluation. Where slope instability and/or soil settlements are identified, appropriate engineering measures should be employed as recommended in a design-level geotechnical evaluation or by the project structural engineer. Such an evaluation would be required in accordance with Chapter 18A of Title 24, Part 2 of the CBC and CGS Note 48. This impact is less than significant with appropriate design and construction methods incorporated.

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

Based on our review of previous soil testing, soils with a potential for expansion may be present at the site. Soil conditions should be further evaluated by geotechnical laboratory testing. The risk associated with expansive soils can be addressed during design of the project, in accordance with the requirements of Chapter 18 of the 2025 California Building Code. However, we consider this impact to be less than significant with appropriate construction methods and specifications incorporated.

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

The project would rely on the existing sanitary sewer system and would not use septic tanks or alternative wastewater disposal systems. This is not an impact.

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

Guidelines for unique and potentially unique geological features in the San Diego region have been provided by the County of San Diego (2007). Based on the guidelines, our review of geologic literature, and our site reconnaissance, no unique geologic features are present at the site. However, based on previous findings of

fossils in the project area, portions of the site are considered to have moderate to high sensitivity ratings for paleontological resources. Potential mitigation including construction monitoring should be performed in accordance with the City of San Diego's requirements (2022). We consider this impact to be less than significant with mitigation incorporated.

9. LIMITATIONS

The field evaluation and geotechnical analyses presented in this report have been conducted in accordance with current engineering practice and the standard of care exercised by reputable geotechnical consultants performing similar tasks in this area. No warranty, implied or expressed, is made regarding the conclusions, recommendations, and professional opinions expressed in this report. Variations may exist and conditions not observed or described in this report may be encountered. Our preliminary conclusions and recommendations area based on an analysis of the observed conditions and the referenced background information.

The purpose of this study was to evaluate geologic and geotechnical conditions within the project site and to provide a preliminary geological report to assist in the preparation of environmental impact documents for the project. A comprehensive geotechnical evaluation, including subsurface exploration and laboratory testing, should be performed prior to design and construction of structural improvements.

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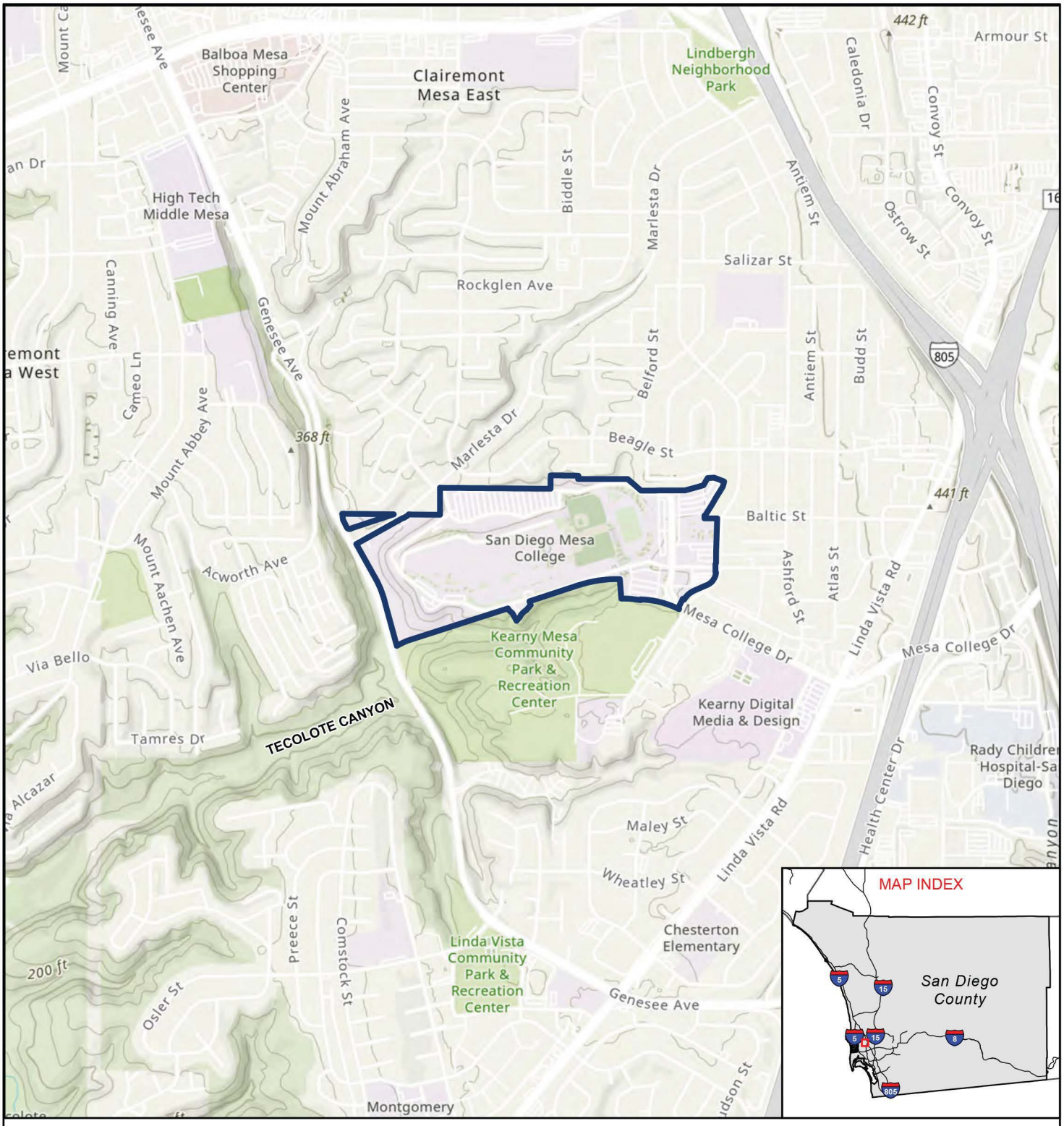
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FIGURES



LEGEND

SITE BOUNDARY

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NOTE: DIRECTIONS, DIMENSIONS AND LOCATIONS ARE APPROXIMATE. | SOURCE: ESRI WORLD TOPO, 2025

P110011001.aprx 12/8/2025 DRAFTED BY: AOB

FIGURE 1

Ninyo & Moore
A SOCOTEC COMPANY

SITE LOCATION

MESA COLLEGE MASTER PLAN
7250 MESA COLLEGE DRIVE
SAN DIEGO, CALIFORNIA

110011001 | 4/26



LEGEND

SITE BOUNDARY

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NOTE: DIRECTIONS, DIMENSIONS AND LOCATIONS ARE APPROXIMATE. | SOURCE:

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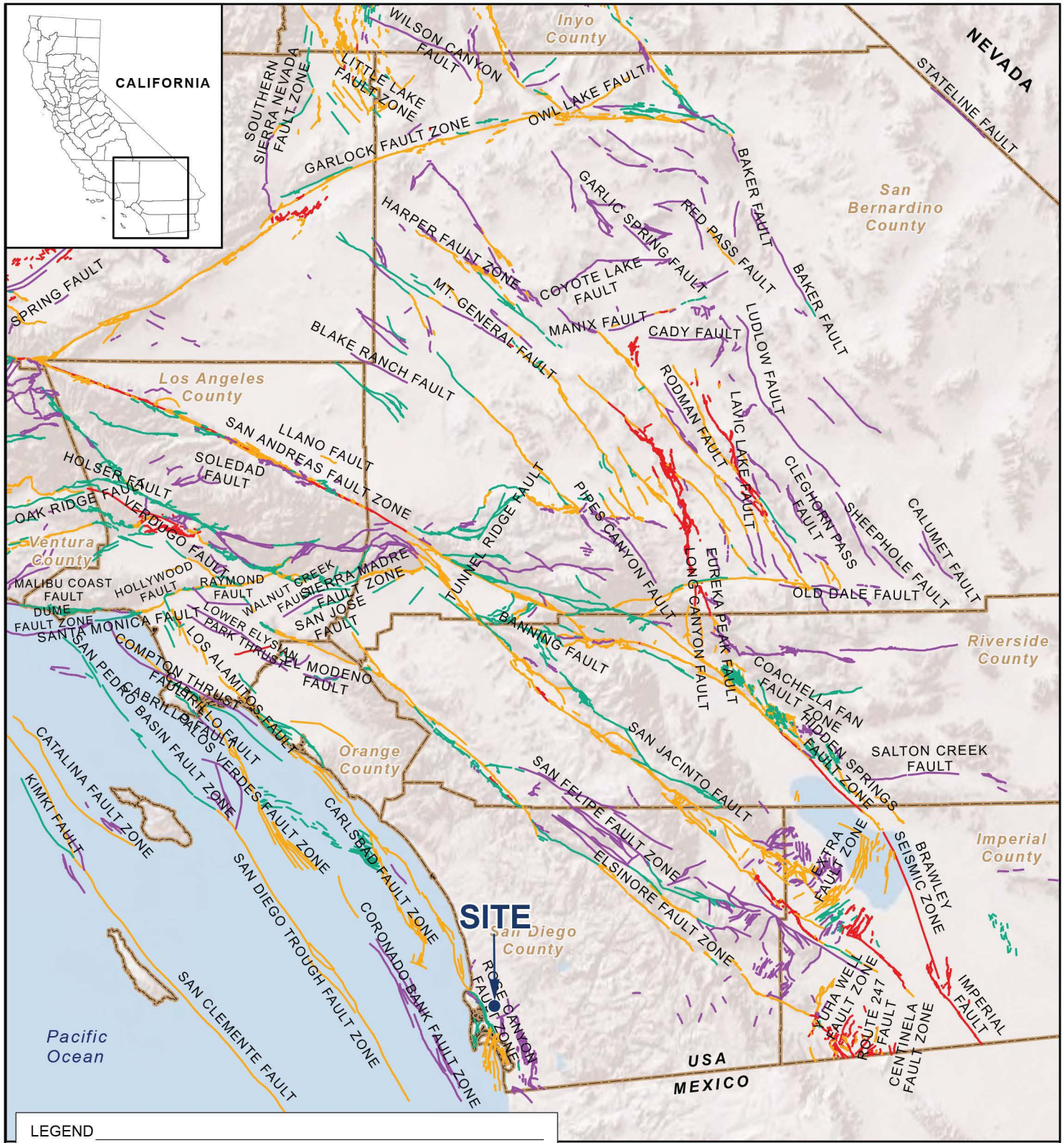
FIGURE 2

Ninyo & Moore
A SOCOTEC COMPANY

SITE AERIAL

MESA COLLEGE MASTER PLAN
7250 MESA COLLEGE DRIVE
SAN DIEGO, CALIFORNIA

110011001 | 4/26



LEGEND

CALIFORNIA FAULT ACTIVITY

- HISTORICALLY ACTIVE
- HOLOCENE ACTIVE
- LATE QUATERNARY (POTENTIALLY ACTIVE)
- QUATERNARY (POTENTIALLY ACTIVE)
- STATE/COUNTY BOUNDARY

SOURCES: QUATERNARY FAULTS DATABASE - U.S. GEOLOGICAL SURVEY AND CALIFORNIA GEOLOGICAL SURVEY, QUATERNARY FAULT AND FOLD DATABASE FOR THE UNITED STATES, ACCESSED NOVEMBER 4, 2024, AT: https://www.usgs.gov/programs/earthquake-hazards/faults

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NOTE: DIRECTIONS, DIMENSIONS AND LOCATIONS ARE APPROXIMATE.

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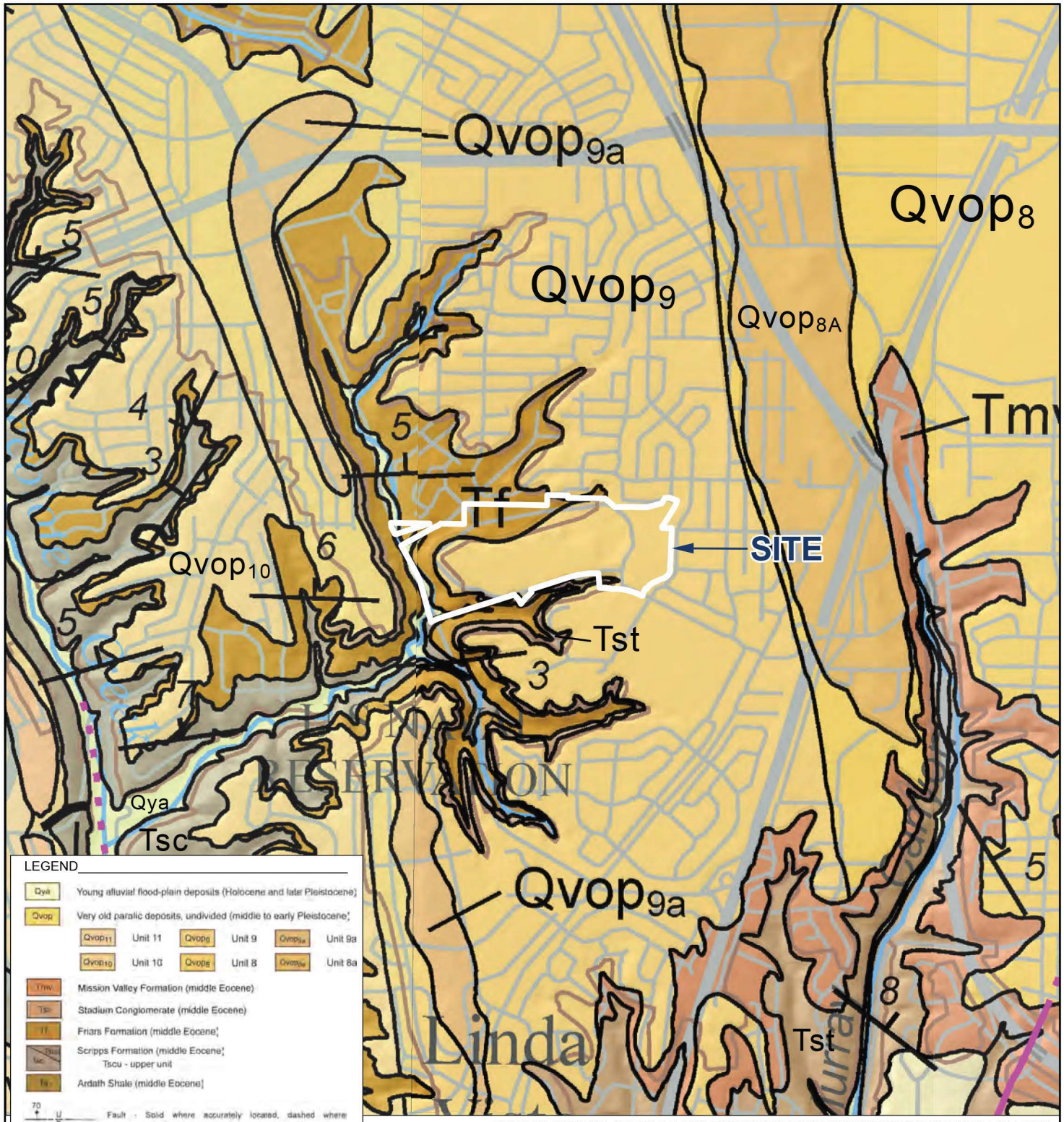
FIGURE 3

Ninyo & Moore
A SOCOTEC COMPANY

FAULT LOCATIONS

MESA COLLEGE
7250 MESA COLLEGE DRIVE
SAN DIEGO, CALIFORNIA

110011001 | 4/26



LEGEND

- Qya — Young alluvial flood-plain deposits (Holocene and late Pleistocene)
- Qvop — Very old paralic deposits, undivided (middle to early Pleistocene)
  - $Qvop_{11}$ Unit 11; $Qvop_9$ Unit 9; $Qvop_{9a}$ Unit 9a
  - $Qvop_{10}$ Unit 10; $Qvop_8$ Unit 8; $Qvop_{8a}$ Unit 8a
- Tmv — Mission Valley Formation (middle Eocene)
- Tst — Stadium Conglomerate (middle Eocene)
- Tf — Friars Formation (middle Eocene)
- Tsc — Scripps Formation (middle Eocene)
  - Tscu - upper unit
- Ta — Ardath Shale (middle Eocene)
- 70 U/D — Fault - Solid where accurately located; dashed where approximately located; dotted where concealed. U = upthrown block, D = downthrown block. Arrow and number indicate direction and angle of dip of fault plane.
- Anticline - Solid where accurately located; dashed where approximately located; dotted where concealed. Arrow indicates direction of axial plunge.
- Syncline - Solid where accurately located; dotted where concealed. Arrow indicates direction of axial plunge.
- 70 — Strike and dip of beds

SOURCE: KENNEDY, M.P., AND TAN, S.S., 2008, GEOLOGIC MAP OF THE SAN DIEGO 30' X 60' QUADRANGLE, CALIFORNIA.

NOTE: DIRECTIONS, DIMENSIONS AND LOCATIONS ARE APPROXIMATE.

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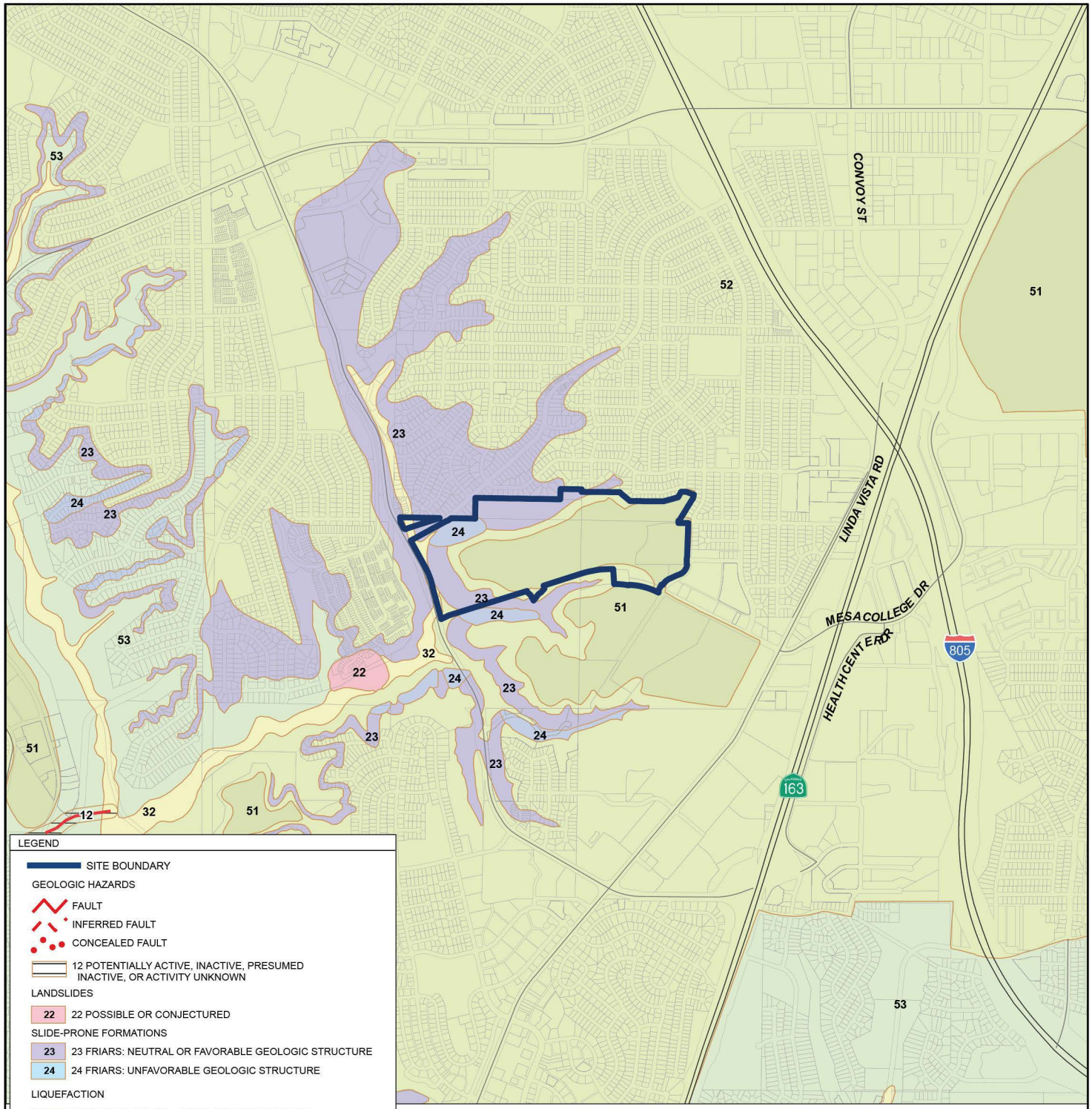
FIGURE 4

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GEOLOGY

MESA COLLEGE MASTER PLAN
7250 MESA COLLEGE DRIVE
SAN DIEGO, CALIFORNIA

110011001 | 4/26



NOTE: DIRECTIONS, DIMENSIONS AND LOCATIONS ARE APPROXIMATE. | SOURCE: SANGIS, 2008, CITY OF SAN DIEGO SEISMIC SAFETY STUDY GEOLOGIC HAZARDS AND FAULTS.

P110011001.aprx 4/7/2026 DRAFTED BY: AOB

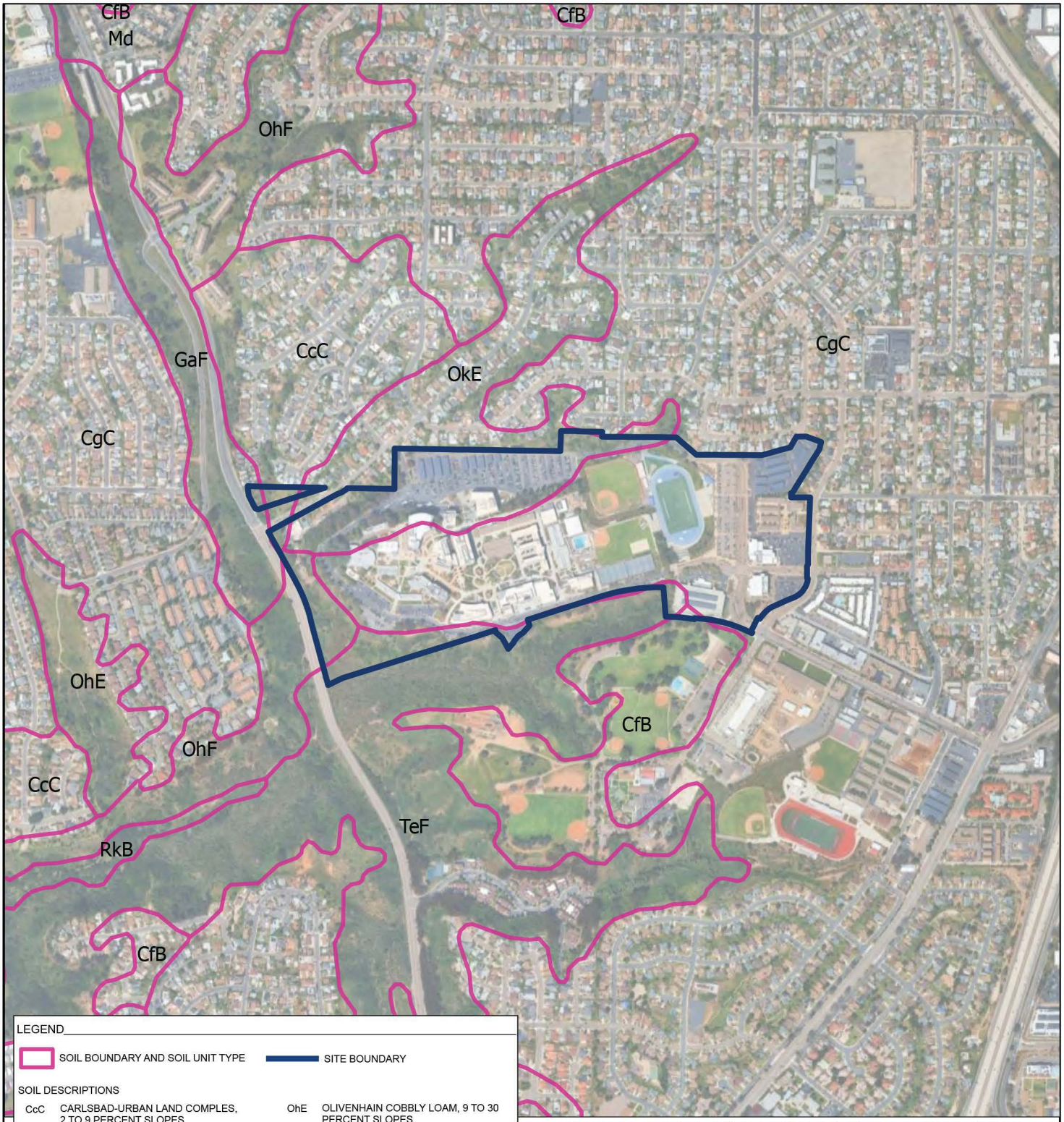
FIGURE 5

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GEOLOGIC HAZARDS

MESA COLLEGE MASTER PLAN
7250 MESA COLLEGE DRIVE
SAN DIEGO, CALIFORNIA

110011001 | 4/26



LEGEND

SOIL BOUNDARY AND SOIL UNIT TYPE

SITE BOUNDARY

SOIL DESCRIPTIONS

CcC	CARLSBAD-URBAN LAND COMPLES, 2 TO 9 PERCENT SLOPES	OhE	OLIVENHAIN COBBLY LOAM, 9 TO 30 PERCENT SLOPES
CfB	CHESTERTON FINE SANDY LOAM, 2 TO 5 PERCENT SLOPES	OhF	OLIVENHAIN COBBLY LOAM, 30 TO 50 PERCENT SLOPES
CgC	CHESTERTON-URBAN LAND COMPLEX, 2 TO 9 PERCENT SLOPES	OkE	OLIVENHAIN-URBAN LAND COMPLEX, 9 TO 30 PERCENT SLOPES
GaF	GAVIOTA FINE SANDY LOAM, 30 TO 50 PERCENT SLOPES	RkB	REIFF FINE SANDY LOAM, 2 TO 5 PERCENT SLOPES
Md	MADE LAND	TeF	TERRACE ESCARPMENTS

SOURCE: U.S. DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE, 5/14/11., GOOGLE EARTH, 2025.

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NOTE: DIRECTIONS, DIMENSIONS AND LOCATIONS ARE APPROXIMATE.

P110011001.aprx 4/7/2026 DRAFTED BY: AOB

FIGURE 6

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USDA (SSURGO) SOIL SURVEY

MESA COLLEGE MASTER PLAN
7250 MESA COLLEGE DRIVE
SAN DIEGO, CALIFORNIA

110011001 | 4/26

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5710 Ruffin Road | San Diego, California 92123 | p. 858.576.1000

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Appendix G

Paleontological Resources Technical Report

PALEOSERVICES
SAN DIEGO NATURAL HISTORY MUSEUM

Paleontological Resources Technical Report

San Diego Community College District
San Diego Mesa College
Comprehensive Master Plan
City of San Diego, California

February 12, 2026 (revised August 6, 2026)

Prepared for:

San Diego Community College District

Under contract to:

HELIX Environmental Planning
7578 El Cajon Boulevard
La Mesa, CA 91942

Prepared by:

Department of PaleoServices
San Diego Natural History Museum
P.O. Box 121390
San Diego, California 92112-1390

Zev Brook, M.S., Paleontological Report Writer
Katie M. McComas, M.S., Senior Paleontologist
Thomas A. Deméré, Ph.D., Principal Paleontologist

thenat | SAN DIEGO NATURAL HISTORY MUSEUM

Executive Summary

This paleontological resources technical report was prepared for the San Diego Mesa College (SDMC) campus, located in the City of San Diego, San Diego County, California. The San Diego Community College District (SDCCD) prepared a Comprehensive Master Plan (CMP) for the SDMC campus in 2021. The SDMC campus is located in the Clairemont Mesa East Neighborhood within the Clairemont Mesa Community Planning Area of the City of San Diego, and is broadly bounded to the west by Genesee Avenue, to the north by residential development off of Beagle Street, to the east by Armstrong Street, and to the south by undeveloped open space within the Tecolote Canyon nature preserve. The CMP recommends a series of physical improvements across the campus. The proposed projects would generally demolish existing aging facilities on the campus and replace them with more modern facilities that accommodate existing programming.

The purpose of this report is to summarize existing paleontological resource data for the SDMC campus, discuss the significance of these resources, conduct a program-level analysis of impacts that may result from implementation of the CMP, and provide a mitigation framework for reviewing future projects associated with implementation of the CMP. The report also includes a project-level discussion of two near-term projects: the Athletics Complex project and the Performing Arts and Administration Center and Parking Structure project. This report includes the results of a literature review and an institutional paleontological records search conducted at the San Diego Natural History Museum (SDNHM). No paleontological field survey of the SDMC campus was conducted due to the extensive prior development within the campus and an evident lack of natural or manmade bedrock exposures available for inspection.

According to published geologic mapping, the SDMC campus is reported to be primarily underlain by middle Pleistocene-age (approximately 855,000 years old) very old paralic deposits (equivalent to the Lindavista Formation), in addition to strata of the middle Eocene-age (approximately 44 to 42 million years old) Stadium Conglomerate, the middle Eocene-age (approximately 46 to 45 million years old) Friars Formation, and the middle Eocene-age (approximately 47 to 46 million years old) Scripps Formation. Late Pleistocene- to Holocene-age (less than 129,000 years old) young alluvial flood plain deposits are also mapped along low-lying drainages within the SDMC campus boundaries. In addition, artificial fill associated with previous construction activities within the SDMC campus is also anticipated to be present.

Previously placed artificial fill is assigned no paleontological resource sensitivity based on the lack of original geographic and stratigraphic context associated with fossils that may be present within these deposits. Young alluvial flood plain deposits are assigned a low paleontological resource sensitivity due to their relatively young geologic age and the recognition that any contained organic remains are likely conspecific with organisms inhabiting the area today. The Lindavista Formation is assigned a moderate paleontological resource sensitivity based on the sparse distribution of primarily marine invertebrate fossils recovered from this geologic unit. The Stadium Conglomerate, Friars Formation, and Scripps Formation are assigned a high paleontological resource sensitivity based on the documented occurrence of diverse marine invertebrate and vertebrate fossil assemblages preserved within these geologic units.

It is anticipated that the Lindavista Formation, Stadium Conglomerate, Friars Formation, and/or Scripps Formation may be impacted by future projects associated with implementation of the CMP, including the two proposed near-term projects. While the City of San Diego is not the lead agency for the CMP, thresholds established by the city were used to guide the analysis in this report given the same geologic

units occur within the SDMC campus as within the city. Under the City of San Diego's Significance Determination Thresholds, potential impacts to paleontological resources are considered significant if a project would require over 1,000 cubic yards of excavation in a high resource sensitivity geologic deposit/formation/rock unit, over 2,000 cubic yards of excavation in a moderate resource sensitivity geologic deposit/formation/rock unit, or if excavation would occur on or near a previously documented fossil recovery site (i.e., within 100 feet of an existing fossil collection locality). While the city typically also employs a 10-foot depth threshold for required paleontological monitoring, because the SDMC campus has been previously graded and surficial weathered deposits removed, this depth threshold is not recommended for evaluating the potential impacts of proposed projects under the SDMC CMP. In its place, a project-specific depth threshold based on the depth of artificial fill in proposed areas of excavation may be defined upon review of site-specific geotechnical data. In the absence of site-specific geotechnical data, a 2-foot depth threshold should be used. If a project proposed under the CMP would exceed the project-specific thresholds of significance, then impacts to paleontological resources are deemed to be potentially significant and construction monitoring would be required.

The following mitigation framework is provided to guide review of near-term and future projects proposed under the SDMC CMP:

- All projects shall be reviewed to determine whether they would have a potentially significant impact on paleontological resources under Mitigation Measure (MM) PALEO-1:
    - If the total cut volume exceeds 1,000 cubic yards in a high resource sensitivity geologic deposit/formation/rock unit or exceeds 2,000 cubic yards of excavation in a moderate resource sensitivity geologic deposit/formation/rock unit and excavation would exceed the project-specific depth threshold determined above, implementation of MM PALEO-2 and MM PALEO-3 shall be required.
    - If the total cut volume is less than 1,000 cubic yards in a high resource sensitivity geologic deposit/formation/rock unit and less than 2,000 cubic yards of excavation in a moderate resource sensitivity geologic deposit/formation/rock unit and excavation would exceed the project-specific depth threshold determined above and the project occurs on or within 100 feet of an existing fossil locality, implementation of MM PALEO-2 and MM PALEO-3 shall be required.
    - If the total cut volume exceeds 1,000 cubic yards in a high resource sensitivity geologic deposit/formation/rock unit or exceeds 2,000 cubic yards of excavation in a moderate resource sensitivity geologic deposit/formation/rock unit and excavation would not exceed the project-specific depth threshold determined above (regardless of proximity to existing fossil localities), implementation of MM PALEO-4 shall be required.
    - If the total cut volume is less than 1,000 cubic yards in a high resource sensitivity geologic deposit/formation/rock unit and less than 2,000 cubic yards of excavation in a moderate resource sensitivity geologic deposit/formation/rock unit and the project does not occur on or within 100 feet of an existing fossil collection locality (regardless of excavation depth), implementation of MM PALEO-4 shall be required.

For projects that are determined to exceed the established grading thresholds based on the initial review required by MM PALEO-1, implementation of a paleontological mitigation program shall be required, as outlined in MM PALEO-2 (Monitoring) and MM PALEO-3 (Treatment of Fossil Discoveries). For projects that are not anticipated to exceed the established grading thresholds, implementation of

MM PALEO-4 addressing unanticipated fossil discoveries shall be required. Implementation of these mitigation measures would reduce project-related impacts to paleontological resources to a level that is less than significant.

Contents

Executive Summary i

1.0 Introduction 1

1.1 Project Description 1
1.1.1 Athletics Complex Project 3
1.1.2 Performing Arts and Administration Center and Parking Structure Project 3
1.2 Scope of Work 3
1.3 Definition of Paleontological Resources 3
1.3.1 Definition of Scientifically Significant Fossils 4
1.4 Regulatory Framework 4
1.4.1 State 4
1.4.2 Local: City of San Diego 5

2.0 Methods 6

2.1 Paleontological Literature Review and Records Search 6
2.2 Paleontological Resource Assessment Criteria 6
2.3 Paleontological Impact Analysis 6

3.0 Existing Conditions: Geologic Setting 7

4.0 Results 8

4.1 Results of the Literature Review and Records Search 8
4.1.1 Summary of SDMC Campus Stratigraphy 8
4.1.2 Summary of Known Paleontological Resources 10
4.2 Results of the Paleontological Resource Assessment 11
4.3 Results of the Paleontological Impact Analysis 12
4.3.1 Athletics Complex Project 13
4.3.2 Performing Arts and Administration Center and Parking Structure Project 14

5.0 SDMC Comprehensive Master Plan Mitigation Framework 14

5.1 Mitigation Framework for Future Projects 15
5.1.1 Impact Significance Determination 15
5.1.2 Proposed Mitigation Measures 15

6.0 References 17

Appendix A (Confidential) A1

1.0 Introduction

1.1 Project Description

This technical report provides an assessment of paleontological resources at the San Diego Mesa College (SDMC) campus, located in the City of San Diego, San Diego County, California (Figure 1). The San Diego Community College District (SDCCD) prepared a Comprehensive Master Plan (CMP) for the SDMC campus in 2021.

The SDMC campus is located in the Clairemont Mesa East Neighborhood within the Clairemont Mesa Community Planning Area of the City of San Diego, and is broadly bounded to the west by Genesee Avenue, to the north by residential development off of Beagle Street, to the east by Armstrong Street, and to the south by undeveloped open space within the Tecolote Canyon nature preserve.

The CMP recommends a series of physical improvements across the Mesa College campus. The proposed projects would generally demolish existing aging facilities on the campus and replace them with more modern facilities that accommodate existing programming. As the CMP is conceptual in nature, the exact architectural programming and design of each project would be developed during future planning and design phases. Specific projects identified for development under the CMP include:

- Athletics Complex
- Performing Arts and Administration Center and Parking Structure
- English/English Language Acquisition (ELAC)/Student Resource Center replacement building
- Conference Center
- On-Campus Housing
- High School relocation
- Facilities Services relocation to dedicated area with loading and storage space
- New Welcome Center near eastern entrance
- Child Development Center relocation and expansion
- New Community Clinic
- West Entrance reconfiguration (Genesee Avenue and Marlesta Drive)

Campus-wide improvements related to utility infrastructure and circulation are also part of the CMP and could be implemented in coordination with the projects listed above or undertaken as campus-wide efforts. Interior renovations, continued maintenance, and other minor construction could also occur throughout existing campus buildings. The Athletics Complex and Performing Arts and Administration Center and Parking Structure projects are anticipated to be designed and constructed in the near term and are discussed in greater detail below. No specific timing or phasing is identified for the remaining projects or campus-wide improvements.



Figure 1. Overview map of the SDMC campus, City of San Diego, California.

1.1.1 Athletics Complex Project

This project would demolish the existing facilities and construct a modern, approximately 175,000-square-foot (SF) Athletics Complex to include a new three-court gym, dance studios, training and study areas, locker rooms, offices, press boxes, ticketing/concessions and restrooms, stadium seating, and other athletics support spaces. Relocated and expanded pool complex, beach volleyball, softball field, and practice fields are proposed on the west side of the new gym building. The existing baseball field would also be reconfigured and replaced with artificial turf, remaining generally in its existing location, and the field house located between the baseball field and stadium would be replaced.

Track and field event spaces, including for javelin and hammer throw events, currently located on and adjacent to the Upper Athletic Field are proposed to be relocated to the area east of the stadium where high fencing would be provided to address safety concerns related to pedestrian movement.

1.1.2 Performing Arts and Administration Center and Parking Structure Project

This project would construct a new multi-story Performing Arts and Administration Center, to be located on the north hillside adjacent to the Student Services Center. The estimated 140,000 SF facility would feature a main stage theater, music and dance spaces, instructional labs, and offices. In addition, a new parking structure would be constructed to expand capacity and support campus events. Both facilities are proposed to be built into the hillside.

1.2 Scope of Work

This report is being prepared to support preparation of a Program Environmental Impact Report (PEIR) for the CMP. The purpose of this report is to summarize existing paleontological resource data for the SDMC campus, discuss the significance of these resources, conduct a program-level analysis of impacts that may result from implementation of the CMP, and provide a mitigation framework for reviewing future projects associated with implementation of the CMP. The report also includes a project-level discussion of two near-term projects: the Athletics Complex project and the Performing Arts and Administration Center and Parking Structure project.

The report includes the results of a literature review and an institutional paleontological records search conducted at the San Diego Natural History Museum (SDNHM). No paleontological field survey of the SDMC campus was conducted due to the extensive prior development within the campus and an evident lack of natural or manmade bedrock exposures available for inspection. This report was written by Katie M. McComas, Zev Brook, and Thomas A. Deméré of the Department of PaleoServices, SDNHM.

1.3 Definition of Paleontological Resources

As defined here, paleontological resources (i.e., fossils) are the buried remains and/or traces of prehistoric organisms (i.e., animals, plants, and microbes). Body fossils such as bones, teeth, shells, leaves, and wood, as well as trace fossils such as tracks, trails, burrows, and footprints, are found in the geologic units/formations within which they were originally buried. The primary factor determining whether an object is a fossil or not is not how the organic remain or trace is preserved (e.g., “petrified”), but rather the age of the organic remain or trace. Although typically it is assumed that fossils must be older than ~11,700 years (i.e., the generally accepted end of the last glacial period of the Pleistocene Epoch), organic remains older than recorded human history and/or older than middle Holocene (about 5,000 radiocarbon years) can also be considered to represent fossils (Society of Vertebrate Paleontology [SVP], 2010).

Fossils are considered important scientific and educational resources because they serve as direct and indirect evidence of prehistoric life and are used to understand the history of life on Earth, the nature of

past environments and climates, the membership and structure of ancient ecosystems, and the pattern and process of organic evolution and extinction. In addition, fossils are considered to be non-renewable resources because typically the organisms they represent no longer exist. Thus, once destroyed, a particular fossil can never be replaced.

The paleontological site, or locality, includes both the geographic and stratigraphic context of fossils—the place on the Earth and stratum (deposited during a particular time in Earth's history) from which the fossils were collected. Localities themselves may persist for decades, in the case of a fossil-bearing outcrop that is protected from natural or human impacts, or may be temporarily exposed and ultimately destroyed, as is the case for fossil-bearing strata uncovered by erosion or construction. Localities are documented with a set of coordinates and a measured stratigraphic section tied to elevation detailing the lithology of the fossil-bearing stratum as well as overlying and underlying strata. This information provides essential context for future scientific study of the recovered fossils.

1.3.1 Definition of Scientifically Significant Fossils

SVP has defined significant paleontological resources as consisting of "fossils and fossiliferous deposits […] consisting of identifiable vertebrate fossils, large or small, uncommon invertebrate, plant, and trace fossils, and other data that provide taphonomic, taxonomic, phylogenetic, paleoecologic, stratigraphic, and/or biochronologic information" (SVP, 2010).

1.4 Regulatory Framework

Paleontological resources are considered scientifically and educationally significant nonrenewable resources; they are protected under a variety of laws, regulations, and ordinances. The SDMC campus is located within the City of San Diego in San Diego County, California. Pursuant to Government Code Section 53094, local City of San Diego zoning and development regulations are not applicable to CMP development as implementation of the CMP would facilitate the education of community college students. However, SDCCD may consider aspects of local plans and policies for the communities surrounding the campus when it is appropriate and feasible. Relative to paleontological resources, city grading regulations and thresholds of significance are not applicable to CMP development but provide relevant guidance for the evaluation of the potential to disturb paleontological resources given the presence of geologic units on SDMC campus consistent with surrounding areas of the city. As such, state regulations applicable to the CMP and local regulations providing relevant guidance are summarized below.

1.4.1 State

The **California Environmental Quality Act (CEQA, Public Resources Code Section 21000 et seq.)** protects paleontological resources on both state and private lands in California. This act requires the identification of environmental impacts of a project, the determination of significance of the impacts, and the identification of alternative and/or mitigation measures to reduce adverse environmental impacts. The Guidelines for the Implementation of CEQA (Title 14, Chapter 3, California Code of Regulations: 15000 et seq.) outline these necessary procedures for complying with CEQA. Paleontological resources are specifically included as a question in the CEQA Environmental Checklist (Appendix G of the CEQA Guidelines): "Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?"

Most CEQA lead agencies follow the definitions and guidelines provided by SVP (2010), which are in line with industry standards (e.g., Murphey et al., 2019). SVP (2010) additionally provides criteria for determining the significance of paleontological resources (see Section 1.3.1), and for appropriate measures to minimize impacts to paleontological resources. As advised by SVP (2010), impacts to

paleontological resources can be minimized to a level below the threshold of significance through 1.) the permanent preservation of a fossil locality and its contained fossil resources); or 2.) the implementation of a paleontological mitigation program that would reduce adverse impacts to a level below the threshold of significance through the salvage and permanent storage of salvaged fossils in an established scientific institution.

Other state requirements for paleontological resource management are included in the **Public Resources Code (Chapter 1.7), Sections 5097.5 and 30244**. These statutes prohibit the removal of any paleontological site or feature on public lands without permission of the jurisdictional agency, defines the removal of paleontological sites or features as a misdemeanor, and requires reasonable mitigation of adverse impacts to paleontological resources from developments on public (state) lands.

1.4.2 Local: City of San Diego

In the absence of SDCCD adopted thresholds related to paleontological resources, SDCCD considers the City's adopted guidance appropriate to the evaluation of paleontological resource impacts at its campuses located within the City. The **City of San Diego** has developed specific guidelines for the implementation of CEQA regarding the management of paleontological resources within the city's boundaries (City of San Diego, 2022). In reviewing the significance of potential impacts to paleontological resources, the city asks if the project would:

1. Require over 1,000 cubic yards of excavation in a high resource potential geologic deposit/formation/rock unit?
2. Require over 2,000 cubic yards of excavation in a moderate resource potential geologic deposit/formation/rock unit?

Additional factors considered in the city's review, as outlined in City of San Diego (2022), include:

- Whether grading will occur on a fossil recovery site or near a fossil recovery site in the same geologic deposit/formation/rock unit as the project site, in which case monitoring is always required.
- Whether the site has been previously graded and/or if unweathered geologic deposits/formations/rock units are present at the surface, in which case monitoring may be required for shallow grading (<10 feet deep).
- Whether documented or undocumented artificial fill will be graded, in which case monitoring is not required.

Following the significance determination thresholds developed by the City of San Diego (2022), **San Diego Municipal Code** Section §142.0151 establishes the following paleontological resources requirements for grading activities:

a) Paleontological resources monitoring shall be required in accordance with the General Grading Guidelines for Paleontological Resources in the Land Development Manual for any of the following:

   (1) Grading that involves 1,000 cubic yards or greater, and 10 feet or greater in depth, in a High Resource Potential Geologic Deposit/Formation/Rock Unit; or

   (2) Grading that involves 2,000 cubic yards or greater, and 10 feet or greater in depth, in Moderate Resource Potential Geologic Deposit/Formation/Rock Unit; or

   (3) Grading on a fossil recovery site or within 100 feet of the mapped location of a fossil recovery site.

b) If paleontological resources, as defined in the General Grading Guidelines for Paleontological Resources, are discovered during grading, notwithstanding [Land Development Code] Section 142.0151(a), all grading in the area of discovery shall cease until a qualified paleontological monitor has observed the discovery, and the discovery has been recovered in accordance with the General Grading Guidelines for Paleontological Resources.

2.0 Methods

2.1 Paleontological Literature Review and Records Search

A review was conducted of relevant published geologic maps, published geological and paleontological reports, and other relevant literature (e.g., field trip guidebooks, theses and dissertations, and unpublished paleontological mitigation reports). This approach was followed in recognition of the direct relationship between paleontological resources and the geologic formations within which they are entombed. Knowing the geologic history of a particular area and the fossil productivity of geologic formations that occur in that area, it is possible to predict where fossils will, or will not, be encountered.

In addition, a paleontological records search was conducted at the SDNHM in order to determine if any documented San Diego Society of Natural History (SDSNH) fossil collection localities occur within the SDMC campus or in the surrounding vicinity. The records search specifically involved examination of the paleontological database for records of known fossil collection localities within a one-mile radius of the SDMC campus.

2.2 Paleontological Resource Assessment Criteria

The Society of Vertebrate Paleontology has developed mitigation guidelines for paleontological resources (SVP, 2010, 2025), which were developed with input from a variety of federal and state land management agencies and conform with established industry professional standards (Murphey et al., 2019). These guidelines recognize that paleontological resources are considered to include not only actual fossil remains and traces, but also the fossil collecting localities and the geologic units containing those fossils and localities, and thus are designed to evaluate the paleontological potential (or "paleontological sensitivity") of individual geologic units within a project area. Paleontological sensitivity is determined based on the existence of known fossil localities within a given geologic unit, and/or the potential for future fossil discoveries, given the age and depositional environment of a particular geologic unit. This procedure assigns ranks to geologic units based on the relative abundance of vertebrate fossils or scientifically significant invertebrate or plant fossils (SVP, 2010, 2025).

The City of San Diego utilizes the paleontological potential/sensitivity scale developed by Deméré and Walsh (1993) and used by San Diego County (County of San Diego, 2009), but does not utilize a "marginal" category (City of San Diego, 2022). Specific criteria for each paleontological sensitivity rating are outlined below in Table 1.

2.3 Paleontological Impact Analysis

Direct impacts to paleontological resources occur when earthwork activities (e.g., grading, trenching, or augering) cut into the geologic formations within which fossils are buried and physically destroy the fossil remains. As such, only earthwork activities that would disturb potentially fossil-bearing geologic units (i.e., those rated with a moderate or high paleontological resource sensitivity) have the potential to significantly impact paleontological resources.

Table 1. Summary of paleontological resource sensitivity rankings and criteria used by the City of San Diego.

Paleontological Resource Sensitivity Ranking	Assessment Criteria
High resource sensitivity	High resource potential and high sensitivity are assigned to geologic formations known to contain paleontological localities with rare, well preserved, critical fossil materials for stratigraphic or paleoenvironmental interpretation, and fossils providing important information about the paleoclimatic, paleobiological and/or evolutionary history (phylogeny) of animal and plant groups. In general, formations with high resource potential are considered to have the highest potential to produce unique invertebrate fossil assemblages or unique vertebrate fossil remains and are, therefore, highly sensitive.
Moderate resource sensitivity	Moderate resource potential and moderate sensitivity are assigned to geologic formations known to contain paleontological localities. These geologic formations are judged to have a strong, but often unproven, potential for producing unique fossil remains.
Low resource sensitivity	Low resource potential and low sensitivity are assigned to geologic formations that, based on their relatively young age and/or high-energy depositional history, are judged unlikely to produce unique fossil remains. Low resource potential formations rarely produce fossil remains of scientific significance and are considered to have low sensitivity. However, when fossils are found in these formations, they are often very significant additions to our geologic understanding of the area.
No resource sensitivity	No resource potential is assigned to geologic formations that are composed entirely of volcanic or plutonic igneous rock, such as basalt or granite, and therefore do not have potential for producing fossil remains. These formations have no paleontological resource potential (i.e., they are not sensitive).

The City of San Diego's CEQA Significance Determination Thresholds (outlined in Section 1.4.2) were utilized in the impact analysis in combination with project-specific threshold adjustments to determine whether project-related impacts to paleontological resources are considered potentially significant and would require monitoring by a trained paleontologist. The impact analysis also includes a conceptual project-level discussion of the two near-term projects proposed under the CMP. Because detailed information regarding the depths and volumes of excavation associated with the proposed projects is not currently available for review, a mitigation framework is provided in Section 5.1 to analyze and properly mitigate impacts to paleontological resources once detailed project information is available.

3.0 Existing Conditions: Geologic Setting

The SDMC campus is located along the coastal plain of San Diego County, within the Peninsular Ranges Geomorphic Province of California. Along the coastal plain, crystalline basement rocks of the late Jurassic-age Peñasquitos Formation, the early Cretaceous-age Santiago Peak Volcanics, and the Cretaceous-age Peninsular Ranges Batholith are nonconformably overlain by a "layer cake" sequence of sedimentary strata of late Cretaceous, Eocene, Oligocene, Miocene, Pliocene, and/or Pleistocene age (Givens and Kennedy, 1979; Hanna, 1926; Kennedy, 1975; Kennedy and Moore, 1971; Kennedy and Peterson, 1975; Peterson and Kennedy, 1974; Walsh and Deméré, 1991; Kimbrough et al., 2014).

During the middle part of the Eocene, a large river delta formed at the base of coastal mountains and extended westward forming a broad coastal flood plain characterized from east to west by active and abandoned distributary channels, extensive marsh and estuarine habitats, nearshore barrier islands, and offshore continental shelf sea floors incised by deep submarine canyons. During the early and middle

Pleistocene, dramatic changes in global sea level related to the advance and retreat of continental ice sheets, combined with regional uplift created the flat mesas and deep valleys characteristic of the coastal San Diego region today. During interglacial periods of high sea level, marine transgressions (coastal flooding) led to wave-erosion of planar marine abrasion platforms (ancient seafloors) into the soft sedimentary rocks, and subsequent deposition of shallow marine and nonmarine sediments by prograding deltas from the east. During glacial periods of low sea level, marine regressions resulted in the carving out of deep river valleys by the west-flowing prehistoric rivers and streams of coastal San Diego County. Subsequent marine transgressions caused flooding of the ancient river valleys and the formation of estuaries and small bays, which were eventually filled in by alluvium transported from the east by local rivers and streams.

4.0 Results

4.1 Results of the Literature Review and Records Search

According to mapping by Kennedy and Tan (2008), the SDMC campus is primarily underlain by mesa-capping middle Pleistocene-age (approximately 855,000 years old) very old paralic deposits (equivalent to the Lindavista Formation), as well as the middle Eocene-age (approximately 44 to 42 million years old) Stadium Conglomerate, middle Eocene-age (approximately 46 to 45 million years old) Friars Formation, and middle Eocene-age (approximately 47 to 46 million years old) Scripps Formation, with late Pleistocene- to Holocene-age (less than 129,000 years old) young alluvial flood plain deposits mapped along low-lying drainages in the western portion of the campus (Figure 2). While not indicated on published geologic maps, artificial fill associated with previous construction activities is also anticipated to be present within the SDMC campus.

4.1.1 Summary of SDMC Campus Stratigraphy

The SDMC campus is situated on the level surface of the Lindavista Mesa, a geomorphic landform that was once continuous to the south with the broad San Diego Mesa and to the west with the narrow mesa surface forming the top of the Point Loma Peninsula. In all three areas the mesa surface is underlain by strata traditionally mapped by geologists as the Lindavista Formation. These strata were deposited in a transitional marine and nonmarine environment under shallow nearshore marine, coastal aeolian, and deltaic conditions (Kennedy, 1975). Underlying the Lindavista Formation and exposed in the walls of coastal valleys and canyons, including the canyons surrounding the SDMC campus to the north, west, and south, are three older geologic units deposited during the middle Eocene: the Stadium Conglomerate, Friars Formation, and Scripps Formation.

Kennedy and Moore (1971) divided the Eocene sedimentary sequence of coastal San Diego County into the early middle Eocene La Jolla Group and late middle Eocene Poway Group, which together include nine geologic units. These Eocene geologic units record a series of intertonguing marine and terrestrial paleoenvironments deposited in a large depositional basin (the ancient San Diego Embayment) that spanned a relatively short lateral distance (east to west). This depositional basin was actively accumulating sediments over a period of approximately 10 million years (50 to 40 million years ago). A large river system occupied the eastern portion of the area, and to the west, these alluvial and fluvial paleoenvironments mixed with nearshore marine paleoenvironments in a river-dominated delta. Farther west were continental shelf and slope paleoenvironments. A submarine canyon system that was eroded into the ancient continental shelf allowed large volumes of coarse sediment to bypass the continental shelf and feed a growing submarine fan system on the deep bathyal seafloor to the west (Abbott, 1999).

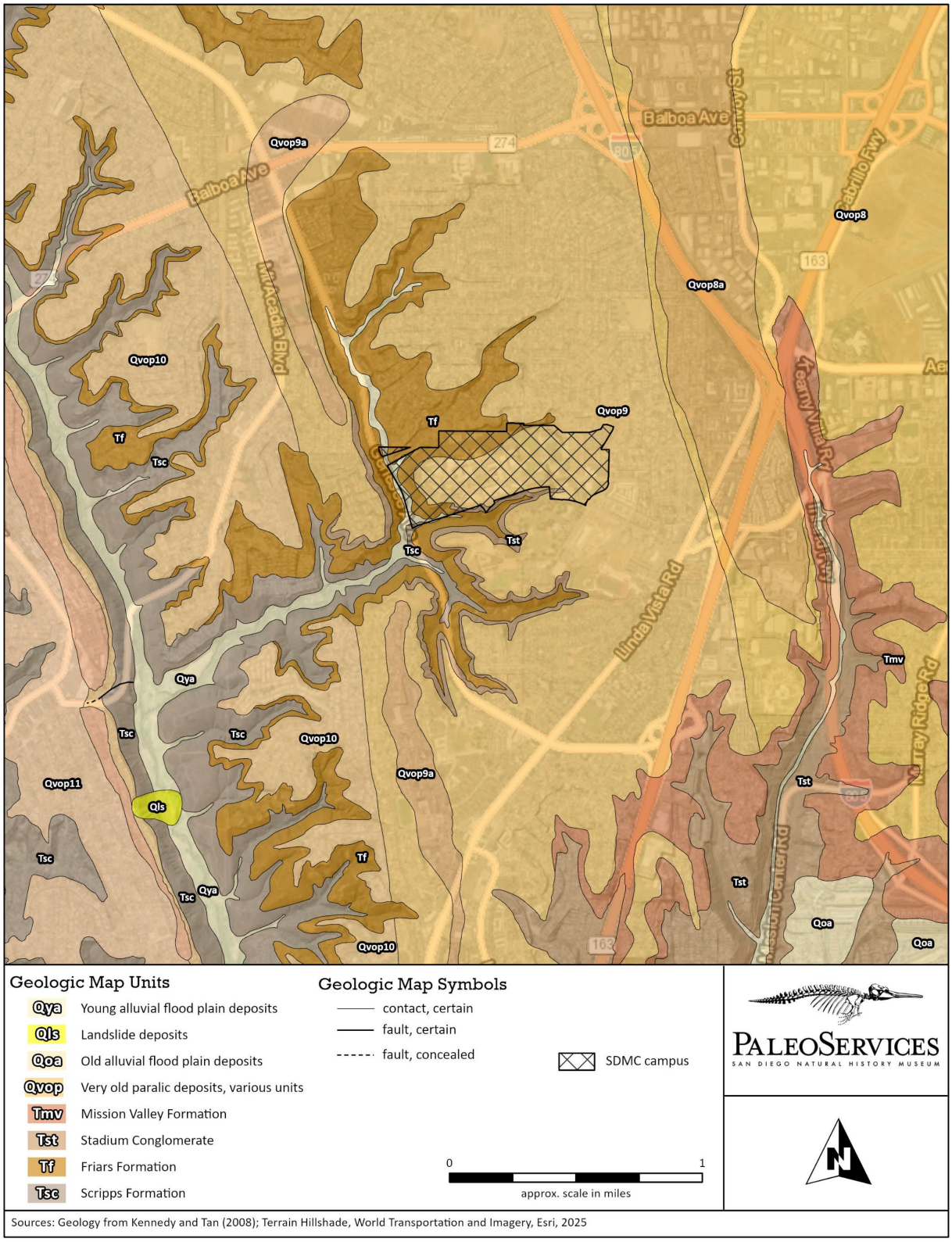


Figure 2. Geologic map of the SDMC campus, City of San Diego, California.

The Project site is located in the central portion of this Eocene depositional system, where the westward-flowing Eocene Ballena River met the paleo-shoreline of the ancient San Diego Embayment, depositing its fine-grained sediment load as well as cobble-sized clasts, during storm events, alongside nearshore marine sediments (Peterson and Kennedy, 1974).

Two geotechnical reports covering the Central Plant site (located north of the existing gym facilities) confirm the mapped geology (the Lindavista Formation) in this portion of the SDMC campus, along with the presence of unmapped artificial fill in this area (Ninyo & Moore, 2008, 2009). These reports characterized the Lindavista Formation here as consisting of brown to reddish brown, moderately cemented, fine-grained clayey sandstone to conglomerate with varying amounts of gravel and cobbles (Ninyo & Moore, 2008, 2009). Artificial fill measuring between 1 and 9 feet thick was observed in several borings in the vicinity of the Central Plant site (Ninyo & Moore, 2008, 2009). No other geotechnical reports covering the SDMC campus were available for review.

4.1.2 Summary of Known Paleontological Resources

A search of the SDNHM paleontological collections database identified 20 fossil localities within a one-mile radius of the SDMC campus, none of which are located within the campus itself. Of these, one locality is from the Lindavista Formation, one locality is from the Stadium Conglomerate, one locality is from undivided deposits of the Stadium Conglomerate and Mission Valley Formation, two localities are from the Friars Formation, and five localities are from the Scripps Formation. These localities are discussed below. The remaining 10 localities are from geologic units that do not appear to underlie the SDMC campus (the San Diego Formation and Mission Valley Formation), and are not discussed further. A list and map (Figure A1) of the localities are included in Confidential Appendix A.

Lindavista Formation: The SDNHM has one recorded fossil locality from the Lindavista Formation within a one-mile radius of the SDMC campus. This locality produced casts of very large burrows of rock boring piddock clams. Fossil localities are generally rare within the Lindavista Formation, but have produced remains of nearshore marine invertebrates (e.g., clams, scallops, snails, barnacles, and sand dollars) and sparse remains of sharks and baleen whales (Kennedy, 1973; Deméré and Walsh, 1993).

Stadium Conglomerate: The SDNHM has one recorded fossil locality from the Stadium Conglomerate and one locality assigned to the undifferentiated Stadium Conglomerate and Mission Valley Formation located within a one-mile radius of the SDMC campus. These localities produced fossil remains of vascular plants, marine invertebrates (e.g., clams, snails), and trace fossils (sponge borings). Scattered but significant occurrences of terrestrial fossils are known from the Stadium Conglomerate—most notably, diverse assemblages of terrestrial mammals, including opossums, insectivores, bats, rodents, primates, carnivores, artiodactyls, and perissodactyls (Golz and Lillegraven, 1977; Walsh, 1996, 2010). Mammalian remains from the basal portion of the unit are particularly important, as they have yielded an unusual assemblage of mammals that is transitional between the early Uintan and late Uintan North American Land Mammal Ages (NALMAs) (e.g., Walsh, 1996). Remains of terrestrial plants are also known from the Stadium Conglomerate, as well as scarce occurrences of marine fossils near the base and within the uppermost exposures of the unit (Milow and Ennis, 1961; Walsh et al., 1996).

Friars Formation: The SDNHM has two recorded fossil localities from the Friars Formation located within a one-mile radius of the SDMC campus. These localities produced fossil remains of flowering plants, marine invertebrates (e.g., clams and snails), and terrestrial vertebrates (e.g., reptiles, opossums, insectivores, rodents, and primates). A diverse assemblage of fossil mammals has been recovered from the Friars Formation in San Diego (as documented by Golz, 1976; Golz and Lillegraven, 1977; Novacek and Lillegraven, 1979; Stock, 1934; Walsh, 1991, 1996, 1997, 1998, 2000, 2010; Wilson, 1940a,b), including insectivores (Walsh, 1998), primates (Gunnell, 1995; Rasmussen et al., 1995; Rose et al., 1999;

Atwater and Kirk, 2018), rodents (Walsh, 1997, 2010), creodonts (Tomiya, 2011), carnivorans (Wesley and Flynn, 2003; Tomiya, 2013), brontotheres (Mihlbachler and Deméré, 2009), tapirs (Colbert, 2006), and artiodactyls (Theodor, 1999; Walsh, 2000). The Friars Formation has also produced well-preserved marine invertebrate assemblages dominated by species of warm water, shallow marine mollusks (Givens and Kennedy, 1979; Squires and Deméré, 1991), as well as localized concentrations of petrified wood and leaf compressions (Deméré and Walsh, 1993).

Scripps Formation: The SDNHM has five recorded fossil localities from the Scripps Formation located within a one-mile radius of the SDMC campus. These localities produced fossil remains of marine invertebrates (e.g., clams, snails, and scaphopods). The Scripps Formation is known to be rich with fossil remains of marine organisms almost everywhere it is exposed. Significant paleontological resources that have been recovered from the Scripps Formation include fossils of benthic and neritic marine organisms such as foraminifers, clams, snails, crabs, sea urchins, sharks, rays, and bony fishes (Givens and Kennedy, 1976, 1979), although remains of crocodilians, turtles, and land mammals have also been recovered (Golz and Lillegraven, 1977; Walsh, 1991). In addition, well-preserved specimens of fossil wood and leaves of subtropical land plants have been found in the Scripps Formation (Deméré and Walsh, 1993).

4.2 Results of the Paleontological Resource Assessment

Previously placed artificial fill is assigned no paleontological resource sensitivity based on the lack of original geographic and stratigraphic context associated with fossils that may be present within these deposits. Young alluvial flood plain deposits are assigned a low paleontological resource sensitivity due to their relatively young geologic age and the recognition that any contained organic remains are likely conspecific with organisms inhabiting the area today. The Lindavista Formation is assigned a moderate paleontological resource sensitivity based on the sparse distribution of primarily marine invertebrate fossils recovered from this geologic unit. The Stadium Conglomerate, Friars Formation, and Scripps Formation are assigned a high paleontological resource sensitivity based on the documented occurrence of diverse marine invertebrate and vertebrate fossil assemblages preserved within these geologic units. These paleontological resource potential ratings are summarized in Table 2 and their general extent is depicted in Figure 3 (mapped geologic units only).

Table 2. Summary of geologic units underlying the SDMC campus and their paleontological resource potential ratings.

Geologic Unit	Age	Paleontological Resource Sensitivity
Artificial fill	Recent	No/zero resource sensitivity
Young alluvial flood plain deposits	Late Pleistocene to Holocene	Low resource sensitivity
Lindavista Formation	Middle Pleistocene	Moderate resource sensitivity
Stadium Conglomerate	Middle Eocene	High resource sensitivity
Friars Formation	Middle Eocene	High resource sensitivity
Scripps Formation	Middle Eocene	High resource sensitivity

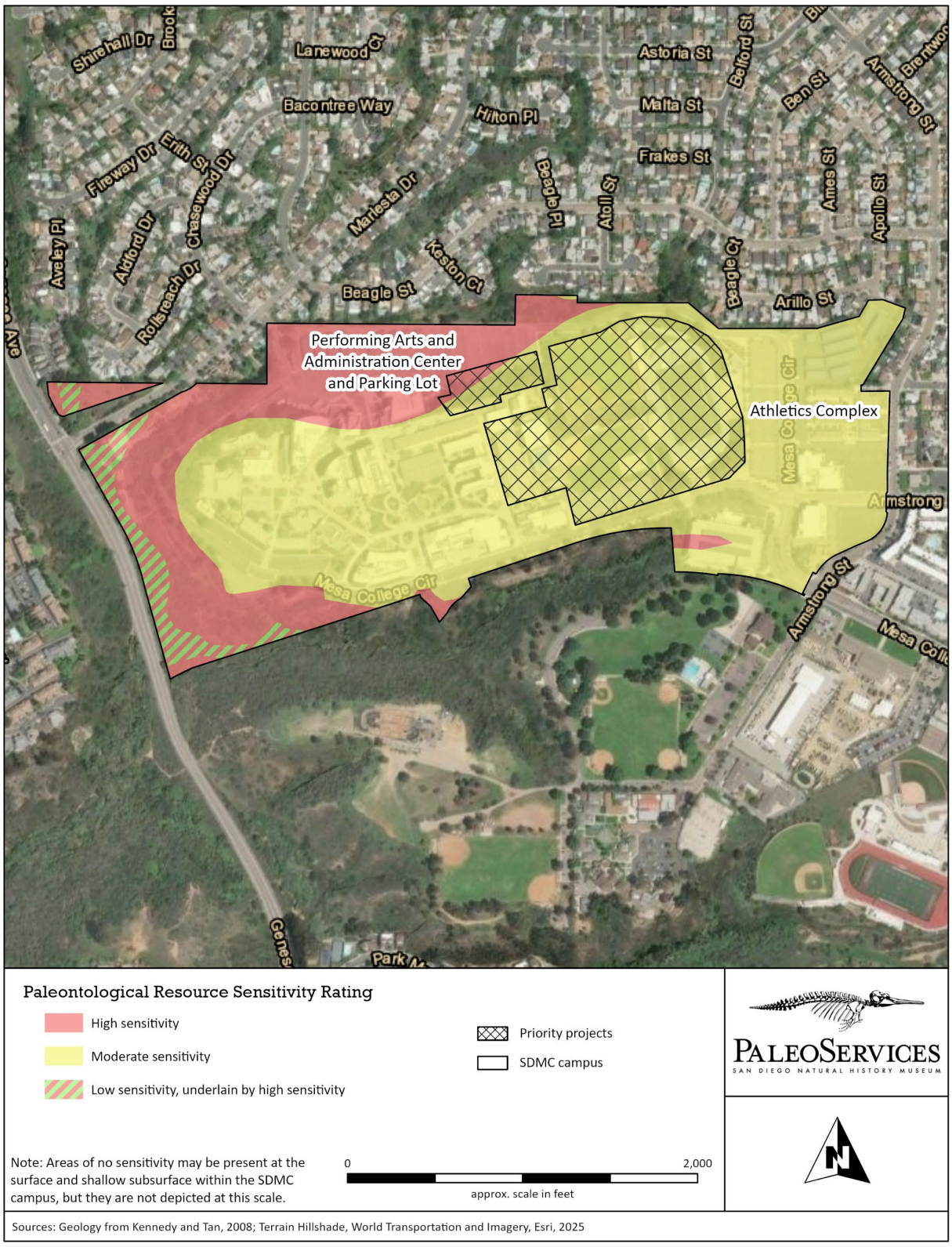


Figure 3. Paleontological resource sensitivity map of the SDMC campus, City of San Diego, California.

4.3 Results of the Paleontological Impact Analysis

The SDMC campus is primarily underlain by geologic units assigned a moderate paleontological resource sensitivity (Lindavista Formation) and high paleontological resource sensitivity (the Stadium Conglomerate, Friars Formation, and Scripps Formation), with some areas additionally underlain at the surface by unmapped geologic units assigned no paleontological resource sensitivity (previously placed fill deposits) or low paleontological resource sensitivity (young alluvial flood plain deposits). Only excavation activities within previously undisturbed deposits of the Lindavista Formation, Stadium Conglomerate, Friars Formation, or Scripps Formation have the potential to result in impacts to paleontological resources.

Improvements proposed under the SDMC CMP include replacement of existing aging facilities with new modern facilities, improvements to utility infrastructure and circulation, and interior renovations and minor construction at existing campus buildings:

- Generally, demolition of existing facilities would not require significant ground impacts to previously undisturbed bedrock deposits—most earthwork is anticipated to impact previously placed artificial fill that was imported during original construction of the facilities.
- Construction of replacement facilities is anticipated to involve ground disturbing activities such as grading to create level building pads, excavation for shallow and deep foundations, trenching for subgrade utilities, and borehole augering for foundations and retaining walls.
- Improvements to utility infrastructure and roads may involve minor grading, borehole augering for utility poles, and trenching for subgrade pipelines or electrical lines.
- Interior renovations and most minor construction occurring at existing campus buildings are not likely to result in significant ground disturbance, but the specific details of each project would need to be evaluated on a case-by-case basis.

For future projects proposed under the CMP, a mitigation framework is provided in Section 5.1 to evaluate and properly mitigate potential impacts to paleontological resources. The two short-term priority projects are not yet in the design stage and therefore precise construction plans and details about proposed locations, depths, volumes, and methods of excavation are not currently available for review. A preliminary impact analysis is provided below given these limitations.

4.3.1 Athletics Complex Project

No previously prepared geotechnical reports covering the proposed Athletics Complex site were available for review. Published geologic maps covering this area indicate that the project site is underlain by strata of the Lindavista Formation, which are in turn underlain by the Stadium Conglomerate and/or Friars Formation. It is assumed that previously placed artificial fill associated with construction of existing fields and facilities is likely present as well.

As described in Section 1.1.1, this project is anticipated to involve demolition of existing athletics facilities (the existing gym, Physical Education building, and pool), removal and replacement of associated site utilities, construction of a new gym building (including dance studios, athletic training spaces, office, study areas, locker rooms, team rooms, equipment storage, and stadium support spaces such as press areas and concessions), construction of a new pool complex and beach volleyball courts, relocation of the softball field, practice fields, and track and field event spaces. The existing baseball field would also be reconfigured, remaining generally in its existing location, and the field house located between the baseball field and stadium would be replaced. Demolition of the existing athletics facilities

and removal of site utilities are anticipated to primarily impact previously placed artificial fill and are considered unlikely to significantly impact previously undisturbed deposits of the Lindavista Formation, Stadium Conglomerate, or Friars Formation. However, construction of the new gym and athletics complex, construction of the new pool complex and beach volleyball courts, and replacement of site utilities would likely involve site grading to prepare level building pads, excavation of footings, trenching, and other subgrade improvements that are anticipated to impact previously undisturbed deposits of the Lindavista Formation, Stadium Conglomerate, and/or Friars Formation. **Therefore, construction of the Athletics Complex project has the potential to result in impacts to paleontological resources.**

4.3.2 Performing Arts and Administration Center and Parking Structure Project

Geotechnical reports prepared for the Central Plant site (located just south of the proposed parking structure) confirm that the upper portion of the hillside within the proposed Performing Arts and Administration Center and Parking Structure site is directly underlain by the Lindavista Formation, as well as limited volumes of previously placed artificial fill (Ninyo & Moore, 2008, 2009). Based on the maximum observed depth of the Lindavista Formation in these borings, it assumed that the Friars Formation underlies the Lindavista Formation at depths greater than 15 feet below the ground surface (as measured from the top of the mesa) and is present at shallower depths or near the surface further downslope to the north (see areas symbolized in red in Figure 3). No borings were advanced in areas mapped as the Friars Formation.

This project is anticipated to involve partial demolition of an existing surface parking lot, mass excavation of the adjacent hillside to produce a level building pad, subgrade preparation, installation of site utilities, construction of a new Performing Arts and Administration Center, and construction of a new multi-story parking structure. Demolition of the existing surface parking lot is anticipated to primarily impact previously placed asphalt base, and is considered unlikely to significantly impact previously undisturbed deposits of the Lindavista Formation or Friars Formation. However, construction of the new Performing Arts Center and new parking garage and replacement of site utilities would likely involve site grading to prepare a level building pad (including shored excavation of the hillside in this area), excavation of footings, trenching, and other subgrade improvements that are anticipated to impact previously undisturbed deposits of the Lindavista Formation and Friars Formation. **Therefore, construction of the Performing Arts and Administration Center and Parking Structure project has the potential to result in impacts to paleontological resources.**

5.0 SDMC Comprehensive Master Plan Mitigation Framework

Consistent with the City of San Diego's Significance Determination Thresholds being applied for this project, potential impacts to paleontological resources are considered significant if a project would require over 1,000 cubic yards of excavation in a high resource sensitivity geologic deposit/formation/rock unit, over 2,000 cubic yards of excavation in a moderate resource sensitivity geologic deposit/formation/rock unit, or if excavation would occur on or near a previously documented fossil recovery site (i.e., within 100 feet of an existing fossil collection locality). While the city typically also employs a 10-foot depth threshold for required paleontological monitoring, because the SDMC campus has been previously graded, this depth threshold is not recommended for evaluating the potential impacts of proposed projects under the SDMC CMP. In its place, a project-specific depth threshold based on the depth of artificial fill in proposed areas of excavation may be defined upon review of site-specific geotechnical data.

If a project proposed under the SDCC CMP would exceed the city's defined thresholds of significance (i.e., if a project would require over 1,000 cubic yards of excavation in a high resource sensitivity geologic deposit/formation/rock unit, or if excavation would occur on or within 100 feet of an existing fossil collection locality), then impacts to paleontological resources are deemed to be potentially significant and construction monitoring would be required.

The following mitigation framework is provided to guide review of near-term and future projects proposed under the SDMC CMP.

5.1 Mitigation Framework for Future Projects

5.1.1 Impact Significance Determination

Implementation of the CMP, including development of individual near-term projects, would involve a variety of ground-disturbing activities, including grading, excavating, and trenching. The potential for encountering significant paleontological deposits or features during construction activities is considered moderate to high given that the SDMC campus is located within areas classified as having a moderate to high paleontological sensitivity. Therefore, the potential for destruction and loss of paleontological resources would be considered a potentially significant impact for near-term and future projects pursuant to the CMP.

5.1.2 Proposed Mitigation Measures

The following mitigation measures are designed to reduce potentially significant impacts to paleontological resources associated with projects proposed under the SDMC CMP. The steps outlined below are based on established industry best practices (SVP, 2010, 2025; Murphey et al., 2019). Implementation of the mitigation measures detailed below would reduce project-related impacts to paleontological resources to less-than-significant levels.

Mitigation Measure (MM) PALEO-1. Initial Project Review.

Project grading plans for projects located within previously undisturbed moderate or high sensitivity areas (Lindavista Formation, Stadium Conglomerate, Friars Formation, and/or Scripps Formation) shall be reviewed to determine the total cut volume associated with construction of the project. If available, a project-specific geotechnical investigation report shall be consulted to determine where and at what depths these geologic units would be impacted. In the absence of site-specific geotechnical data, it shall be assumed that unweathered deposits of the Lindavista Formation, Stadium Conglomerate, Friars Formation, and/or Scripps Formation are present at depths of 2 feet or more below existing grade. Finally, if a paleontological records search has not been conducted within one year of proposed project construction, an updated paleontological records search shall be requested from the SDNHM to determine whether there are documented fossil collection localities present within or within 100 feet of the site.

Based on the results of the above review, one of the following scenarios shall apply:

- If the total cut volume exceeds 1,000 cubic yards in a high resource sensitivity geologic deposit/formation/rock unit or exceeds 2,000 cubic yards of excavation in a moderate resource sensitivity geologic deposit/formation/rock unit and excavation would exceed the project-specific depth threshold determined above, implementation of **MM PALEO-2** and **MM PALEO-3** shall be required.
- If the total cut volume is less than 1,000 cubic yards in a high resource sensitivity geologic deposit/formation/rock unit and less than 2,000 cubic yards of excavation in a moderate

resource sensitivity geologic deposit/formation/rock unit and excavation would exceed the project-specific depth threshold determined above and the project occurs on or within 100 feet of an existing fossil locality, implementation of **MM PALEO-2** and **MM PALEO-3** shall be required.

- If the total cut volume exceeds 1,000 cubic yards in a high resource sensitivity geologic deposit/formation/rock unit or exceeds 2,000 cubic yards of excavation in a moderate resource sensitivity geologic deposit/formation/rock unit and excavation would not exceed the project-specific depth threshold determined above (regardless of proximity to existing fossil localities), implementation of MM PALEO-4 shall be required.
- If the total cut volume is less than 1,000 cubic yards in a high resource sensitivity geologic deposit/formation/rock unit and less than 2,000 cubic yards of excavation in a moderate resource sensitivity geologic deposit/formation/rock unit and the project does not occur on or within 100 feet of an existing fossil collection locality (regardless of excavation depth), implementation of MM PALEO-4 shall be required.

MM PALEO-2. Monitoring.

Prior to the commencement of construction, a qualified Project Paleontologist shall be retained by SDCCD or its Designated Representative(s) to oversee the mitigation program (a Project Paleontologist is a person with a Ph.D. or Master's Degree in Paleontology or related field, and who has knowledge of San Diego County paleontology and documented experience in professional paleontological procedures and techniques). In addition, a regional fossil repository shall be designated to receive discovered fossils (because the Project is in the County of San Diego, the recommended repository is the San Diego Natural History Museum). The Project Paleontologist shall review available geotechnical data and project construction plans prior to the start of monitoring to determine precisely where and at what depths paleontological monitoring should occur.

The Project Paleontologist or a designated representative shall attend the Project pre-construction meeting to consult with the grading and excavation contractors and environmental and engineering staff concerning excavation schedules, paleontological monitoring requirements and field techniques, and safety issues.

A paleontological monitor (working under the direction of the Project Paleontologist) shall be on-site on a full-time basis during all earthwork impacting previously undisturbed deposits of the Stadium Conglomerate, Friars Formation, or Scripps Formation and on a part-time basis during earthwork impacting previously undisturbed deposits of the Lindavista Formation to inspect exposures for unearthed fossils. Monitoring should include testing for the presence of microfossils, which can be accomplished by collecting and screenwashing test samples of potentially fossil-bearing sediment, as deemed appropriate by the Project Paleontologist. Monitoring may be reduced or terminated at the discretion of the Project Paleontologist based on the results of initial monitoring.

If no fossils are discovered during monitoring, an abbreviated summary report shall be prepared at the completion of monitoring and submitted to SDCCD to signal completion of the mitigation program.

MM PALEO-3. Treatment of Fossil Discoveries.

If fossils are discovered, the Project Paleontologist (or paleontological monitor) shall evaluate their significance, document, and recover them. In most cases, fossil recovery can be completed in a short period of time. However, some fossil specimens (e.g., a partial or complete large mammal skeleton) may require an extended salvage period. In these instances, the Project Paleontologist (or paleontological monitor) has the authority to temporarily direct, divert, or halt earthwork within 50 feet of the discovery site to allow recovery of fossil remains in a timely manner.

Fossil remains collected during monitoring and salvage shall be cleaned, repaired, sorted, identified, and catalogued as part of the mitigation program. Prepared fossils, along with copies of all pertinent field notes, photos, and maps, shall be deposited (as a donation) in the designated fossil repository. Fossils shall be deposited in the designated fossil repository within 90 days of completion of monitoring unless the Project Paleontologist determines that more time is required to prepare, stabilize, and/or curate the recovered fossils and communicates this revised timeline to SDCCD and the designated fossil repository. Donation of the fossils shall be accompanied by financial support for initial specimen storage, provided by SDCCD or its Designated Representative(s).

If fossils were discovered and salvaged during monitoring, an expanded summary report shall be prepared in place of the abbreviated summary report required under MM PALEO-2. The report shall detail the results of the mitigation program, and shall include discussions of the methods used, stratigraphic section(s) exposed, recovered fossils and their significance, and an inventory list of catalogued fossils. The summary report shall be submitted to the designated fossil repository and to SDCCD to signal completion of the mitigation program.

MM PALEO-4. Unanticipated Fossil Discoveries.

If fossils are discovered during construction when a paleontological monitor is not on site (i.e., during earthwork that was not anticipated to encounter paleontological resources), a 50-foot buffer shall be established around the discovery site and work shall cease in this area. The construction contractor shall contact SDCCD and SDCCD shall contact a qualified Project Paleontologist to evaluate the discovery and its significance. The Project Paleontologist shall recommend whether further mitigation (i.e., monitoring of remaining earthwork and treatment of the fossil discovery, as outlined in MM PALEO-2 and MM PALEO-3) is required. The Project Paleontologist shall document their recommendation in a memo submitted to SDCCD, after which work may resume in the location of the discovery.

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Appendix H

Noise Technical Report

HELIX Environmental Planning

Mesa College Comprehensive Master Plan

Noise Technical Report

August 2026 | 01737.00004.003

Prepared for:

San Diego Community College District
1450 Frazee Road, Suite 500
San Diego, CA 92108

Prepared by:

HELIX Environmental Planning, Inc.
7578 El Cajon Boulevard
La Mesa, CA 91942

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TABLE OF CONTENTS

Section **Page**

EXECUTIVE SUMMARY ES-1

1.0 INTRODUCTION 1

1.1 Project Location 1
1.1.1 Existing Campus Development 1
1.2 Project Description 1
1.2.1 Near-Term Projects 2
1.3 Noise Descriptors and Terminology 3
1.3.1 Noise Descriptors 3
1.3.2 Noise Terminology 3
1.4 Ground-borne Vibration Descriptors and Terminology 4
1.5 Noise and Vibration Sensitive Land Uses 5

2.0 ENVIRONMENTAL SETTING 5

2.1 Existing Noise Environment 5
2.1.1 Noise Survey 6

3.0 REGULATORY FRAMEWORK 7

3.1 Federal 7
3.1.1 Federal Transit Administration 7
3.2 State 7
3.2.1 California Noise Control Act 7
3.2.2 California Building Standards Code 8
3.2.3 Assembly Bill 1307 9
3.3 Regional 9
3.3.1 Airport Land Use Compatibility Plans 9
3.4 District 10
3.4.1 District Design Guidelines and Standards Manual 10
3.5 Local (Non-Regulatory) 12
3.5.1 City of San Diego General Plan, Noise Element 12
3.5.2 City of San Diego Municipal Code 14

4.0 METHODOLOGY, ASSUMPTIONS, AND THRESHOLDS OF SIGNIFICANCE 15

4.1 Methodology 15
4.1.1 Noise Modeling Software 15
4.2 Assumptions 16
4.2.1 Temporary Sources 16
4.2.2 Permanent Sources 16
4.3 Guidelines for the Determination of Significance 19
4.3.1 Increase in Ambient Noise Levels 19
4.3.2 Ground-borne Vibration 20
4.3.3 Airport Noise Exposure 21

TABLE OF CONTENTS (cont.)

Section **Page**

5.0 IMPACT ANALYSIS 21

5.1 Issue 1: Increase in Ambient Noise Levels 21
5.1.1 Impacts 21
5.1.2 Level of Significance Prior to Mitigation 26
5.1.3 Mitigation Measures 27
5.1.4 Level of Significance After Mitigation 29
5.2 Issue 2: Ground-borne Vibration 29
5.2.1 Impacts 29
5.2.2 Level of Significance Prior to Mitigation 31
5.2.3 Mitigation Measures 32
5.2.4 Level of Significance After Mitigation 33
5.3 Issue 3: Airport Noise Exposure 33
5.3.1 Impacts 33
5.3.2 Level of Significance Prior to Mitigation 34

6.0 LIST OF PREPARERS 34

7.0 REFERENCES 35

LIST OF APPENDICES

A Noise Survey

LIST OF FIGURES

No. **Title** **Follows Page**

1 Regional Location 2
2 Aerial Photograph 2
3 Comprehensive Master Plan Facility Overview 2
4 Noise Measurement Locations 8

TABLE OF CONTENTS (cont.)

LIST OF TABLES

No.	Title	Page
1	Noise Measurement Results	6
2	Gypsum Board Design Requirements	11
3	City of San Diego Land Use Noise Compatibility Guidelines	12
4	City of San Diego Exterior Noise Limits	14
5	Roadway Segment Volumes	17
6	Federal Transit Administration Construction Vibration Building Damage Criteria	20
7	Construction Equipment Average Noise Levels	22
8	Traffic Noise Levels	24
9	Screening Distances by Vibration-Sensitive Receptor Type	30

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ACRONYMS AND ABBREVIATIONS

µPa	micro-Pascals
ADT	average daily trips
ALUCP	Airport Land Use Compatibility Plan
ANSI	American National Standards Institute
ASHRAE	American Society of Heating, Refrigerating and Air-Conditioning Engineers
ASTM	American Society for Testing and Materials
Caltrans	California Department of Transportation
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
City	City of San Diego
CMP	Mesa College Comprehensive Master Plan
CNEL	Community Noise Equivalent Level
County	County of San Diego
dB	decibel
dBA	A-weighted decibel
District	San Diego Community College District
FTA	Federal Transit Administration
GSF	gross square feet
HVAC	heating, ventilation, and air conditioning
Hz	hertz
I-	Interstate
in	inch
KPI	Key Performance Indicator
L_{DN}	Day Night sound level
L_{EQ}	time-averaged noise level
LLG	Linscott, Law, and Greenspan Engineers
L_V	vibration velocity level
MCAS	Marine Corps Air Station
mph	miles per hour
NSLU	noise-sensitive land use
OITC	Outdoor-Indoor Sound Transmission Class

ACRONYMS AND ABBREVIATIONS (cont.)

PPV	peak particle velocity
project	Mesa College Comprehensive Master Plan Project
sec	second
SPL	sound pressure level
SR	State Route
STC	Sound Transmission Class
SDCRAA	San Diego County Regional Airport Authority
TNM	Traffic Noise Model
VdB	vibration velocity in decibels

EXECUTIVE SUMMARY

This report assesses potential construction and operational noise and vibration impacts associated with the San Diego Community College District (District) Mesa College Comprehensive Master Plan Project (CMP or project). The campus is located within the City of San Diego (City) and currently hosts approximately 50 permanent buildings, containing approximately 1.3 million gross square feet. The CMP recommends a series of physical improvements across the Mesa College campus which would generally demolish existing aging facilities on the campus and replace them with more modern facilities that accommodate existing programming and enrollment growth. The Athletics Complex and Performing Arts and Administration Center and Parking Structure projects are anticipated to be designed and constructed in the near term and are discussed and analyzed in more detail in this report as more information is available.

Construction of the CMP, including the near-term projects, would require the use of heavy construction equipment. Noise from heavy construction equipment would not exceed applicable thresholds with implementation of mitigation measure NOI-1, which requires various construction noise reduction measures if project construction is located within established screening distances from noise-sensitive land uses. Temporary construction noise impacts would be less than significant with mitigation incorporated. Special events at the Mesa College campus such as athletic events and outdoor student gatherings would produce temporary noise levels but would not substantially increase temporary noise levels above existing conditions; therefore, temporary noise impacts would be less than significant.

On-site operational noise sources associated with the CMP would include heating, ventilation, and air conditioning (HVAC) units, a linear generator, and parking garages. Noise associated with HVAC units and the linear generator could exceed applicable thresholds. With implementation of mitigation measure NOI-2, which would require a site-specific noise study and incorporation of recommended attenuation features to achieve applicable noise limits, impacts would be less than significant. Noise generated by the operation of parking garages would be less than significant without mitigation.

In addition, the future traffic noise levels with the addition of campus-related trips due to future on-campus growth would not exceed the compatibility levels identified for adjacent land uses and would not increase traffic noise levels by a perceptible amount. Impacts related to traffic noise would be less than significant.

Construction of the CMP, including the near-term projects, could result in ground-borne vibrations from operation of heavy construction equipment, particularly vibratory rollers. Mitigation measure NOI-3 would require vibratory equipment to be operated in static mode if feasible and, if not, implement vibration monitoring if a project is constructed within the identified screening distances for different vibration sensitive receptors. Construction vibration impacts would be less than significant with mitigation incorporated. Project operations would not be a substantial source of vibration and operational vibration impacts would be less than significant.

The project site is not located within the noise contours for any nearby airports. Therefore, persons residing or working in the project area would not be exposed to substantial noise from airports or aircraft. Impacts related to airport noise exposure would be less than significant.

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1.0 INTRODUCTION

This report assesses the potential noise and vibration impacts that would be associated with the San Diego Community College District (District) Mesa College Comprehensive Master Plan (CMP or project). The analysis includes a description of existing conditions in the project vicinity, overview of relevant regulations, and an assessment of potential impacts associated with project construction and operation. This report has been prepared to support environmental review in accordance with the California Environmental Quality Act (CEQA; California Public Resources Code Section 21000 et seq.) and CEQA Guidelines (California Code of Regulations, Title 14, Section 15000 et seq.).

1.1 PROJECT LOCATION

Mesa College is centrally located within the District in the Clairemont Mesa community of the City of San Diego (City) in the County of San Diego (County). Refer to Figure 1, *Regional Location*. The Clairemont Mesa community is generally bordered by Interstate (I-) 5 on the west, I-805 on the east, State Route (SR) 52 on the north, and the community of Linda Vista on the south. Clairmont Mesa is a suburban community characterized by single-family homes generally confined to the mesas formed by surrounding canyons and hillsides. The Mesa College campus is located in the southeastern portion of the Clairemont Mesa community, on an approximately 106-acre mesa. Refer to Figure 2, *Aerial Photograph*. It is generally surrounded by a mix of single-family and multi-family residential uses and on two sides by the Tecolote Canyon nature preserve. The campus is generally divided into upper, mid, and lower levels.

1.1.1 Existing Campus Development

The campus currently hosts approximately 50 permanent buildings, containing approximately 1.3 million gross square feet (GSF) and 590,000 assignable square feet. Seven temporary classroom buildings are currently located at the southwest corner of Parking Lot 1. The majority of the buildings are clustered on the upper level of the mesa and the mid to lower portions of campus are dedicated to athletic fields, additional instructional buildings, and parking.

1.2 PROJECT DESCRIPTION

Over the course of the 20-year buildout period anticipated for the CMP, student enrollment and associated staffing needs are anticipated to increase. Approximately 15,358 on-campus students are anticipated to attend Mesa College in 2045, an increase of 3,955 on-campus students compared to baseline (Fall 2025) conditions. In addition, approximately 2,745 employees would be required in 2045 to maintain the current staff-to-student ratio, which represents an increase of 707 employees compared to baseline conditions.

Based on current campus challenges and anticipated growth, the CMP recommends a series of physical improvement projects across the Mesa College campus. The improvements would generally replace aging facilities on the campus with more modern facilities that accommodate existing educational programming. The CMP is conceptual in nature and describes potential projects for the campus that would assist Mesa College in meeting its educational and programming goals. Specific project designs, building footprints, architectural details, circulation and parking improvements, infrastructure

alignments, and operational characteristics are expected to be refined during future planning and design phases. Specific improvement projects identified for development under the CMP include:

- Athletics Complex
- Performing Arts and Administration Center and Parking Structure
- English/English Language Acquisition/Student Resource Center replacement building
- Conference Center
- On-Campus Housing
- High School relocation
- Facilities Services relocation to dedicated area with loading and storage space
- New Welcome Center near eastern entrance
- Child Development Center relocation and expansion
- New Community Clinic
- West Entrance reconfiguration (Genesee Avenue and Marlesta Drive)

Campus-wide improvements related to utility infrastructure and circulation are also part of the CMP and could be implemented in coordination with the projects listed above or undertaken as campus-wide efforts. Interior renovations, continued maintenance, and other minor construction could also occur throughout existing campus buildings. The Athletics Complex and the Performing Arts and Administration Center and Parking Structure projects are anticipated to be designed and constructed in the near term and are described further below. Refer to Figure 3, *Comprehensive Master Plan Facility Overview*. No specific timing or phasing is identified for the remaining projects or campus-wide improvements. Therefore, the analysis in this report is provided at the program level for the overall CMP improvements but at the project level for the near-term projects as more information is available.

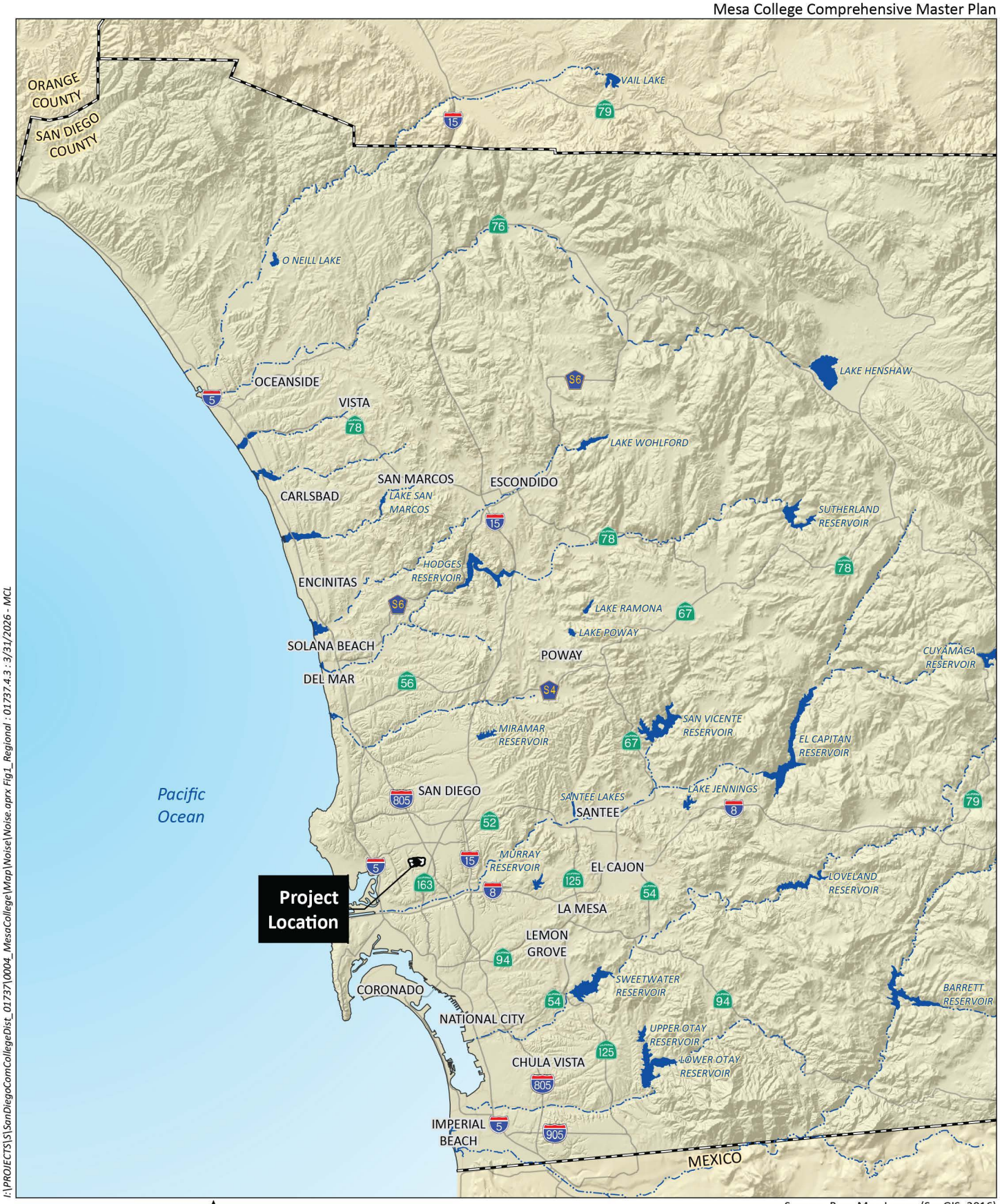
1.2.1 Near-Term Projects

1.2.1.1 Athletics Complex

A series of improvements is proposed to replace and reconfigure existing athletic, exercise science, and dance instructional and support spaces to improve connectivity and facility quality. The existing Pool, Upper Athletic Field, gym, and Physical Education building (L1) would be demolished.

The proposed reconfiguration would place a new three-court gym at the eastern end of the mesa top with two options for hillside extensions along the baseball field and stadium. In addition to court space, the approximately 175,000-GSF complex would include dance studios, athletic training spaces, offices, study areas, locker rooms, team rooms, weight rooms, classrooms, press boxes, ticketing/concessions and restrooms, stadium seating, and equipment storage space. Relocated and expanded pool complex, beach volleyball, softball field, and practice fields are proposed on the west side of the new gym building. These facilities would be accessible via the pedestrian network of pathways across campus. The existing baseball field would also be reconfigured, remaining generally in its existing location, and the field house located between the baseball field and stadium would be replaced. Lighting is also anticipated to be installed at existing and reconfigured fields to allow evening usage.

Areas for track and field events currently located on and adjacent to the Upper Athletic Field are proposed to be relocated to the area east of the stadium where high fencing would be provided to address safety concerns related to pedestrian movement.



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0 8 Miles

Source: Base Map Layers (SanGIS, 2016)

HELIX Environmental Planning

Regional Location

Figure 1



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0 700 Feet

Source: Aerial (Maxar 2025)

HELIX Environmental Planning

Aerial Photograph

Figure 2

THE FUTURE CAMPUS



Gensler

Mesa2030 | THE FUTURE CAMPUS | 5.4

Source: Gensler 2025

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1.2.1.2 Performing Arts and Administration Center and Parking Structure

A new multi-story, 140,000-GSF building is proposed on the north side of the mesa top and adjacent to the I-400 Student Services Center. The building would be constructed into the hillside and would therefore be accessible from both Lot 1 and the mesa level. A large main stage theater would occupy a portion of the building, with ground floor entry available from Lot 1. Theater support spaces would be constructed along the hillside while instructional labs and offices for Administration services would be located on the upper floors, accessible from the active plaza on the mesa level of campus. Programs in the proposed Performing Arts and Administration Center would be relocated from their location in original campus buildings on the west side of campus, and these buildings would be demolished or re-purposed when future construction in this area occurs.

A multi-story parking structure is proposed adjacent to the Performing Arts and Administration Center on the east. The structure would replace all parking displaced by the construction of the new Performing Arts Center and Administration Building and would similarly be constructed along the existing hillside with access from Lot 1, thereby improving access to large events at the Performing Arts and Administration Center and athletic fields.

1.3 NOISE DESCRIPTORS AND TERMINOLOGY

1.3.1 Noise Descriptors

All noise level or sound level values presented herein are expressed in terms of decibels (dB), with A-weighting (dBA) to approximate the hearing sensitivity of humans. Time-averaged noise levels are expressed by the symbol L_{EQ}, with a specified duration. The Community Noise Equivalent Level (CNEL) is a 24-hour average, where noise levels during the evening hours of 7:00 p.m. to 10:00 p.m. have an added 5 dBA weighting, and noise levels during the nighttime hours of 10:00 p.m. to 7:00 a.m. have an added 10 dBA weighting. This is similar to the Day Night sound level (L_{DN}), which is a 24-hour average with an added 10 dBA weighting on the same nighttime hours but no added weighting on the evening hours. Sound levels expressed in CNEL and L_{DN} are always based on dBA. These metrics are used to express noise levels for both measurement and municipal regulations, as well as for land use guidelines and enforcement of noise ordinances.

1.3.2 Noise Terminology

1.3.2.1 Sound, Noise, and Acoustics

Sound can be described as the mechanical energy of a vibrating object transmitted by pressure waves through a liquid or gaseous medium (e.g., air) to a hearing organ, such as a human ear. Noise is defined as loud, unexpected, or annoying sound. In the science of acoustics, the fundamental model consists of a sound (or noise) source, a receiver, and the propagation path between the two. The loudness of the noise source and obstructions or atmospheric factors affecting the propagation path to the receiver determine the sound level and characteristics of the noise perceived by the receiver. The field of acoustics deals primarily with the propagation and control of sound.

1.3.2.2 Frequency

Continuous sound can be described by frequency (pitch) and amplitude (loudness). A low-frequency sound is perceived as low in pitch. Frequency is expressed in terms of cycles per second, or Hertz (Hz) (e.g., a frequency of 250 cycles per second is referred to as 250 Hz). High frequencies are sometimes more conveniently expressed in kilohertz, or thousands of Hertz. The audible frequency range for humans is generally between 20 Hz and 20,000 Hz.

1.3.2.3 Sound Pressure Levels and Decibels

The amplitude of pressure waves generated by a sound source determines the loudness of that source. Sound pressure amplitude is measured in micro-Pascals (µPa). One µPa is approximately one hundred billionth (0.00000000001) of normal atmospheric pressure. Sound pressure amplitudes for different kinds of noise environments can range from less than 100 to 100,000,000 µPa. Because of this wide range of values, sound is rarely expressed in terms of µPa. Instead, a logarithmic scale is used to describe sound pressure level (SPL) in terms of dBA. The threshold of hearing for the human ear is about 0 dBA, which corresponds to 20 µPa.

1.3.2.4 Addition of Decibels

Because decibels are logarithmic units, SPL cannot be added or subtracted through standard arithmetic. Under the decibel scale, a doubling of sound energy corresponds to a 3 dBA increase. In other words, when two identical sources are each producing sound of the same loudness, the resulting sound level at a given distance would be 3 dBA higher than from one source under the same conditions. For example, if one automobile produces an SPL of 70 dBA when it passes an observer, two cars passing simultaneously would not produce 140 dBA – rather, they would combine to produce 73 dBA. Under the decibel scale, three sources of equal loudness together produce a sound level 5 dBA louder than one source.

Under controlled conditions in an acoustical laboratory, the trained, healthy human ear can discern 1 dBA changes in sound levels when exposed to steady, single-frequency (“pure-tone”) signals in the mid-frequency (1,000 Hz to 8,000 Hz) range. In typical noisy environments, changes in noise of 1 to 2 dBA are generally not perceptible. It is widely accepted; however, that people begin to detect sound level increases of 3 dBA in typical noisy environments. Further, a 5 dBA increase is generally perceived as a distinctly noticeable increase, and a 10 dBA increase is generally perceived as a doubling of loudness.

No known studies have directly correlated the ability of a healthy human ear to discern specific levels of change in traffic noise over a 24-hour period. Many ordinances, however, specify a change of 3 CNEL as the significant impact threshold. This is based on the concept of a doubling in noise energy resulting in a 3 dBA change in noise, which is the amount of change in noise necessary for the increase to be perceptible to the average healthy human ear.

1.4 GROUND-BORNE VIBRATION DESCRIPTORS AND TERMINOLOGY

Ground-borne vibration consists of rapidly fluctuating motions or waves transmitted through the ground with an average motion of zero. The rumbling sound caused by the vibration of room surfaces due to ground-borne vibration is called ground-borne noise. Ground-borne noise is highly dependent on the

characteristics of the structure subject to vibration. Therefore, this analysis focuses on ground-borne vibrations. Sources of ground-borne vibrations include natural phenomena and anthropogenic causes (e.g., explosions, machinery, traffic, trains, construction equipment). Vibration sources may be continuous (e.g., factory machinery) or transient (e.g., explosions).

Peak particle velocity (PPV) is defined as the maximum instantaneous positive or negative peak of the vibration wave. Decibels are also used to compress the range of numbers required to describe vibration. A vibration velocity level (L_V) with units of VdB (referenced to one-micro-inch per second velocity) is commonly used in evaluating human reactions to vibrations as it describes the "smoothed" vibration amplitude. For the purposes of this analysis, L_V with units of VdB is used to evaluate construction-generated vibration for building damage and human reactions.

1.5 NOISE AND VIBRATION SENSITIVE LAND USES

Noise-sensitive land uses (NSLUs) are land uses that may be subject to stress and/or interference from excessive noise, such as residential dwellings, schools, transient lodging (hotels), hospitals, educational facilities, and libraries. Industrial and commercial land uses are generally not considered sensitive to noise. Noise receptors are individual locations that may be affected by noise. The closest existing NSLUs to the campus include the single-family residences to the north and east of campus and the multi-family residential building to the east of campus, as well as the existing classroom buildings throughout campus (see Figure 2). In addition, the CMP would include the construction of additional classroom buildings and student housing, which would also be considered NSLUs.

Land uses in which ground-borne vibration could potentially interfere with operations or equipment, such as research, hospitals, and university research operations (California Department of Transportation [Caltrans] 2020), are considered "vibration-sensitive." The degree of sensitivity depends on the specific equipment that would be affected by the ground-borne vibration. In addition, excessive levels of ground-borne vibration of either a regular or an intermittent nature can result in annoyance to residential uses, schools, or transient lodging. Land uses in the vicinity of campus that are subject to annoyance from vibration include the residences described as NSLUs above. In addition, on-campus vibration-sensitive land uses include the existing Science and Allied Health Education buildings, which contain vibration-sensitive laboratory and medical imaging equipment. The proposed community clinic may be a future vibration-sensitive land use constructed on campus; its sensitivity would depend on the final equipment and uses involved in the clinic.

2.0 ENVIRONMENTAL SETTING

2.1 EXISTING NOISE ENVIRONMENT

The existing noise environment on campus is dominated by traffic noise from internal campus roadways such as Mesa College Circle, external City streets, noise from recreation uses on campus such as tennis courts and athletic fields, and typical college campus noise (e.g., landscape maintenance equipment, students and faculty speaking, etc.). There is some noise from small aircraft overflights in the project area, mostly associated with the Montgomery-Gibbs Executive Airport, which is located approximately one mile northeast of the campus. However, as discussed further in Section 5.3, the campus is outside of the noise contours associated with the Montgomery-Gibbs Executive Airport (San Diego County Regional Airport Authority [SDCRAA] 2010).

2.1.1 Noise Survey

Seven short-term (15-minute) noise measurements were taken on or near the campus to document ambient noise conditions in the vicinity. Traffic counts were taken during measurements along roadways (measurements 6 and 7) for passenger cars, medium trucks, buses, and heavy trucks that passed by the noise meter during the measurement. The measured noise levels and traffic counts, as applicable, are shown in Table 1, *Noise Measurement Results.* Measurement locations are shown on Figure 4, *Noise Measurement Locations*. The noise measurement survey sheets are included in Appendix A, *Noise Survey*, to this report.

Table 1
NOISE MEASUREMENT RESULTS

Measurement 1	
Date:	September 30, 2025
Time:	10:21 a.m. – 10:36 a.m.
Location:	North side of the entrance to Lot 2, 50 feet northeast of Mesa College Circle.
Measured Noise Level:	54.0 dBA L_{EQ}
Primary Noise Source(s):	Primarily traffic noise on internal streets, occasional light aircraft overflight, perceptible noise from baseball field.
Measurement 2	
Date:	September 30, 2025
Time:	10:50 a.m. – 11:05 a.m.
Location:	Southern edge of Lot 1, 120 feet east of Student Services Center I400 building.
Measured Noise Level:	53.3 dBA L_{EQ}
Primary Noise Source(s):	Primarily traffic noise on internal streets, occasional light aircraft overflight.
Measurement 3	
Date:	September 30, 2025
Time:	11:13 a.m. – 11:28 a.m.
Location:	Mesa Commons Quad, 110 feet south of K1 building.
Measured Noise Level:	52.6 dBA L_{EQ}
Primary Noise Source(s):	Noise associated with students and faculty walking and talking, minimal light aircraft overflight.
Measurement 4	
Date:	September 30, 2025
Time:	11:36 a.m. – 11:51 a.m.
Location:	50 feet east of Lot 8 entrance and 80 feet west of Center for Business and Technology building, north side of Mesa College Circle.
Measured Noise Level:	51.4 dBA L_{EQ}
Primary Noise Source(s):	Primarily traffic noise on internal streets, occasional light aircraft overflight.
Measurement 5	
Date:	September 30, 2025
Time:	12:04 p.m. – 12:19 p.m.
Location:	10 feet south of Exercise Science building and 75 feet west of tennis courts, north side of Mesa College Circle.
Measured Noise Level:	53.9 dBA L_{EQ}
Primary Noise Source(s):	Primarily traffic noise on internal streets, students walking by, and tennis court use.

Measurement 6	
Date:	September 30, 2025
Time:	12:38 p.m. – 12:53 p.m.
Location:	Northeast side of Mesa College Drive, 45 feet from roadway centerline. 15 feet from the Villa Mesa Apartments and 425 feet southeast of Lot 5.
Measured Noise Level:	64.7 dBA L_{EQ}
Primary Noise Source(s):	Primarily traffic noise associated with Mesa College Drive.
Traffic Count:	453 cars; 1 medium truck, 2 buses, 0 heavy trucks.
Measurement 7	
Date:	September 30, 2025
Time:	1:07 p.m. – 1:22 p.m.
Location:	North side of Marlesta Drive, 30 feet from roadway centerline. 560 feet southeast of campus entrance at Chasewood Way.
Measured Noise Level:	66.8 dBA L_{EQ}
Primary Noise Source(s):	Primarily traffic noise associated with Marlesta Drive.
Traffic Count:	116 cars; 2 medium trucks; 0 buses; 0 heavy trucks.

dBA = A-weighted decibel; L_{EQ} = time-averaged noise level

3.0 REGULATORY FRAMEWORK

3.1 FEDERAL

3.1.1 Federal Transit Administration

Multiple federal agencies have developed noise standards that apply to projects taken out by the applicable agency. While none of these federal noise laws, regulations, or policies for noise and vibration apply to the campus, aspects of the Federal Transit Administration (FTA) noise impact analysis framework have been used for guidance in the analysis of the project's potential impacts. The FTA's Transit Noise and Vibration Impact Assessment Manual (FTA 2018) provides technical guidance and standards for construction and operational sources of noise and vibration, including for specific vibration-sensitive land uses such as historic structures and laboratory settings. Specific impact assessment procedures and thresholds from the Transit Noise and Vibration Impact Assessment Manual are described further below where they are used in this report.

3.2 STATE

3.2.1 California Noise Control Act

The California Noise Control Act is a section within the California Health and Safety Code that describes excessive noise as a serious hazard to the public health and welfare and that exposure to certain levels of noise can result in physiological, psychological, and economic damage. It also finds that there is a continuous and increasing bombardment of noise in the urban, suburban, and rural areas. The California Noise Control Act declares that the State of California has a responsibility to protect the health and welfare of its citizens by the control, prevention, and abatement of noise. It is the policy of the State to provide an environment for all Californians free from noise that jeopardizes their health or welfare.

3.2.2 California Building Standards Code

The California Building Standards Code (California Code of Regulations [CCR] Title 24) establishes minimum building standards for structures throughout California to ensure public health, safety, and general welfare within the state's built environment. These standards are typically updated every 3 years. In 1974, the California Commission on Housing and Community Development adopted noise insulation standards for multi-family residential buildings (California Code of Regulations Title 24, Part 2). Title 24, Part 2, the California Building Code establishes standards for interior room noise (attributable to outside noise sources) in residential buildings. Non-residential building noise exposure is regulated in CCR Title 24, Part 11, commonly known as CALGreen, which provides the option to follow a prescriptive approach or achieve performance-based criteria. Specific sections of the California Building Standards Code applicable to the proposed project are provided in detail below.

3.2.2.1 Section 1206.2, Air-Borne Sound

Walls, partitions, and floor-ceiling assemblies separating dwelling units and sleeping units from each other or from public or service areas shall have an Sound Transmission Class (STC) of not less than 50 where tested in accordance with American Society for Testing and Materials (ASTM) E90, or have a Normalized Noise Isolation Class rating of not less than 45 if field tested, in accordance with ASTM E336 for air-borne noise. Alternatively, the STC of walls, partitions, and floor-ceiling assemblies shall be established by engineering analysis based on a comparison of walls, partitions, and floor-ceiling assemblies having STC ratings as determined by the test procedures set forth in ASTM E90. Penetrations or openings in construction assemblies for piping; electrical devices; recessed cabinets; bathtubs; soffits; or heating, ventilating or exhaust ducts shall be sealed, lined, insulated or otherwise treated to maintain the required ratings. This requirement shall not apply to entrance doors; however, such doors shall be tight fitting to the frame and sill.

3.2.2.2 Section 1206.3, Structure-Borne Sound

Floor-ceiling assemblies between dwelling units and sleeping units or between a dwelling unit or sleeping unit and a public or service area within the structure shall have an Impact Insulation Class rating of not less than 50 where tested in accordance with ASTM E492 or have a Normalized Impact Sound Rating of not less than 45 if field tested in accordance with ASTM E1007. Alternatively, the Impact Insulation Class of floor-ceiling assemblies shall be established by engineering analysis based on a comparison of floor-ceiling assemblies having Impact Insulation Class ratings as determined by the test procedures in ASTM E492.

Exception: Impact Insulation Class is not required for floor-ceiling assemblies over non-habitable rooms or spaces not designed to be occupied, such as garages, mechanical rooms, or storage areas.

3.2.2.3 Section 1206.4, Allowable Interior Noise Levels

Interior noise levels attributable to exterior sources shall not exceed 45 dB in any habitable room. The noise metric shall be either L_{DN} or CNEL, consistent with the noise element of the local general plan.

3.2.2.4 Section 5.507.4, Acoustical Control

Non-residential buildings are required to incorporate acoustical design measures that limit interior noise from exterior sources. To comply, building assemblies must meet specified STC or Outdoor-Indoor



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Source: Aerial (Maxar 2025)

HELIX Environmental Planning

Noise Measurement Locations

Figure 4

Sound Transmission Class (OITC) ratings which are verified using ASTM testing standards. Designers may follow either a prescriptive method by using minimum STC/OITC ratings for walls, windows, and building envelopes, or a performance method that demonstrates interior noise would not exceed 50 dBA L_{EQ}. When following the prescriptive approach, wall and roof-ceiling assemblies exposed to the noise source shall have a composite STC rating of at least 50 or a composite OITC rating of at least 40, with exterior windows of a minimum STC of 40 or OITC of 30 within the 65 CNEL noise contour of an airport, freeway, railroad, industrial, or other fixed-guideway source. Where noise contours are not readily available, buildings exposed to a noise level of 65 dBA L_{EQ} during any hour of operation shall have building, building addition, or alteration exterior wall and roof-ceiling assemblies exposed to the noise source meeting a composite STC rating of at least 45 (or OITC 35), with exterior windows of a minimum STC of 40 (or OITC 30). The performance method alternatively allows an acoustical analysis to document a combination of wall or window composition requirements and exterior site features to demonstrate that interior noise attributable to exterior sources would not exceed 50 dBA L_{EQ} in occupied areas during the facility's hours of operation.

The rule applies primarily to buildings located in high-noise environments (e.g., near airports, freeways, rail lines). Exceptions to this requirement include buildings with few or no occupants or where occupants are not likely to be affected by exterior noise, as determined by the enforcement authority, such as factories, stadiums, storage, enclosed parking structures, and utility buildings. The Division of the State Architect also specifies that for public schools and community colleges, this section applies only to new construction.

3.2.3 Assembly Bill 1307

Assembly Bill 1307 was approved by Governor Newsom on September 7, 2023, and added Section 21085 to the Public Resources Code relating to environmental quality. Public Resources Code Section 21085 states that, for residential projects, the effect of noise generated by project occupants and their guests on human beings is not a significant effect on the environment under CEQA.

3.3 REGIONAL

3.3.1 Airport Land Use Compatibility Plans

The SDCRAA, which acts as the Airport Land Use Commission for the County, maintains the Airport Land Use Compatibility Plans (ALUCPs) for the County's airports. The ALUCPs contain policies to regulate land use and development near airports, including noise compatibility considerations. Consideration of airport compatibility related to noise is intended to result in new development that is compatible with aircraft noise. Specifically, each ALUCP provides guidance to local agencies to limit new noise-sensitive development within the noise compatibility boundary, identifies sound attenuation goals for noise-sensitive development, and considers if avigation easements are necessary. The campus is within the Airport Influence Areas identified in the Montgomery-Gibbs Executive Airport (previously Montgomery Field; SDCRAA 2010) and the San Diego International Airport (SDCRAA 2025) ALUCPs but is not within the noise contours identified for either airport.

3.4 DISTRICT

3.4.1 District Design Guidelines and Standards Manual

The 2025 District Design Guidelines and Standards Manual (District 2025) was prepared for use by design professionals and construction teams during the planning and design phases of renovation and construction projects for the District. It outlines the design approach, space allocation, physical environment, materials, and system requirements applicable to District projects, and provides technical standards that the design and construction teams are expected to meet or exceed. The general criteria and standards provided in the Design Guidelines and Standards Manual apply to all campuses within the District, and specific requirements related to each campus are provided in individual campus guidelines and during the design process. Requirements related to noise and vibration are outlined below.

3.4.1.1 Sustainability Goals

Indoor/Outdoor Environmental Quality Goal 2: Improve indoor air quality and acoustics. **Key Performance Indicator (KPI):** Maintain indoor noise levels below 35 dB in classrooms and below 40 dB in shared spaces.

3.4.1.2 Sustainability Levels

The District has established a system of Sustainability Levels designed to recognize, measure, and promote sustainable practices across District campuses and facilities. It provides a tiered rating system that encourages environmentally responsible design, construction, and operations. However, as projects are scored across multiple categories and may choose from a variety of point-earning sustainability features to achieve each Sustainability Level, the exact features that would be incorporated into each future project is not known. Relative to noise, a project is awarded three points if it complies with American National Standards Institute (ANSI) S12.60-2010 acoustical performance standards, ensuring noise reduction, optimal speech intelligibility, and sound insulation in classrooms, offices, and shared spaces.

3.4.1.3 Design Guides & Standards

The District Design Guidelines and Standards Manual includes noise and vibration control criteria for all District projects in Section 2.1.3, noting that noise and vibration control is the combined responsibility of all design professionals and consultants and must be considered in the design of every building or space. Generally, noise control is required to be provided to ensure usefulness of the facility for the purposes for which the facility is designed whether that be studying, working, or socializing. Noise-producing equipment required for building operations should be designed to be located as far as possible from noise-sensitive areas such as classrooms. For specific guidance, the criteria note that noise control should be consistent with Occupational Safety and Health Administration requirements.

For rooms requiring acoustic control, additional criteria are provided to address specific finishes and design considerations such as caulking of plumbing features, installation of light fixtures, separation of doors and restrooms from these spaces, locations of operable windows, and door gaps. Where noise control is critical to the anticipated use, a post-construction sound test may also be required.

Vibration control is also required to be considered for proposed equipment that may have effects on vibration-sensitive equipment, such as projectors, as well as the building.

3.4.1.4 General Specifications

General specifications and product and material data are provided in Section 2.2 of the District Design Guidelines and Standards Manual. These are expected to be incorporated into the design of future District projects; however, design professionals may work with the District to include modifications to the general specifications via special conditions to meet specific site conditions and/or program needs. The following general specifications relate to noise or vibration.

Building Demolition

4. Environmental Compliance: Ensure compliance with local, state, and federal environmental regulations regarding dust control, noise, and vibration.

Selective Demolition

3. Dust and Noise Mitigation: Implement measures such as dust barriers, negative air pressure systems, and noise-dampening method.

Gypsum Board Design Requirements

1. Acoustical Performance & Sound Transmission
    a. Sound Transmission Classification must be evaluated for each space to enhance speech privacy and noise control.

2. Requirements

Table 2
GYPSUM BOARD DESIGN REQUIREMENTS

Use	Sound Transmission Class (STC)	Maximum Noise Transmitted (dB)
Private Offices	45-50	25-30
Conference Rooms	50-55	20-25
Classrooms	45-50	25-30
Laboratories	50-55	20-25
Mechanical/Electrical Rooms Adjacent to Occupied Spaces	55+	15-20
Corridors Adjacent to Offices/Classrooms	40-45	30-35

Source: District 2025
dB = decibel

Air Distribution Systems

Goals and Objectives

1. Air Supply System Requirements:
    a. Ensure the supply air to conditioned spaces is:
        iv. Delivered draft-free, maintaining a noise level below NC 35, per ASHRAE [American Society of Heating, Refrigerating and Air-Conditioning Engineers] guidelines.

System Acoustical Features

1. Noise Control Guidelines:
    a. Follow ASHRAE HVAC Applications Handbook, Chapter on Sound and Vibration Control, referencing "Design Guidelines for HVAC Noise in Occupied Spaces."
2. Equipment Placement Considerations:
    a. Locate noise-generating equipment such as compressors, fan coil units, exhaust fans, and pumps outside occupied spaces.
3. Duct Noise Control Measures:
    a. Utilize turning vanes, low-velocity duct design, and sound attenuation baffles/materials to minimize noise transmission.
4. Vibration Isolation:
    a. Ensure vibration-isolating connections between air handlers, ducts, and supporting structures are adequately installed.

3.5 LOCAL (NON-REGULATORY)

When developing a facility that furthers its educational objectives, a community college district may take action (a two-thirds vote) pursuant to Government Code Section 53094 to exempt a proposed project from the zoning ordinances of the jurisdiction in which the project is located. Therefore, local City of San Diego zoning and development regulations are not applicable to CMP development as implementation of the CMP would facilitate the education of community college students. However, the District may consider aspects of local plans and policies in evaluating potential impacts on the communities surrounding the campus when it is appropriate and feasible. As such, local regulations providing relevant noise and vibration guidance used in this report are summarized below.

3.5.1 City of San Diego General Plan, Noise Element

The Noise Element of the City's General Plan establishes noise compatibility guidelines for appropriate exterior noise levels at new land uses affected by traffic noise, as shown in Table 3, *City of San Diego Land Use Noise Compatibility Guidelines* (City 2024).

Table 3
CITY OF SAN DIEGO LAND USE NOISE COMPATIBILITY GUIDELINES

Land Use Category	Exterior Noise Exposure (CNEL)				
	<60	60-65	65-70	70-75	75+
Parks and Recreational					
Parks, Active and Passive Recreation					
Outdoor Spectator Sports, Golf Courses; Water Recreational Facilities; Indoor Recreation Facilities					
Agricultural					
Crop Raising & Farming; Community Gardens, Aquaculture, Dairies; Horticulture Nurseries & Greenhouses; Animal Raising, Maintain & Keeping; Commercial Stables					
Residential					
Single Dwelling Units; Mobile Homes		45			
Multiple Dwelling Units		45	45		

Land Use Category	Exterior Noise Exposure (CNEL)				
	<60	60-65	65-70	70-75	75+
Institutional					
Hospitals; Nursing Facilities; Intermediate Care Facilities; Kindergarten through Grade 12 Educational Facilities; Libraries; Museums; Child Care Facilities		45			
Other Educational Facilities including Vocational/Trade Schools and Colleges, and Universities		45	45		
Cemeteries					
Retail Sales					
Building Supplies/Equipment; Food, Beverages & Groceries; Pets & Pet Supplies; Sundries, Pharmaceutical, & Convenience Sales; Wearing Apparel & Accessories			50	50	
Commercial Services					
Building Services; Business Support; Eating & Drinking; Financial Institutions; Maintenance & Repair; Personal Services; Assembly & Entertainment (includes public and religious assembly); Radio & Television Studios; Golf Course Support			50	50	
Visitor Accommodations		45	45	45	
Offices					
Business & Professional; Government; Medical, Dental & Health Practitioner; Regional & Corporate Headquarters			50	50	
Vehicle and Vehicular Equipment Sales and Services Use					
Commercial or Personal Vehicle Repair & Maintenance; Commercial or Personal Vehicle Sales & Rentals; Vehicle Equipment & Supplies Sales & Rentals; Vehicle Parking					50
Wholesale, Distribution, Storage Use Category					
Equipment & Materials Storage Yards; Moving & Storage Facilities; Warehouse; Wholesale Distribution					50
Industrial					
Heavy Manufacturing; Light Manufacturing; Marine Industry; Trucking & Transportation Terminals; Mining & Extractive Industries					50
Research & Development				50	50

	Compatible	Indoor Uses	Standard construction methods should attenuate exterior noise to an acceptable indoor noise level.
		Outdoor Uses	Activities associated with the land use may be carried out.
45, 50	Conditionally Compatible	Indoor Uses	Building structure must attenuate exterior noise to the indoor noise level indicated by the number (45 or 50) for occupied areas, including residential habitable areas, commercial work/shopping areas, and office areas associated with industrial uses.
		Outdoor Uses	Feasible noise mitigation techniques should be analyzed and incorporated to make the outdoor activities acceptable.
	Incompatible	Indoor Uses	New construction should not be undertaken.
		Outdoor Uses	Severe noise interference makes outdoor activities unacceptable.

Source: City 2024
CNEL = Community Noise Equivalent Level

3.5.2 City of San Diego Municipal Code

3.5.2.1 Section 59.5.0401, Sound Level Limits

San Diego Municipal Code Section 59.5.0401, as follows, establishes exterior sound level limits for the City that apply to operational noise sources. The permissible sound level is determined by the land use of the affected property, as provided in Table 4, *City of San Diego Exterior Noise Limits*.

(a) It shall be unlawful for any person to cause noise by any means to the extent that the one-hour average sound level exceeds the applicable limit given in the following table [Table 4], at any location in the City on or beyond the boundaries of the property on which the noise is produced. The noise subject to these limits is that part of the total noise at the specified location that is due solely to the action of said person.

Table 4
CITY OF SAN DIEGO EXTERIOR NOISE LIMITS

Land Use Zone	Time of Day	One-hour Average Sound Level (dBA)
Single Family Residential	7:00 a.m. to 7:00 p.m.	50
	7:00 p.m. to 10:00 p.m.	45
	10:00 p.m. to 7:00 a.m.	40
Multi-Family Residential (up to a maximum density of 1/2000)	7:00 a.m. to 7:00 p.m.	55
	7:00 p.m. to 10:00 p.m.	50
	10:00 p.m. to 7:00 a.m.	45
All other Residential	7:00 a.m. to 7:00 p.m.	60
	7:00 p.m. to 10:00 p.m.	55
	10:00 p.m. to 7:00 a.m.	50
Commercial	7:00 a.m. to 7:00 p.m.	65
	7:00 p.m. to 10:00 p.m.	60
	10:00 p.m. to 7:00 a.m.	60
Industrial or Agricultural	Anytime	75

Source: City of San Diego Municipal Code, Section 59.5.0401
dBA = A-weighted decibel

(b) The sound level limit at a location on a boundary between two zoning districts is the arithmetic mean of the respective limits for the two districts. Permissible construction noise level limits shall be governed by Section 59.5.0404 of this article.

3.5.2.2 Section 59.5.0404, Construction Noise

San Diego Municipal Code Section 59.5.0404, as follows, establishes sound level limits for construction noise within the City. Generally, the Municipal Code permits construction between 7:00 a.m. to 7:00 p.m. Mondays through Saturdays with an average sound level of no greater than 75 dBA at the property line of a residentially zoned property during the 12-hour period.

(a) It shall be unlawful for any person, between the hours of 7:00 p.m. of any day and 7:00 a.m. of the following day, or on legal holidays as specified in Section 21.04 of the San Diego Municipal Code, with exception of Columbus Day and Washington's Birthday, or on Sundays, to erect,

construct, demolish, excavate for, alter or repair any building or structure in such a manner as to create disturbing, excessive or offensive noise unless a permit has been applied for and granted beforehand by the Noise Abatement and Control Administrator. In granting such permit, the Administrator shall consider whether the construction noise in the vicinity of the proposed work site would be less objectionable at night than during the daytime because of different population densities or different neighboring activities; whether obstruction and interference with traffic particularly on streets of major importance, would be less objectionable at night than during the daytime; whether the type of work to be performed emits noises at such a low level as to not cause significant disturbances in the vicinity of the work site; the character and nature of the neighborhood of the proposed work site; whether great economic hardship would occur if the work were spread over a longer time; whether proposed night work is in the general public interest; and he shall prescribe such conditions, working times, types of construction equipment to be used, and permissible noise levels as he deems to be required in the public interest.

(b) Except as provided in subsection (c) hereof, it shall be unlawful for any person, including the City of San Diego, to conduct any construction activity to cause, at or beyond the property lines of any property zoned residential, an average sound level greater than 75 dBA during the 12-hour period from 7:00 a.m. to 7:00 p.m.

(c) The provisions of subsection (b) of this section shall not apply to construction equipment used in connection with emergency work, provided the Administrator is notified within 48 hours after commencement of work.

4.0 METHODOLOGY, ASSUMPTIONS, AND THRESHOLDS OF SIGNIFICANCE

4.1 METHODOLOGY

The following equipment was used to measure existing noise levels at the project site:

- Larson Davis Noise Meter
- Larson Davis Model CA250 Calibrator
- Windscreen and tripod for the noise meter

The sound level meter was calibrated prior to the noise measurements to ensure accuracy. All sound level measurements conducted and presented in this report were made with a sound level meter that conforms to the ANSI specifications for sound level meters (ANSI SI.4-1983 R2006). All instruments were maintained with National Institute of Standards and Technology traceable calibration per the manufacturers' standards.

4.1.1 Noise Modeling Software

Modeling of the exterior noise environment for this report was accomplished using the Traffic Noise Model (TNM) released by the U.S. Department of Transportation Federal Highway Administration and noise level calculations using guidance from various agencies. The specific noise models and noise level

calculations used in this analysis are discussed further in Sections 4.2 and 5.0 where relevant to the analysis.

4.2 ASSUMPTIONS

4.2.1 Temporary Sources

4.2.1.1 Construction

Construction activities would vary depending on the scale and nature of the individual project but would typically include standard construction activities such as demolition (if applicable), site preparation, grading, installation of underground utilities, building construction, architectural coating (e.g., painting), and paving. Typical heavy-duty construction equipment would be used; however, no excessively noisy activities such as pile driving or blasting would be required. Although piles may be required to support some project components, the District or their contractor would utilize pre-drilling as an alternative to pile driving given the proximity of sensitive receptors.

The most intensive use of heavy construction equipment would occur during demolition (if applicable), site preparation (e.g., clearing and grubbing), and grading activities, requiring typical earthmoving equipment including dozers, excavators, graders, and scrapers. The pieces of construction equipment assumed to be used for the project were based on the default off-road equipment list in the California Emissions Estimator Model, Version 2022.1 (California Air Pollution Control Officers Association 2022). Construction equipment noise was evaluated using the methodology from the FTA's *Transit Noise and Vibration Impact Assessment Manual*, Option A for a quantitative construction noise assessment. Using this method, mobile equipment is assumed to operate at the center of the project site that would be located closest to NSLUs (the Facilities Services project), and the two noisiest pieces of construction equipment are assumed to operate concurrently in close proximity to each other (FTA 2018).

4.2.1.2 Special Events

Noise is currently generated by occasional outdoor special events at the Mesa College campus such as athletic events and outdoor student gatherings. These special events may involve the use of amplification equipment. Specific noise levels for each event cannot be defined since sound level expectations are different for various types of sports or events. The noise levels generated by special events on campus primarily affect the surrounding academic and administrative uses on campus, although they may be audible from off-campus residential neighborhoods to the north and east. No new types of outdoor special events are anticipated on campus as a result of the project, as there are no facilities proposed under the CMP that would accommodate such events. The reconfiguration of athletic facilities would not locate special events where they do not occur under existing conditions.

4.2.2 Permanent Sources

4.2.2.1 Vehicular Traffic Noise

Existing and future exterior noise levels along the roadways anticipated to carry increases in campus-related trips were modeled using the Federal Highway Administration TNM Version 2.5. Traffic volumes were provided by Linscott, Law, and Greenspan Engineers (LLG) for existing (2025), future (2045), and future with project scenarios based on the increased trip volumes anticipated to result from on-campus

growth over the buildout period of the CMP. Traffic data are presented in terms of average daily traffic (ADT), which describes the number of vehicles on a given roadway segment on a given day. In total, campus-related trips are anticipated to increase by 4,548 ADT by 2045 (LLG 2026). Table 5, *Roadway Segment Volumes*, summarizes the ADT data and posted speed limits for the roadway segments anticipated to be most heavily traveled by campus-related trip increases.

Table 5
ROADWAY SEGMENT VOLUMES

Roadway Segment	Existing (2025) ADT	Future (2045) ADT	Future (2045) with Project ADT	Speed Limit (mph)
Marlesta Drive				
Genesee Avenue to Chasewood Drive/Chasewood Way	7,780	8,519	10,338	30
Mesa College Drive				
Mesa College Circle/Armstrong Place to Armstrong Street	7,750	8,486	10,987	30
Armstrong Street to Ashford Street	11,980	13,118	15,847	30
Ashford Street to Linda Vista Road	16,410	17,969	20,698	30

Source: LLG 2026
ADT = average daily traffic; mph = miles per hour

A traffic distribution of 97 percent automobiles, 2 percent medium trucks, and 1 percent heavy trucks was used on local roads in this analysis based conservatively on the traffic counts conducted during noise measurements (refer to Section 2.1.1) and typical traffic distributions in similar settings. The project does not propose new types of uses on campus that would cause substantial changes to the traffic distribution; therefore, the same traffic distribution was applied to existing, future, and project-related trips.

The one-hour L_{EQ} traffic noise level is calculated utilizing peak-hour traffic. Peak-hour traffic volumes were estimated based on the assumption that approximately 10 percent of the average daily traffic would occur during a peak hour. Peak hour L_{EQ} can be converted to CNEL using the following equation, where $L_{EQ}(h)pk$ is the peak hour L_{EQ}, P is the peak hour volume percentage of ADT, d and e are divisions of the daytime fraction of ADT to account for daytime and evening hours, and N is the nighttime fraction of ADT:

$$CNEL = L_{EQ}(h)pk + 10\log10\ 4.17/P + 10\log10(d + 4.77e + 10N)$$

The model-calculated one-hour L_{EQ} noise output is, therefore, approximately equal to the CNEL when peak-hour traffic volumes are around 10 percent of ADT (Caltrans 2013).

4.2.2.2 Stationary Source Noise

Stationary noise sources generally include equipment such as heating, ventilation, and air-conditioning (HVAC) systems, utility plants, ventilated parking structures, and operation of emergency generators during non-emergency conditions. Sound levels from these source types vary with source type and model as well as the level of noise attenuation incorporated into their design and installation. No change to existing emergency generators is planned with the CMP; therefore, these source types are not

analyzed further. However, a linear generator intended to address electrical utility load reduction could be installed and is described below.

HVAC Systems

The exact models and locations of HVAC systems that would be installed for future projects implemented under the CMP are not known at this stage of the planning process, including for the near-term projects. Therefore, a standard rooftop, commercial HVAC unit manufactured by Carrier is used in this analysis to predict the potential for HVAC-related noise effects and develop general screening guidelines for future projects. A 20-ton unit (the loudest of this model) has a sound power level of 86.5 dBA, which equates to a sound pressure level of approximately 78.5 at 1 meter (3 feet) for a unit mounted on a reflective surface (Carrier 2024). It is anticipated that these units would be mounted on building rooftops; however, to be conservative, no parapets or other mechanical screening materials are considered in this analysis.

Linear Generator

Linear generators are devices that convert linear mechanical motion into electrical energy. The core mechanism involves the relative motion between a magnetic field and a conductor (usually a coil) to induce an electrical current. Following the trial of a linear generator system at City College, the addition of a linear generator system is also anticipated at Mesa College. At this time, the specific location of this linear generator is not known for Mesa College. Based on the system anticipated to be installed at City College, the same 250 kilowatt Mainspring Linear Generator Model No. MSE 3, manufactured by Mainspring, was included in this analysis. The linear generator would provide peak load flexibility and therefore would have an irregular operation schedule. For the purposes of this analysis, it is anticipated that the linear generator would typically be operated during daytime hours in steady state (i.e., continuous). The manufacturer's noise data for this unit states that the linear generator produces noise levels of approximately 70 dBA at a distance of three meters and approximately 65 dBA at a distance of 10 meters (Mainspring 2026).

Parking Garages

Noise sources associated with the operation and use of parking structures include both intermittent and continuous sources of noise. Similar to the existing surface parking lots on campus, parking garages are often quiet for long periods of time during which low levels of activity generate only sporadic noise that does not add substantially to overall noise levels in the vicinity. Some intermittent sources of noise include tire noise, car alarms, vehicle engine idling, shutting of vehicle doors, and vehicle loudspeaker systems, all of which are typically momentary and irregular. The primary continuous source of noise typically associated with parking structures is the operation of exhaust fans that deliver required mechanical ventilation; however, as parking structures anticipated under the CMP would be constructed above ground where natural ventilation is available, exhaust fans are not anticipated to be required or contribute substantial noise to the project vicinity. Parking lots or structures can occasionally become more noteworthy noise sources during periods of peak activity when many vehicles are arriving and/or leaving within the same hour. Guidance from the FTA provides reference noise levels for a parking garage assuming 1,000 peak hour vehicle movements (i.e., vehicles either arriving or departing), which is a higher level of activity than is anticipated to occur within the proposed parking garages on campus, which are anticipated to have fewer than 1,000 spaces. At 50 feet from the center of a parking garage, the FTA estimates a parking garage with 1,000 vehicle movements generates an hourly noise level of 56.4 dBA L_{EQ} (FTA 2018).

4.3 GUIDELINES FOR THE DETERMINATION OF SIGNIFICANCE

Based on Appendix G of the CEQA Guidelines, implementation of the project would result in a significant adverse impact if it would result in exceedance of the thresholds listed below. The CEQA Guidelines do not provide quantitative thresholds for the evaluation of noise and vibration impacts. The District noise standards primarily address interior building noise through building design measures for campus land uses (refer to Section 3.4.1). Therefore, where quantitative noise or vibration limits for other source or receptor types have not been established by the District, standards established by the City and other public agencies are considered as thresholds for the purposes of this analysis, where appropriate. While City regulations do not apply to campus development projects, many City standards are considered relevant guidance to establish thresholds for this analysis of potential impacts on surrounding land uses, which are located within City limits and subject to City noise standards.

4.3.1 Increase in Ambient Noise Levels

Threshold 1: *Generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.*

Construction impacts would be considered significant if noise generated during construction activities exceeds 75 dBA L_{EQ} (12-hour) at a noise-sensitive campus land use or at the property line of a residentially zoned off-site property.

Stationary source operational impacts at off-site locations would be considered significant if the sound level limits established by the City would be exceeded for the associated land use type (refer to Table 4). This analysis conservatively considers the more restrictive sound level limit at adjacent land uses and does not use the arithmetic mean between the applicable limit and the commercial limit that would apply to campus as allowed by San Diego Municipal Code Section 59.5.0401(b).

For on-campus uses, stationary source noise impacts could occur if new noise sources cause the interior noise standard of 50 dBA L_{EQ} established in CALGreen for academic uses or 45 dBA L_{EQ} established in the CBC for residential uses to be exceeded. It is also noted that the District's future interior noise goal is to reduce interior noise levels below 35 dB in classrooms and below 40 dB in shared spaces. To determine whether a new stationary source of noise has the potential to conflict with the interior noise level standards, exterior noise levels must be calculated. Standard building materials can be assumed to provide at least 15 dB of attenuation from exterior noise levels. Therefore, this analysis considers an exterior noise limit of 65 dBA L_{EQ} for academic buildings and 60 dBA L_{EQ} for residential buildings. If these exterior noise limits are achieved, it can be assumed that the interior noise standards are also achieved with standard building materials. The District goal to achieve noise levels below 35 dB in classrooms and below 40 dB in shared spaces could be achieved with further enhanced building materials but is not used as a threshold of significance for this analysis.

Traffic noise impacts would be considered significant if traffic generated by the project causes the traffic noise level at off-site land uses to increase above the conditionally compatible noise level defined in the City's General Plan Noise Element for that land use (refer to Table 3). If this noise level is exceeded without the addition of project-related trips, the impact would be considered significant if the project-related increase exceeds 3 dBA CNEL (a perceptible increase).

4.3.2 Ground-borne Vibration

Threshold 2: *Generate excessive ground-borne vibration or ground-borne noise levels.*

Table 6, *Federal Transit Administration Construction Vibration Building Damage Criteria*, presents vibration criteria provided by the FTA to evaluate the potential for building damage due to continuous or steady sources of vibration depending on the construction materials of the building (FTA 2018).

Table 6
FEDERAL TRANSIT ADMINISTRATION CONSTRUCTION VIBRATION BUILDING DAMAGE CRITERIA

Building Category	Thresholds	
	PPV (in/sec)	Approximate L_v (VdB)
I. Reinforced concrete, steel, or timber (no plaster)	0.5	102
II. Engineered concrete and masonry (no plaster)	0.3	98
III. Non-engineered timber and masonry buildings	0.2	94
IV. Buildings extremely susceptible to vibration damage	0.12	90

Source: FTA 2018
PPV = peak particle velocity; in/sec = inches per second; L_V = vibration velocity level; VdB = vibration decibels

With respect to human annoyance, FTA guidance sets a threshold of 80 VdB for infrequent vibration events at residential land uses and other buildings where people normally sleep (FTA 2018). This standard would apply to on- and off-campus housing. Classrooms, libraries and related learning spaces, and child development centers would be considered "institutional land uses" per FTA guidance as they primarily contain daytime and evening uses; therefore, an annoyance threshold of 83 VdB would apply (FTA 2018). As these annoyance thresholds are more stringent than the building damage thresholds that would apply to on- and off-campus buildings (Table 6), the vibration analysis below focuses on these annoyance thresholds for occupied buildings and discusses building damage only for buildings extremely susceptible to building damage (FTA Type IV).

An additional category of vibration effects relates to the potential for disruption of laboratory research, medical procedures, or other commercial processes that are sensitive to vibration. The FTA establishes thresholds for disruption of vibration-sensitive operations based on the type of equipment that would be affected. While these thresholds provide guidance for a variety of equipment types, specific vibration criteria provided by a manufacturer may supersede the criteria in this section if available during subsequent environmental review. The space usage type that would apply to most vibration-sensitive uses at Mesa College would be Computer Equipment (adequate for computer equipment and low-power optical microscopes), for which the FTA establishes a maximum vibration level of 78 VdB (FTA 2018). For the Allied Health building, which contains medical imaging equipment, vibration effects are evaluated in comparison with the vibration criterion category of VC-A (adequate for medium- to high-power optical microscopes [400X], microbalances, optical balances, and similar specialized equipment), which has a maximum vibration level of 66 VdB, though equipment-specific information may be used to update this threshold during subsequent environmental review.

4.3.3 Airport Noise Exposure

Threshold 3: *For a project located within the vicinity of a private airstrip or an airport land use plan, or where such a plan has not been adopted, within two miles of a public use airport or private airstrip, expose people residing or working in the project area to excessive noise.*

Excessive noise exposure is defined as noise levels that exceed the ALUCP noise compatibility limit for the associated land use.

5.0 IMPACT ANALYSIS

5.1 ISSUE 1: INCREASE IN AMBIENT NOISE LEVELS

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

5.1.1 Impacts

5.1.1.1 Program-Level

Temporary Sources

Construction

Construction of individual projects under the CMP would require the use of heavy off-road equipment for demolition, site clearing, grading, installation of underground utilities/infrastructure, construction of new buildings, and paving. Construction would generate elevated noise levels that may disrupt NSLUs in the area. Potential effects of construction noise on sensitive animal species are addressed in the impact analysis and mitigation framework of the Biological Resources Technical Report prepared for the project; the following focuses on potential effects of construction noise on human receptors.

The magnitude of the noise experienced at sensitive receptor locations would depend on the type of construction activity, equipment in use, duration of each construction phase, distance between the noise source and receiver, and any intervening structures or topography. As described in Section 1.5, above, the closest existing off-site NSLUs to the project site include the single-family residences to the north and east of campus. These residences were measured approximately 40 feet northeast of the center of the nearest CMP project location (the Facilities Services project). In addition, existing on-campus NSLUs that could be affected by construction noise include the existing classroom buildings throughout campus. The CMP would include the construction of additional classroom buildings and student housing, which would also be considered NSLUs once operational.

Heavy off-road construction equipment would not all operate at the same time or in the same location and would not be in constant use during a typical 8-hour operating day. Further, not all pieces of equipment would be used near off-site residential property lines. While multiple construction projects could occur within campus at one time, the movement of equipment within each site and the distance between areas where heavy-duty equipment is operating simultaneously are anticipated to provide attenuation such that combined noise levels at an individual receptor would not be substantially higher

than those estimated at 40 feet. Construction equipment noise was evaluated using methodology from the FTA's *Transit Noise and Vibration Impact Assessment Manual*, Option A for a quantitative construction noise assessment. Using this methodology, equipment is assumed to operate at the center of a project site, and the two noisiest pieces of construction equipment are assumed to operate concurrently in close proximity to each other (FTA 2018). This methodology was used to calculate construction noise levels during each phase of construction at 40 feet. In addition, the distance at which the operation of the combined construction equipment would reach 75 dBA L_{EQ} (12-hour), assuming an 8-hour workday, was calculated. The results of the hourly average construction equipment noise level calculations and distances at which noise levels for each phase would reach 75 dBA L_{EQ} (12-hour) are shown in Table 7, *Construction Equipment Average Noise Levels*.

Table 7
CONSTRUCTION EQUIPMENT AVERAGE NOISE LEVELS

Construction Phase	Two Noisiest Off-Road Equipment	dBA L_{EQ} (12-hour) at 40 feet	Distance to 75 dBA L_{EQ} (12-hour) (feet)
Demolition	Dozer, Saw	85.7	137
Site Preparation	Dozer, Backhoe	86.4	148
Grading	Grader, Dozer	88.2	183
Building Construction	Generator Set, Crane	85.7	138
Underground Utilities	Dozer, Excavator	86.4	148
Paving	Paver, Roller	88.2	183
Architectural Coating	Air Compressors (2)	80.2	73

Source: FTA 2018
dBA = A-weighted decibel; L_{EQ} = time-averaged noise level

As discussed in Section 4.3.1, construction noise impacts would be considered significant if noise generated during construction activities occurring between 7:00 a.m. and 7:00 p.m. exceeds 75 dBA L_{EQ} (12-hour) at a noise-sensitive campus land use or at the property line of a residentially-zoned property. As shown in Table 7 above, all phases of construction could generate sound levels exceeding 75 dBA L_{EQ} (12-hour) at a distance of 40 feet. As the distance between future project locations and sensitive receptors would vary widely depending on the improvement project, additional calculations were completed to identify the distance at which construction activity would need to occur for noise levels at NSLUs to be kept at or below 75 dBA L_{EQ} (12-hour). As shown in Table 7, the distance to the 75 dBA L_{EQ} (12-hour) contour ranges from approximately 73 feet to 183 feet; therefore, it is reasonable to conclude that noise levels would exceed the threshold of 75 dBA L_{EQ} (12-hour) if construction activity occurred within approximately 185 feet of an NSLU. For a future project that requires only select types of construction activity (e.g., demolition or coating application), the distances at which the threshold of 75 dBA L_{EQ} (12-hour) is assumed to be exceeded are shown in Table 7.

Nighttime construction could occasionally be required in specific circumstances, such as to accommodate concrete pours during lower temperature hours or to reduce temporary conflicts with traffic or operation of nearby uses. If required, nighttime construction would be limited to those activities needing to occur during nighttime hours and would be limited to a few nights of work rather than throughout the entire construction period of an individual project. For example, nighttime construction could be required for concrete pouring during the paving phase of the parking structure component of the Performing Arts and Administration Center and Parking Structure project to allow proper curing. The center of this near-term project site would be located approximately 320 feet south

of the nearest off-site residence; on-campus buildings would not be in use during these hours. Using the FTA methodology described above, construction noise levels during the paving phase of this near-term project were calculated at this distance. The two loudest pieces of equipment would be a paver and a roller, which would generate a combined noise level of 70.1 dBA L_{EQ} (12-hour) at a distance of 320 feet, below the 75 dBA L_{EQ} (12-hour) limit.

Special Events

No new types or locations of outdoor special events are anticipated, as there are no new facilities proposed under the CMP that would accommodate new types of such events. In addition, the timing of such events is anticipated to remain consistent with existing conditions wherein outdoor events typically end by 10:00 p.m., when classes conclude. Outdoor sporting events would continue within the Athletics Complex; however, the baseball field and football stadium, where these events primarily occur, would remain in their existing locations with project implementation and related improvements. Track and field events that would be relocated from the Upper Athletic Field would be moved to spaces surrounding the football stadium where other track and field events occur under existing conditions. The remaining facilities proposed under the CMP would not result in new or altered special event noise compared to existing conditions. Therefore, special events at Mesa College would not result in substantial temporary increases in ambient noise levels in the vicinity of the project.

Permanent Sources

Vehicular Traffic Noise

The number of students attending on-campus classes at Mesa College is anticipated to increase over the buildout period of the CMP, which has the potential to increase traffic noise levels along surrounding roadways where NSLUs occur. As described above, traffic noise impacts would be considered significant if the traffic noise level at off-site land uses increases above the conditionally compatible noise level for that land use (refer to Table 3) with the addition of campus-related trips or, where this noise level is already exceeded, increases by more than 3 dBA CNEL. The conditionally compatible noise level for single-family land uses (65 CNEL) would be applicable to the Marlesta Drive roadway segment, while the conditionally compatible noise level for multi-family land uses (70 CNEL) would be applicable to the roadway segments along Mesa College Drive.

Based on the traffic volumes provided by LLG, noise levels were modeled in TNM for the roadway segments anticipated to accommodate the increases in campus-related trips under existing, future, and future with project scenarios. The calculations provide modeled noise levels at 50 feet from the roadway centerline, which represents the approximate distance to the nearest structures and provides a reference distance at which to compare existing and future noise levels. The model also conservatively assumes flat terrain, though the traffic noise level at an individual receptor location would decrease with the presence of intervening structures, barriers, vegetation, or topography. Table 8, *Traffic Noise Levels*, provides the modeled noise level for each scenario and the project-generated increase for comparison with the applicable threshold.

Table 8
TRAFFIC NOISE LEVELS

Roadway Segment	Existing (2025) CNEL	Future (2045) CNEL	Future with Project (2045) CNEL	Project-Generated Increase (CNEL)	Direct Impact?[1]
Marlesta Drive					
Genesee Avenue to Chasewood Drive/Chasewood Way	62.0	62.4	63.2	0.8	*No*
Mesa College Drive					
Mesa College Circle/Armstrong Place to Armstrong Street	62.0	62.3	63.4	1.1	*No*
Armstrong Street to Ashford Street	63.8	64.2	65.0	0.8	*No*
Ashford Street to Linda Vista Road	65.2	65.6	66.2	0.6	*No*

CNEL = Community Noise Equivalent Level

[1] A direct impact to off-site uses would occur if the project would increase noise levels above the applicable threshold or, where the existing noise level exceeds the threshold, would increase noise levels by 3 CNEL. The single-family noise level (65 CNEL) would be applicable to the Marlesta Drive roadway segment, and the multi-family residential conditionally compatible noise level (70 CNEL) would be applicable to the Mesa College Drive roadway segments.

As shown in Table 8, the future traffic noise levels with the addition of campus-related trips due to future growth would not exceed the compatibility levels identified for adjacent land uses in the General Plan Noise Element. An increase of less than 3 dBA is generally not considered to be perceptible by the average human ear. Traffic noise levels would increase by less than 3 dBA CNEL; therefore, the project would not generate vehicular traffic that results in a substantial permanent increase in ambient noise levels in the vicinity of the project.

HVAC Systems

The location of future HVAC systems and other mechanical equipment required for buildings are not known at this time; therefore, this analysis establishes screening distances based on the typical equipment that is anticipated to be required for future projects implemented under the CMP. Overall, it is not anticipated that a substantial increase in noise levels would occur at off-site residences, as the addition of mechanical equipment to new buildings within the campus core would generate similar noise levels to those generated by comparable sources on existing buildings under ambient conditions. Based on the sample HVAC unit described in Section 4.2.2, noise levels would attenuate below the City's nighttime single-family residential property line limit of 40 dBA L_{EQ} at approximately 280 feet, below the City's nighttime multi-family residential property line limit of 45 dBA L_{EQ} at approximately 160 feet, below the 60 dBA L_{EQ} limit at campus residential buildings at 30 feet, and below the 65 dBA L_{EQ} limit applicable to non-residential campus buildings at approximately 16 feet. As HVAC systems would typically be installed on building rooftops, it is not anticipated that they could be installed within 30 feet of other NSLUs within campus. However, new HVAC systems or mechanical equipment could be sited within 280 feet of single-family residences or 160 feet of multi-family residences, thereby potentially increasing noise levels above the applicable limits.

Linear Generator

The location of a potential linear generator is not known at this time; therefore, a screening distance is established in this analysis. Based on the manufacturer's measurement of 65 dBA at 33 feet (10 meters), the linear generator noise level would be attenuated below the City's daytime single-family residential property line limit of 50 dBA L_{EQ} at approximately 185 feet, below the City's daytime multi-family residential property line limit of 55 dBA L_{EQ} at approximately 105 feet, below the 60 dBA L_{EQ} limit at campus residential buildings at 60 feet, and below the 65 dBA L_{EQ} limit applicable to non-residential campus buildings at approximately 33 feet. Therefore, if the linear generator were to be sited within 185 feet of a single-family residence, 105 feet of multi-family residences, 60 feet of on-campus residences, or 33 feet of a noise-sensitive campus building (non-residential), it would have the potential to increase noise levels above the applicable limits.

Parking Garages

As described further in Section 4.2.2.2, noise associated with the operation of parking structures is irregular, specifically for the momentary sources of noise associated with individuals parking and exiting their vehicle (car door slams). Therefore, there is little potential for surface parking areas constructed or adjusted under the CMP to result in an average noise level over a 1-hour period that exceeds the applicable criteria or substantially increases ambient noise levels. Further, surface parking areas occur along much of the campus perimeter under existing conditions and adjustments to these surface parking areas would not result in substantial changes in noise. As noted in Section 4.2.2.2, the FTA estimates a parking garage with 1,000 vehicle movements in a given hour generates an hourly noise level of 56.4 dBA L_{EQ} at 50 feet from the center of the parking garage (FTA 2018). The parking structure location anticipated under the CMP that would be nearest an adjacent residential land use is the parking area associated with the Eastern Housing Option in the northeast corner of campus. The center of this parking garage would be located at least 100 feet from the property lines of these residences and its peak use would occur during daytime hours when the City's single-family residential property line limit is 50 dBA L_{EQ}. At 100 feet, the noise level generated by a parking garage with 1,000 vehicle movements would be 48.9 dBA L_{EQ} (FTA 2018), below the applicable City limit. It is also unlikely that this parking garage would accommodate 1,000 vehicle movements in a given hour as it would be limited to the footprint beneath the housing building. Other parking garages anticipated under the CMP would be located on the north and west sides of the upper mesa and would be much further from off-site residences. Parking garages associated with implementation of the CMP would not result in a substantial increase in noise levels in the project vicinity.

5.1.1.2 Project-Level

Athletics Complex

The center point of construction for the Athletics Complex project would occur approximately 600 feet from the nearest off-site residences and at least 230 feet from the nearest noise-sensitive campus building (Exercise Science). Therefore, construction noise is not anticipated to exceed 75 dBA L_{EQ} (12-hour) at noise-sensitive land uses. As described in the program-level analysis above, the improvements proposed as part of the Athletics Complex project would not result in substantial temporary increases in special event noise. The Athletics Complex project would not generate substantial temporary increases in noise.

Permanent sources of noise associated with the Athletics Complex project would include HVAC systems for the new gym building proposed between the reconfigured field areas, which would be over 500 feet from the nearest single-family residence and 350 feet from the nearest noise-sensitive campus building (Child Development Center). At these distances, HVAC noise would not conflict with the noise limits for these uses. No generator or new parking garages are proposed and no additional vehicular traffic compared to that considered in the program-level analysis would be generated. Therefore, the Athletics Complex project would not result in a substantial permanent increase in noise levels in the project vicinity.

Performing Arts and Administration Center and Parking Structure

The center point of construction for the Performing Arts and Administration Center and Parking Structure project would occur approximately 320 feet from the nearest off-site residences and approximately 120 feet from the nearest noise-sensitive campus building (High School). Therefore, construction noise could exceed the 75 dBA L_{EQ} (12-hour) limit at noise-sensitive land uses on campus. No outdoor special event spaces are proposed as part of this project. Therefore, the Performing Arts and Administration Center and Parking Structure project could generate a substantial temporary increase in noise during construction.

Permanent sources of noise associated with the Performing Arts and Administration Center and Parking Structure project would include HVAC systems for the new building and a new parking structure. HVAC systems on the new building rooftop would occur approximately 300 feet from the nearest single-family residence and 45 feet from the nearest noise-sensitive campus building (High School), which would be outside of the screening distances for both of these uses. The proposed parking garage would also be located approximately 300 feet from single-family residential uses and would be shielded from noise-sensitive campus buildings by existing topography. No generator is proposed and no additional vehicular traffic compared to that considered in the program-level analysis would be generated. Therefore, the Performing Arts and Administration Center and Parking Structure project would not result in a substantial permanent increase in noise levels in the project vicinity.

5.1.2 Level of Significance Prior to Mitigation

5.1.2.1 Program-Level

Implementation of the CMP could generate a substantial temporary increase in ambient noise levels in the vicinity of the project during construction if construction occurs within 185 feet of an NSLU, or within the distances identified in Table 7 for specific activities. Therefore, construction-related noise impacts would be significant prior to mitigation.

Implementation of the CMP could generate a substantial permanent increase in ambient noise levels in the vicinity of the project as a result of stationary noise sources.

The CMP would not generate vehicular traffic that results in a substantial permanent increase in ambient noise levels in the vicinity of the project, and impacts would be less than significant. No mitigation is required.

5.1.2.2 Project-Level

Athletics Complex

The Athletics Complex project would not generate a substantial temporary or permanent increase in noise. Project-level impacts would be less than significant. No mitigation is required.

Performing Arts and Administration Center and Parking Structure

The Performing Arts and Administration Center and Parking Structure project could generate a substantial temporary increase in noise, and temporary construction impacts would be significant prior to mitigation. Impacts related to a permanent increase in noise generation would be less than significant.

5.1.3 Mitigation Measures

5.1.3.1 Program-Level

NOI-1 Construction Noise Screening. If project construction activities resulting from implementation of the CMP are proposed within 185 feet of noise-sensitive land uses (NSLUs) or within activity-specific screening distances identified below from NSLUs when only select phases of construction are required, mitigation shall be integrated into the project's construction specifications:

- 137 feet for demolition
- 148 feet for site preparation or utility undergrounding
- 183 feet for grading or paving
- 138 feet for building construction
- 73 feet for architectural coating application

The following measures shall be implemented to minimize temporary noise caused by construction activities to below the applicable CEQA significance thresholds at NSLUs:

a. Require the construction contractor to work with proper administrative controls on equipment operation periods so as not to exceed a 12-hour average sound level of 75 dBA L_{EQ} at NSLUs between 7:00 a.m. and 7:00 p.m. Monday through Saturday except for infrequent circumstances when nighttime work is required for short durations to reduce conflicts with nearby uses or accommodate environmental factors such as heat during concrete pours. Prior to construction activities occurring outside of the hours of 7:00 a.m. to 7:00 p.m. Monday through Saturday, the extended work hours shall be approved by the District construction manager for the project and the following noise control measures shall be implemented, as applicable.

b. Outfit construction equipment with properly maintained, manufacturer-approved or recommended sound abatement features on air intakes, combustion exhausts, heat dissipation vents, and the interior surfaces of engine hoods and power train enclosures.

c. Locate (to the extent practical) steady-state, continuously operating stationary construction equipment such as generators, pumps, and air compressors at least as far as the identified screening distances from nearby NSLUs. If this screening distance cannot be achieved within the project site, consider deployment of temporary noise walls or acoustical blankets that would block direct sound paths between the equipment and the receptor(s) of concern.

d. Position (to the extent practical) construction laydown and vehicle staging areas as far from NSLUs as feasible.

e. Inform, whenever possible and preferably with at least a two-week advanced notice, all neighboring NSLUs located within a 185 foot radius of the project site that a construction project is planned to commence. The notification shall describe the anticipated location of construction activities and the general construction schedule.

f. Where on-campus NSLUs are expected to be less than 185 feet away from construction activity, schedule construction activities anticipated to generate the highest noise levels to avoid the final week of classes. Adjust hours or days of the construction activity to occur before or after these most noise-sensitive periods of the Mesa College academic year.

NOI-2 Stationary Noise Source Assessment. If new or modified stationary noise sources are proposed, including but not limited to major HVAC systems, ventilated parking structures, or similar facilities with noise-generating mechanical equipment not analyzed, the project shall consider the feasibility of incorporating the following screening distances between the noise-sensitive land use and the stationary noise source:

- **HVAC/Mechanical System:** within 280 feet of a single-family residential land use or 160 feet of multi-family residential land use.

- **Linear Generator:** within 185 feet of a single-family residential land use, 105 feet of multi-family residential land use, 60 feet for a residential building on campus, or 33 feet of a noise-sensitive campus building (non-residential).

If these noise sources are planned to be located outside of the applicable screening distances, no further action shall be required. If such screening distances cannot be achieved based on the project location or needs, or a project requires a noise source type not considered in this analysis, a noise assessment shall be conducted by a qualified acoustician to determine if there would be a conflict with the off-campus noise limits established based on the City's Municipal Code or the interior noise limits for on campus buildings of 50 dBA L_{EQ} in non-residential spaces and 45 dBA L_{EQ} in habitable residential buildings. The noise assessment shall consider the specific source proposed, its location, intervening features, and other relevant site-specific or source-specific information available during project design.

If the noise assessment determines that noise levels would exceed the applicable limits at a receiving NSLU, project-specific recommendations for attenuation shall be provided within the noise assessment to reduce the noise level below the applicable limit. Such recommendations may include, but are not limited to, relocation, addition of noise barriers or louvers, and use of mufflers or other manufacturer-provided features. For potential conflicts with the on-campus

interior noise levels, enhanced building materials such as windows or doors may also be considered, with the aim to reduce indoor noise levels below 35 dB in classrooms and below 40 dB in shared spaces if possible. The noise assessment shall demonstrate that the recommended noise attenuation techniques reduce noise levels at off-campus land uses below the applicable noise limit based on the City's Municipal Code. If feasible attenuation techniques considered in the noise assessment cannot achieve the limit applied at on-campus buildings, the incorporation of attenuation features that do not result in noise levels below this limit may be considered adequate with approval from the District Architect based on evidence that the anticipated exterior noise level would not result in conflicts with the interior noise level standard for the affected building's use. The recommendations of the noise assessment shall be incorporated into the project plans and detailed within the project's construction specifications where applicable.

5.1.3.2 Project-Level

Performing Arts and Administration Center and Parking Structure

Mitigation measure NOI-1 would apply to the construction of the Performing Arts and Administration Center and Parking Structure project.

5.1.4 Level of Significance After Mitigation

5.1.4.1 Program-Level

Implementation of mitigation measures NOI-1 and NOI-2 would reduce program-level impacts related to the generation of substantial temporary and permanent increases in ambient noise levels in the vicinity of the project to a level that is less than significant.

5.1.4.2 Project-Level

Performing Arts and Administration Center and Parking Structure

Implementation of mitigation measure NOI-1 would reduce project-level impacts related to temporary increases in ambient noise levels in the vicinity of the project to a level that is less than significant.

5.2 ISSUE 2: GROUND-BORNE VIBRATION

Would the project result in generation of excessive ground-borne vibration or ground-borne noise levels?

5.2.1 Impacts

5.2.1.1 Program-Level

Construction

The operation of construction equipment is anticipated to generate the highest levels of vibration during CMP implementation. Construction activities would have the potential to generate levels of ground-borne vibration that could adversely affect nearby vibration-sensitive land uses, buildings that are structurally sensitive to ground-borne vibration, and facilities where equipment and/or activities may be

interrupted by vibration. The level of vibration experienced by these land uses would depend on the vibration-generated by the construction equipment or process. As discussed in Section 4.2.1.1, the project is anticipated to utilize drilling as an alternative to pile driving given the proximity of sensitive receptors. Therefore, in the absence of impact or vibratory-type pile driving equipment, the largest source of construction vibration is anticipated to be a vibratory roller, which generates a vibration velocity of 94 VdB at 25 feet (FTA 2018). Table 9, *Screening Distances by Vibration-Sensitive Receptor Type*, identifies screening distances for use of a vibratory roller based on the FTA criteria for building damage, human annoyance, and vibration-sensitive equipment described in Section 4.3.3.

Table 9
SCREENING DISTANCES BY VIBRATION-SENSITIVE RECEPTOR TYPE

Receptor Type	Threshold (VdB)	Distance from Vibratory Roller (feet)
FTA type IV – Buildings extremely susceptible to vibration damage	90	35
Classrooms, libraries (and related learning spaces), and child development centers	83	60
Residential land uses (on- and off-campus)	80	75
Computer equipment rooms, low-power optical microscopes	78	85
Vibration Criterion A (VC-A) (medium- to high-power optical microscopes, microbalances, optical balances, and similar specialized equipment)	66	215

Source: FTA 2018

The construction activity to building or receptor distance would need to be greater than the screening distances shown in Table 9 in order for vibration exposure to be less than the thresholds identified for each receptor type. As construction of future projects could occur within these distances, construction has the potential to result in the generation of excessive ground-borne vibration.

Operation

Once operational, new and renovated facilities proposed under the CMP are not anticipated to be substantial sources of vibration. Stationary noise sources such as HVAC and other mechanical systems would not be expected to generate excessive vibration levels as these types of equipment are typically designed, manufactured, and installed with vibration-isolating connections and other features to minimize vibration. Increased levels of vibration from this type of equipment would indicate the need for maintenance and after such maintenance is completed, the equipment would generate negligible vibration levels. Increases in campus-related vehicle trips also would not generate excessive vibration as vibration from vehicular traffic is generally not perceptible outside of paved roadways that are properly maintained (Caltrans 2020). The project would not result in the permanent generation of excessive vibration levels.

5.2.1.2 Project-Level

Athletics Complex

Building foundations for the Athletics Complex project requiring the use of a vibratory roller are anticipated to be constructed approximately 130 feet from the nearest building (District Police Offices) and approximately 300 feet from the Allied Health building (Building S) where vibration sensitive equipment occurs. Therefore, vibratory equipment would not be used within the applicable screening distances during construction (Table 9) and the Athletics Complex project would not result in the generation of excessive ground-borne vibration. No permanent sources of substantial vibration would be installed for the Athletics Complex project.

Performing Arts and Administration Center and Parking Structure

No permanent sources of substantial vibration would be installed for the Performing Arts and Administration Center and Parking Structure project. Building foundations for the Performing Arts and Administration Center and Parking Structure project requiring the use of a vibratory roller could be constructed within 50 feet of the nearest building (High School), which is vibration sensitive. This project would be constructed over 1,000 feet from the Allied Health (Building S) where vibration-sensitive equipment occurs and approximately 300 feet from the nearest residences; therefore, no effect on vibration-sensitive equipment or residential receptors would occur. However, sensitive on-campus uses (high school classrooms) could be affected by construction vibration.

5.2.2 Level of Significance Prior to Mitigation

5.2.2.1 Program-Level

Construction of the CMP, including the near-term projects, could result in the generation of excessive ground-borne vibration or ground-borne noise levels and construction-related impacts would be significant prior to mitigation.

Operation of the CMP, including the near-term projects, would not result in generation of excessive ground-borne vibration or ground-borne noise levels and impacts would be less than significant. Therefore, no mitigation is required for operations.

5.2.2.2 Project-Level

Athletics Complex

The Athletics Complex project would not generate excessive construction or operational vibration. Project-level impacts would be less than significant. No mitigation is required.

Performing Arts and Administration Center and Parking Structure

Construction of the Performing Arts and Administration Center and Parking Structure project could temporarily generate excessive vibration at on-campus buildings. Project-level impacts related to construction would be significant prior to mitigation. No operational impact would occur.

5.2.3 Mitigation Measures

5.2.3.1 Program-Level

NOI-3 Construction Vibration Screening. Prior to the commencement of construction of projects under the CMP that would involve the use of heavy earth-moving equipment within the following screening distances, the District shall retain a qualified acoustician to prepare a construction vibration mitigation program to be implemented by the construction contractor(s).

- 35 feet of buildings extremely susceptible to vibration damage (90 VdB threshold)
- 60 feet of classrooms, libraries, and child development centers (83 VdB threshold)
- 75 feet of residential land uses (80 VdB threshold)
- 85 feet of computer equipment rooms, low-power optical microscopes (78 VdB threshold)
- 215 feet of medium- to high-power optical microscopes, microbalances, optical balances, and similar specialized equipment (66 VdB threshold)

If additional information about the specific construction equipment to be used or types of vibration-sensitive equipment that would be affected is available during project planning, the screening distance may also be adjusted to a project-specific distance based on more detailed information about the sensitivity of the equipment and/or affected receptor. Where required, the construction vibration mitigation program shall identify and require measures to reduce vibration resulting from construction activities to the maximum extent practicable, as well as detail construction activity notification and monitoring processes that include, but are not limited to, the following:

a. If feasible, vibratory equipment shall be operated in static mode while it is required to be used within the screening distances noted above.

b. Where vibratory equipment would be used within the applicable equipment screening distance and use of static mode within this buffer distance is infeasible, vibration monitoring shall be performed during construction to establish the level of vibration produced by activities using vibratory equipment. Monitoring shall be conducted when the construction activity would occur within the screening distances noted above. Monitoring shall be conducted using portable vibration-monitoring instrumentation that provides a calibrated record of local ground movement/accelerations. If construction vibration exceeds the appropriate threshold, work shall be stopped and resumed when alternative work methods and equipment can be implemented. Baseline vibration levels at specified locations shall be established prior to the construction activity.

c. Building occupants of vibration-sensitive land uses within the applicable screening distance shall be notified at least two weeks prior to the start of construction. The notification shall describe the anticipated vibration effects and construction schedule.

5.2.3.2 Project-Level

Performing Arts and Administration Center and Parking Structure

Mitigation measure NOI-3 would apply to construction of the Performing Arts and Administration Center and Parking Structure project.

5.2.4 Level of Significance After Mitigation

5.2.4.1 Program-Level

Implementation of mitigation measure NOI-3 would reduce program-level vibration impacts during construction to a level that is less than significant.

5.2.4.2 Project-Level

Performing Arts and Administration Center and Parking Structure

Implementation of mitigation measure NOI-3 would reduce project-level vibration impacts during construction to a level that is less than significant.

5.3 ISSUE 3: AIRPORT NOISE EXPOSURE

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

5.3.1 Impacts

5.3.1.1 Program-Level

The closest airports to the campus are the Montgomery-Gibbs Executive Airport, located approximately one mile east of the campus; Marine Corps Air Station (MCAS) Miramar, located approximately 3.95 miles northeast of the campus; and San Diego International Airport, located approximately 4.90 miles southwest of the campus. According to the ALUCP prepared for MCAS Miramar, the campus is not within the Airport Influence Area or the airport noise contours associated with MCAS Miramar (SDCRAA 2011). The campus is within Review Area 2 of the Airport Influence Area associated with Montgomery-Gibbs Executive Airport (SDCRAA 2010) and is within the Overflight Area Boundary and Airport Influence Area associated with San Diego International Airport (SDCRAA 2025). However, the campus is not within the noise contours associated with either of these airports (SDCRAA 2010; SDCRAA 2025). Therefore, although aircraft may be audible in the airspace around the campus, persons residing or working on campus would not be exposed to excessive noise levels from aircraft or airports.

5.3.1.2 Project-Level

The near-term projects would be constructed within the Mesa College campus, which is not within the noise contours for nearby airports. Therefore, although aircraft may be audible from these project locations, people residing or working in the area would not be exposed to excessive noise levels from aircraft or airports.

5.3.2 Level of Significance Prior to Mitigation

The project, including the near-term projects, would not expose people residing or working in the project area to excessive noise levels from aircraft or airports. The impact would be less than significant; therefore, no mitigation is required.

6.0 LIST OF PREPARERS

Jason Runyan	Senior Noise Specialist
Sydney Wells	Noise Specialist
Joanne Dramko, AICP	Principal Technical Specialist, QA/QC
Vanessa Toscano	Principal Planner, Project Manager
Shelby Bocks	Assistant Project Manager, Noise Specialist

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Appendix A

Noise Survey

Site Survey

Job # 01737.00004.003		Project Name: Mesa College CMP	
Date: 9/30/2025	Site #: M1	Engineer: Sydney Wells	
Address: 7250 Mesa College Drive, San Diego, CA 92111			
Meter: LXT2	Serial #: 1741	Calibrator: CAL150	Serial #: 2754

Notes: Overhead plane noise from small aircrafts, slow moving vehicles pulling into Lot 2, distant noise from baseball bats at nearby field.

Sketch:



Temp:	80.2	Wind Spd:	1.7 mph	Humidity:	72 %
Start of Measurement:	10:21 AM	End of Measurement:	10:36 AM	54.0 dBA LEQ	

Cars (tally per 5 cars)	Medium Trucks (MT)	Heavy Trucks (HT)

Noise Measurement for Information Only

No Through Roadways

No Calibration Analysis Will Be Provided

Site Survey

Job # 01737.00004.003		Project Name: Mesa College CMP	
Date: 9/30/2025	Site #: M2	Engineer: Sydney Wells	
Address: 7250 Mesa College Drive, San Diego, CA 92111			
Meter: LXT2	Serial #: 1741	Calibrator: CAL150	Serial #: 2754

Notes: Overhead plane noise from small aircrafts.

Sketch:



Temp:	81.7	Wind Spd:	2.1 mph	Humidity:	69 %
Start of Measurement:	10:50 AM	End of Measurement:	11:05 AM	53.3 dBA LEQ	

Cars (tally per 5 cars)	Medium Trucks (MT)	Heavy Trucks (HT)

Noise Measurement for Information Only

No Through Roadways

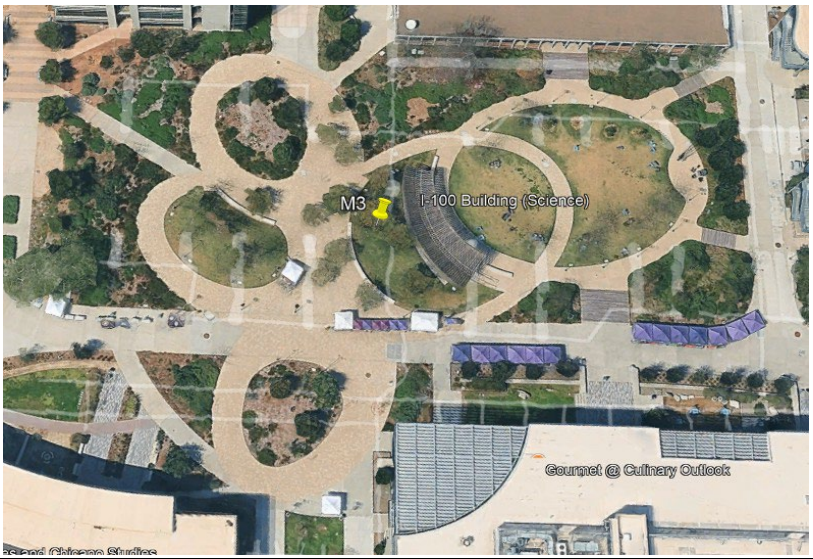
No Calibration Analysis Will Be Provided

Site Survey

Job # 01737.00004.003		Project Name: Mesa College CMP	
Date: 9/30/2025	Site #: M3	Engineer: Sydney Wells	
Address: 7250 Mesa College Drive, San Diego, CA 92111			
Meter: LXT2	Serial #: 1741	Calibrator: CAL150	Serial #: 2754

Notes: Noise associated with students and faculty walking and talking, minimal light aircraft overflight.

Sketch:



Temp:	80.2	Wind Spd:	2.4 mph	Humidity:	72 %
Start of Measurement:	11:13 AM	End of Measurement:	11:28 AM	52.6 dBA LEQ	

Cars (tally per 5 cars)	Medium Trucks (MT)	Heavy Trucks (HT)

Noise Measurement for Information Only

No Through Roadways

No Calibration Analysis Will Be Provided

Site Survey

Job # 01737.00004.003		Project Name: Mesa College CMP	
Date: 9/30/2025	Site #: M4	Engineer: Sydney Wells	
Address: 7250 Mesa College Drive, San Diego, CA 92111			
Meter: LXT2	Serial #: 1741	Calibrator: CAL150	Serial #: 2754

Notes: Primarily traffic noise on internal streets, occasional light aircraft overflight.

Sketch:



Temp:	78.1	Wind Spd:	3.1 mph	Humidity:	64 %
Start of Measurement:	11:36 AM	End of Measurement:	11:51 AM	51.4 dBA LEQ	

Cars (tally per 5 cars)	Medium Trucks (MT)	Heavy Trucks (HT)

Noise Measurement for Information Only

No Through Roadways

No Calibration Analysis Will Be Provided

Site Survey

Job # 01737.00004.003		Project Name: Mesa College CMP	
Date: 9/30/2025	Site #: M5	Engineer: Sydney Wells	
Address: 7250 Mesa College Drive, San Diego, CA 92111			
Meter: LXT2	Serial #: 1741	Calibrator: CAL150	Serial #: 2754

Notes: Primarily traffic noise on internal streets, students walking by, and tennis court use.

Sketch:



Temp:	83.3	Wind Spd:	0 mph	Humidity:	63 %
Start of Measurement:	12:04 PM	End of Measurement:	12:19 PM		53.9 dBA LEQ

Cars (tally per 5 cars)	Medium Trucks (MT)	Heavy Trucks (HT)

Noise Measurement for Information Only

No Through Roadways

No Calibration Analysis Will Be Provided

Site Survey

Job # 01737.00004.003		Project Name: Mesa College CMP	
Date: 9/30/2025	Site #: M6	Engineer: Sydney Wells	
Address: 7366 Mesa College Dr, San Diego, CA 92111			
Meter: LXT2	Serial #: 1741	Calibrator: CAL150	Serial #: 2754
Notes: Primarily traffic noise associated with Mesa College Drive.			

Sketch:



Temp:	79	Wind Spd:	2.8 mph	Humidity:	72 %
Start of Measurement:	12:38 PM	End of Measurement:	12:53 PM	64.7 dBA LEQ	

Cars (tally per 5 cars)	Medium Trucks (MT)	Heavy Trucks (HT)
453 cars		
1 Medium Truck		
2 Buses		
Noise Measurement for Information Only		
No Through Roadways		
No Calibration Analysis Will Be Provided		

Site Survey

Job # 01737.00004.003		Project Name: Mesa College CMP	
Date: 9/30/2025	Site #: M7	Engineer: Sydney Wells	
Address: 3372 Marlesta Dr, San Diego, CA 92111			
Meter: LXT2	Serial #: 1741	Calibrator: CAL150	Serial #: 2754
Notes: Primarily traffic noise associated with Marlesta Drive.			

Sketch:



Temp:	79.8	Wind Spd: 2.9	mph	Humidity:	72 %
Start of Measurement:	1:07 PM	End of Measurement:	1:22 PM		66.8 dBA LEQ

Cars (tally per 5 cars)	Medium Trucks (MT)	Heavy Trucks (HT)
116 cars		
2 Medium Trucks		
Noise Measurement for Information Only		
No Through Roadways		
No Calibration Analysis Will Be Provided		

Appendix I

Vehicle Miles Traveled Analysis

4542 Ruffner Street
Suite 100
San Diego, CA 92111
858.300.8800 T
www.llgengineers.com

Pasadena
Irvine
San Diego

VEHICLE MILES TRAVELED ANALYSIS

MESA COLLEGE MASTER PLAN

San Diego, California
April 15, 2026

LLG Ref. 3-25-4139

Prepared by:
Amelia Giacalone
Senior Transportation Planner
&
Zahira Chayeb
Transportation Engineer II

Under the Supervision of:
John Boarman, P. E.
Principal

TABLE OF CONTENTS

SECTION		PAGE
1.0	**Introduction**	**3**
2.0	**Project Description**	**4**
2.1	Campus Location	4
2.1.1	Campus Access	4
2.2	Project Background	4
2.2.1	Mesa 2030 Comprehensive Master Plan Overview	4
2.2.2	Measure HH Funding	5
2.2.3	Campus Population Growth	5
2.3	Project Components	6
2.3.1	West Access Relocation Project	6
2.3.2	Increase in On Campus Students	7
3.0	**Project Trip Generation Calculations**	**10**
3.1	Trip Generation Rate Comparison	10
3.2	Trip Generation Calculations	11
3.3	Trip Distribution & Assignment	11
4.0	**VMT Analysis Methodology**	**12**
4.1.1	Projects Screened from VMT Assessment	12
5.0	**VMT Assessment Results & Conclusions**	**15**
5.1	Project Level Screening Assessment	15
5.1.1	Development in Transit Priority Areas	15
5.2	Cumulative Level Screening Assessment	15
5.3	VMT Analysis Conclusions	16

APPENDICES

APPENDIX	
A.	California State University's *Transportation Impact Study Manual, March 11, 2019.*
B.	MTS Bus Route 44 Timetables and Route Information
C.	City of San Diego's *Multifamily Residential TPA* interactive map

LIST OF FIGURES

SECTION—FIGURE #		PAGE
Figure 2–1	Vicinity Map	8
Figure 2–2	Project Area Map	9

LIST OF TABLES

SECTION—TABLE #		PAGE
Table 3–1	Project Trip Generation	11

VEHICLE MILES TRAVELED ANALYSIS

MESA COLLEGE MASTER PLAN

City of San Diego, California
April 15, 2026

1.0 INTRODUCTION

Linscott, Law & Greenspan Engineers (LLG) has prepared this Vehicle Miles Traveled (VMT) Analysis pursuant to the California Environmental Quality Act (CEQA) for the Mesa College Master Plan (Project). Mesa College is located on land within the jurisdiction of the San Diego Community College District (District) within the Clairemont Mesa community of the City of San Diego (City), which is generally bordered by Interstate (I-) 5 on the west, I-805 on the east, State Route (SR) 52 on the north, and the community of Linda Vista on the south.

The following sections are included in this report:

- Project Description
- Project Trip Generation Calculations
- VMT Analysis Methodology
- VMT Screening Criteria
- VMT Assessment Results
- Project Level Screening Assessment
- Cumulative Level Screening Assessment
- VMT Analysis Conclusions

2.0 PROJECT DESCRIPTION

2.1 Campus Location

Mesa College is located within the Clairemont Mesa community of the City, which is generally bordered by Interstate (I-) 5 on the west, I-805 on the east, State Route (SR) 52 on the north, and the community of Linda Vista on the south. The Mesa College campus is located in the southeastern portion of the Clairemont Mesa community, on an approximately 106-acre mesa. It is generally surrounded by a mix of single-family and multi-family residential uses and on two sides by the Tecolote Canyon nature preserve. The campus is generally divided into upper, mid, and lower levels.

The campus currently hosts approximately 50 permanent buildings, containing approximately 1.3 million gross square feet (GSF) and 590,000 assignable square feet (ASF). Three 960-GSF temporary classroom buildings are currently located at the southwest corner of Parking Lot 1. The majority of the buildings are clustered on the upper level of the mesa and the mid to lower portions of campus are dedicated to athletic fields, additional instructional buildings, and parking.

2.1.1 *Campus Access*

The campus has two entry points: the main entry on the east, accessible via Mesa College Drive, and the secondary entry on the west, at the intersection of Marlesta Drive and Chasewood Way. A two-way loop road circles the campus and connects to all parking areas, which contain a total of 3,835 parking spaces.

Figure 2–1 shows the Campus Vicinity Map, ***Figure 2–2*** shows a more detailed Project Area Map.

2.2 Project Background

The San Diego Community College District is a community college district serving the City in central San Diego County (County). The District includes three credit colleges (San Diego City College, Mesa College, and Miramar College) and the state's only free-standing noncredit college (San Diego College of Continuing Education). The District is the third largest public community college district in California, serving approximately 90,000 students annually across these colleges.

Mesa College is a public, accredited, and comprehensive community college. Mesa College is the largest college in the District and offers more than 195 associate degree and certificate programs from its seven schools: Arts and Languages; Business Technology; Health Sciences and Public Service; Humanities; Mathematics and Natural Sciences; Exercise Science, Health Education, and Athletics; Social/Behavioral Sciences and Multicultural Studies. The campus' Student Services programs promote student learning, achievement, and engagement by providing services directly or by connecting students to associated resources. A total of 24 Student Services are organized into three schools: Student Affairs, Student Development, and Student Success and Equity.

2.2.1 *Mesa 2030 Comprehensive Master Plan Overview*

The Mesa2030 Comprehensive Master Plan (CMP), approved by the District Board of Trustees on May 13, 2021, is the ten-year educational and facilities master plan for Mesa College. This document

includes an analysis of Mesa College's effectiveness in meeting its mission, projected demographics and economic changes, and feedback from internal and external campus communities. This information provides for the development of two long-term guides for future decisions: Mesa2030 Goals and Facilities Planning Principles. Based on the guiding goals and principles, Chapter 5 of the CMP describes a series of site improvement and facility projects for the campus. The designs and concepts presented in the CMP are conceptual and intended to serve as a framework for the future detailed design of campus improvements as funding becomes available.

2.2.2 *Measure HH Funding*

On November 5, 2024, San Diego voters approved Measure HH, authorizing the District to issue $3.5 billion in bonds for District facility upgrades. Based on the campus facility needs and potential improvements described in the master plan for each District campus, certain projects have been prioritized to move forward with initial funding from Measure HH bond sales. Two of these projects would be constructed at Mesa College. Future bond sales authorized by Measure HH would fund additional improvements described in the CMP as well as the master plans for the other District campuses.

2.2.3 *Campus Population Growth*

The CMP establishes planning assumptions for future campus development based on projected enrollment and staffing needs. While the CMP identifies maximum enrollment of up to 25,000 students based on enrollment projections first established in 2005, current enrollment and historic growth rates from 1973 through 2023 (approximately 1.4 percent per year on average) do not demonstrate that reaching enrollment of 25,000 on-campus students is reasonably foreseeable within the next 20 years. This is particularly true as the addition of more online and hybrid course offerings in recent years has decreased the number of students who enroll in on-site courses. As of Fall 2025, 11,403 students were enrolled in on-site courses at Mesa College. Students participating in off-site and online courses register online; some students may visit the campus one to two times per semester, typically prior to on-campus courses starting and outside of peak on-campus hours. As these students do not regularly attend the physical Mesa College campus or use campus facilities, their presence does not contribute to campus-wide operational environmental impacts. Therefore, the analysis in this study focuses on the on-campus student population.

Although historic enrollment growth at the campus has averaged approximately 1.4 percent per year, this rate may not fully reflect future conditions. For purposes of this study, a 1.5 percent annual growth rate has been selected to ensure that the environmental analysis accounts for reasonably foreseeable changes in enrollment and campus development over the next 20 years. This growth rate reflects the potential for attracting and accommodating additional students in on-campus courses through implementation of planned improvements to campus facilities, academic offerings, and student services, while also providing a conservative approach for environmental analysis and ensuring that the PEIR addresses potential impacts associated with continued on-campus enrollment growth.

Based on applying an annual growth rate of 1.5 percent growth to the on-campus population per year, 15,358 on-campus students are anticipated to attend Mesa College in 2045, an increase of 3,955 on-campus students compared to baseline (Fall 2025) conditions.

Employee growth is anticipated to maintain the current student-to-staff ratio, which reflects established operational standards for delivering academic programs and student services at Mesa College.

2.3 Project Components

Based on current campus challenges and anticipated growth, the CMP recommends a series of improvements across the Mesa College campus. The exact architectural programming and design of each project would be developed during project implementation in coordination with user groups as funding becomes available and program needs are prioritized, with buildout anticipated in 2045. These future projects would generally provide more modern and expanded buildings to accommodate existing programming. This study focuses on circulation-related and student growth components of the Project as the specific building projects do not affect the VMT analysis as discussed in more detail in *Section 2.3.2* below.

The CMP identifies campus-wide projects that would improve circulation and utilities across campus consistent with the vision of the CMP. These improvements could be incorporated into specific projects or as holistic campus improvement programs, with buildout anticipated in 2045. Circulation improvements across campus would include pedestrian connections, bicycle paths, ride share drop off areas, and bus stops. Roadway improvements to add a bike path and parking along the southern loop of the campus access road are anticipated. New campus signage, art, and wayfinding signage could also be incorporated across the campus.

2.3.1 *West Access Relocation Project*

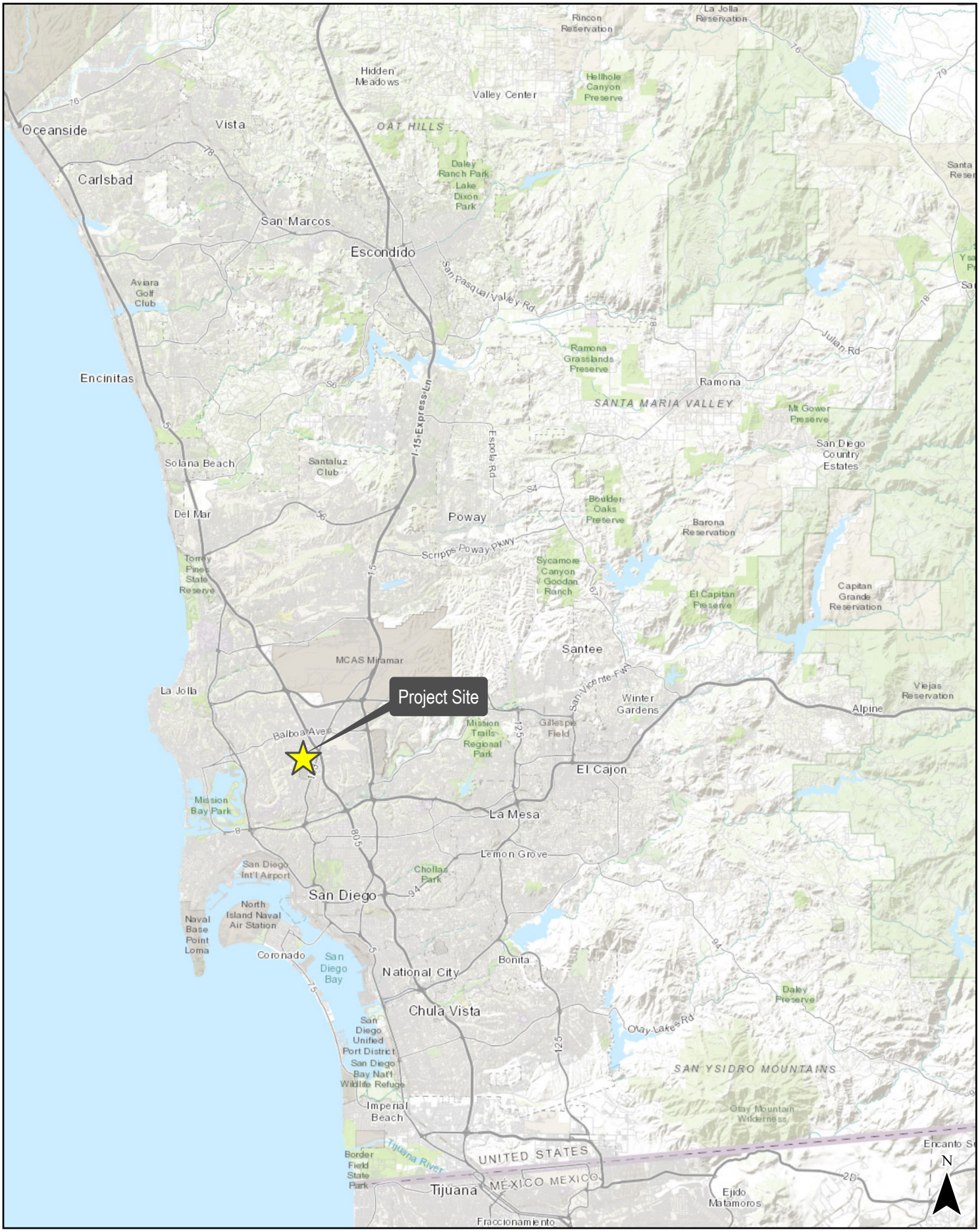
The campus currently has two entry points: the main entry on the east, accessible via Mesa College Drive, and the secondary entry on the west, at the intersection of Marlesta Drive and Chasewood Way. One of the improvements proposed by the project is a reconfigured west entrance to Mesa College, centered at the intersection of Genesee Avenue and Marlesta Drive, with the intent to alleviate congestion in adjacent neighborhoods, create a welcoming entry experience with improved wayfinding signage, and increase the visibility of Mesa College within the community. New monument signage and landscape improvements are proposed at the intersection of Genesee Avenue and Marlesta Drive.

The existing driveway to the campus garden, approximately 650 feet east of Genesee Avenue, would become the entrance to campus from Marlesta Drive, thereby eliminating the existing vehicular access at Chasewood Way. An access road would be extended from the existing driveway up to the mesa, providing vehicular access to the perimeter road and proposed parking structure.

2.3.2 *Increase in On Campus Students*

This study specifically analyzes the VMT associated with the anticipated increase in on-campus students outlined in *Section 2.2.3*, as opposed to specific infrastructure or planning changes that are proposed as a part of the Project. This is consistent with guidance provided by the Institute of Traffic Engineers (ITE) in their *Trip Generation Manual* (12th Edition, 2025) for community college land uses, which notes that acreage, floor space, staff, and parking accommodations can vary widely with the populations served or the social and economic characteristics of the area and therefore the number of students may be the most reliable independent variable on which to establish a trip generation estimate for this land use type.

As noted in *Section 2.2.3*, an increase of 3,955 on-campus students compared to baseline (Fall 2025) conditions is expected as part of the Project.



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Date: 3/7/2026

SanGIS, Bureau of Land Management, Esri, HERE, Garmin, USGS, NGA, EPA, USDA, NPS

Figure 2-1
Vicinity Map



LLG

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Date: 04/12/26

Figure 2-2

Project Area Map

San Diego Mesa College Master Plan

3.0 PROJECT TRIP GENERATION CALCULATIONS

The section below provides a detailed description of the Project's trip generation. As described above, an increase of 3,955 'on-campus students compared to baseline (Fall 2025) conditions is expected as part of the Project, over a 20-year period. 'Off-Campus' students enrolled in either off-site programs (i.e., high school courses receiving District credits) or online courses do not regularly attend the physical Mesa College campus or use campus facilities and are therefore not accounted for in this analysis.

3.1 Trip Generation Rate Comparison

The following sources were reviewed to determine the appropriate trip generation rates for the increase in on-campus students associated with the Project:

- *City of San Diego* - The City of San Diego *Trip Generation Manua*l, May 2003 provides a rate of **1.6 ADT per student** for the 'Community College (2 years)' land use type.

- *SANDAG* - SANDAG's *(Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region*, April 2002, provides a rate of **1.2 ADT per student** for the 'Junior College (2 years)' land use type.

- *ITE*- The ITE Trip *Generation Manual*, 12th Edition, August 2025, provides a rate of **1.15 ADT per student** for 'Junior/Community College (Land use code 540)' land use type.

The City of San Diego Trip Generation Manual indicates that the Community College trip generation rate is based on data originally developed by SANDAG. As such, the City rate ultimately reflects the same underlying dataset used to develop the SANDAG trip generation relationship. SANDAG college rates are based on data collected in the 1970s, and therefore, both the City and SANDAG rates are based on very old travel behavior patterns. In contrast, the ITE *Trip Generation Manual* (12th Edition, 2025) reflects a substantially more recent dataset compiled from observed trip generation studies across multiple sites.

After careful consideration, the ITE trip rate of 1.15 ADT per student was selected for use in calculating the Project trip generation. While ITE's rate is the lowest of the three rates compared, it's very comparable to the SANDAG rate of 1.2 ADT per student. Additionally, the ITE rate was published in 2025 and accounts for a number of factors that have resulted in a reduction in trips to/from college campuses including the prevalence of hybrid and on-line classes. The City and SANDAG rates, published in 2003 and 2002, respectively, are both over 20 years old and can be considered outdated in a number of ways.

It should be noted that all of the trip rates listed above account for all trips to and from the campus including trips made by students, teachers, staff, visitors, deliveries, etc.

3.2 Trip Generation Calculations

Table 3–1 summarizes the Project's estimated trip generation. As shown in *Table 3–1*, the Project is estimated to generate approximately 4,548 Average Daily Trips (ADT) with 435 AM peak hour trips (352 inbound / 83 outbound) and 435 PM peak hour trips (244 inbound / 191 outbound).

3.3 Trip Distribution & Assignment

The Project trip distribution was developed based on the locations of the existing and proposed access points, traffic patterns observed from the existing traffic counts, and the proximity of the Project site to surrounding freeways, and residential and commercial areas.

As part of the Project, existing vehicular access from Marlesta Drive at Chasewood Way would be eliminated and the driveway forming the southern leg of intersection #2 would be permanently closed. This driveway is proposed to be replaced with a driveway approximately 650 feet east of Genesee Avenue, which would become the entrance to campus from Marlesta Drive. Therefore, all existing trips to/from campus at Chasewood Way under 'without Project' conditions were moved to the New Western Driveway (intersection #7) under 'with Project' conditions.

TABLE 3–1
PROJECT TRIP GENERATION

Land Use	Size	Daily Trip Ends (ADTs)		AM Peak Hour					PM Peak Hour				
		Rate [a]	ADT	Rate	In:Out Split	Volume			Rate	In:Out Split	Volume		
						In	Out	Total			In	Out	Total
Residential Component													
Mesa College	3,955 Students [b]	1.15/ Student	4,548	0.11	81:19	352	83	435	0.11	56:44	244	191	435

Footnotes:

a. Trip Rate for 'Junior/Community College' (Land use code 540) from the ITE Trip Generation Manual, 12th Edition.

b. Increase in students from 2025 to 2045 is based on 1.5%/year growth for 20 years.

4.0 VMT ANALYSIS METHODOLOGY

The analysis contained herein has been prepared to evaluate the vehicular effects of the Project using the VMT metric, as currently required under CEQA.

CEQA Guidelines *Appendix G, Transportation, significance criteria 2*, refers to CEQA Guidelines Section 15064.3, subdivision (b), which provides the criteria for analyzing transportation impacts. CEQA Guidelines Section 15064.3(b) provides, in relevant part, that the lead agency has discretion to choose the most appropriate methodology to evaluate a project's VMT impact, including whether to express the change in absolute terms, per capita, per household or in any other measure. A lead agency may use models to estimate a project's VMT and may revise those estimates to reflect professional judgment based on substantial evidence.

Additionally, CEQA Guidelines Section 15064.3, subdivision (b) notes that if existing models or methods are not available to estimate the VMT for the project being considered, a lead agency may analyze the project's VMT qualitatively. Such a qualitative analysis would evaluate VMT based on factors such as the availability of transit, proximity to other destinations, etc.

The San Diego Community College District is the CEQA lead agency for the Project and therefore has the discretion to choose the most appropriate methodology to evaluate VMT. The analysis methodology utilized in this report was developed based on a review of the following documents:

- ***Technical Advisory on Evaluating Transportation Impacts in CEQA*** prepared by the State Office of Planning and Research (OPR) *(December 2018)*
- City of San Diego's ***Transportation Study Manual*** (TSM; *dated September 19, 2022*)
- California State University (CSU) ***Transportation Impact Study*** **(TIS)** ***Manual*** *(dated March 11, 2019)*

Neither the OPR or City of San Diego guidelines include detailed procedures for specifically analyzing VMT from colleges or universities, which are considered unique and complex land-use types from a VMT perspective, and instead group community college uses with other types of public facility uses that have different travel patterns and characteristics Alternatively, CSU's *TIS Manual* provides comprehensive and relevant guidance on the preparation of transportation impact assessments for projects on college campuses, consistent with both the CEQA Guidelines and OPR's *Technical Advisory*. While these guidelines were developed for projects on CSU campuses, they are considered especially applicable to the proposed Project due to the similar land use characteristics, commuter patterns, and travel behavior associated with large public higher-education campuses. Therefore, the Project's VMT analysis was based on CSU's *TIS Manual,* included in ***Appendix A***.

4.1.1 *Projects Screened from VMT Assessment*

Based on the CSU *TIS Manual*, the following project types generally are not required to complete a full VMT assessment and impacts under CEQA are presumed to be less than significant; that is, traffic

impacts associated with projects falling within one of the following categories are presumed to constitute a less than significant impact related to VMT:

- Local serving retail that is less than 50,000 [square feet] sq. ft., or retail that is located wholly within the core of a CSU campus;
- Childcare centers that serve students, faculty, and staff families;
- Student services facilities;
- Parking facilities that serve the campus demand and do not create "too much parking";
- Healthcare centers serving students, faculty, and staff;
- Recreation/fitness/wellness centers that serve students, faculty, and staff; and
- Projects generating less than 110 vehicle trips per day, as noted in the OPR Technical Advisory.

The CSU *TIS Manual* further describes that, in addition to the project types identified above, screening from a project-level assessment may be appropriate for other types of projects on the basis that certain characteristics (e.g. location) affect VMT such that it can be assumed those project types would not result in significant VMT impacts. Specifically, the following project types and screening attributes have the potential to decrease the number of trips and/or the trip length around their development, further decreasing VMT:

- **Development in Transit Priority Areas (TPA)**. TPAs are defined as areas located within a one-half mile of either an existing major transit stop (defined as a rail transit stop, ferry terminal served by either bus or rail transit, or the intersection of two or more major bus routes with 15-minute or better headways during the peak commute periods) or a stop along an existing high quality transit corridor (defined as a fixed route bus service with headways of 15-minutes or better). TPAs should be identified by the transportation consultant for applicability in the area.
- **Development in a low-VMT generating area of the city, sub-region, or region**. Low-VMT generating areas of the city, sub-region, or region can be identified by the transportation consultant by reviewing the VMT per person for the traffic analysis zone (TAZ) for the referenced region. If the proposed land use is consistent with what is currently in the study area and the TAZ is identified as generating lower than the regional average VMT (compared to the city, sub-region, or regional VMT per person average), then the project can be screened from project level assessment.
- **On-campus housing serving students, faculty, and staff**.

Additionally, although these types of projects would be screened from project level VMT assessment, they would still need to complete a *cumulative* level assessment to determine consistency with the Regional Transportation Plan (RTP). If a project meets one of the above project screening types/attributes and is consistent with the RTP assumptions, it can be presumed to have a less than significant project-level and cumulative impact related to VMT. If a project is not consistent with the

RTP assumptions, then it would still be screened out from project-level assessment but would require assessment of the effect upon cumulative VMT.

5.0 VMT ASSESSMENT RESULTS & CONCLUSIONS

5.1 Project Level Screening Assessment

As noted in the previous section, screening from a project-level VMT assessment may be applicable to certain projects on the basis that certain characteristics such as location affect VMT such that it can be assumed that those projects would not result in significant VMT impacts. To that end, the Project is screened from a project-level VMT assessment based on the campus' location within a **Transit Priority Area** (TPA), as further described below. Consistent with CEQA Guidelines Section 15064.3 and the CSU *TIS Manual*, no quantitative project-level VMT modeling is required

5.1.1 *Development in Transit Priority Areas*

The CSU *TIS Manual* defines Transit Priority Areas as those areas located within one-half mile of either an existing major transit stop (defined as a rail transit stop, ferry terminal served by either bus or rail transit, or the intersection of two or more major bus routes with 15-minute or better headways during the peak commute periods) **OR** a stop along an existing high quality transit corridor (defined as a fixed route bus service with headways of 15-minutes or better).

The Mesa College campus is considered to be located within a TPA since it is generally within one-half mile of Metropolitan Transit System (MTS) Route 44, which is a fixed route bus service with headways of 15 minutes or better. Bus stops for Route 44 are located on campus at the intersection of Mesa College Drive and Armstrong Place. Route 44 runs between Kearny Mesa Transit Center and Old Town Transit Center along Linda Vista Road, Mesa College Drive, Convoy Street, Clairemont Mesa Boulevard, and Complex Drive. Weekday service begins at 5:19 AM and ends at 11:34 PM, with 15-minute headways. (see ***Appendix B*** for additional information).

The small portion of the western campus not within one-half mile of Route 44 is serviced by MTS Route 41. Bus stops for Route 41 are located at the intersection of Genesee Avenue and Marlesta Drive. The western portion of the Mesa College Campus is shown to be located within a TPA as indicated on the City of San Diego's *Multifamily Residential TPA* interactive map, included in ***Appendix C.***

As illustrated above, the proposed Project is within a TPA as that term is defined by the *CSU TIS Manual* and the City of San Diego's *Multifamily Residential TPA* interactive map. Therefore, the proposed Project is presumed to result in a less than significant VMT impact and, as a result, the Project is appropriately screened from a project level assessment.

5.2 Cumulative Level Screening Assessment

The *CSU TIS Manual* notes that although a proposed project may be screened from project level VMT assessment based on the project types/locations discussed above, the project would nevertheless need to be assessed for its consistency with the applicable RTP. If the proposed project is not consistent with the RTP assumptions, then it would be necessary to assess the project's effect upon the regional or city VMT (i.e., it would require a cumulative assessment). To assess the project's consistency with

the RTP, it is necessary to review the land use information and assumptions contained in the local or regional travel demand forecasting model.

The currently approved RTP for the San Diego region is the San Diego Association of Governments (SANDAG) *2025 Regional Plan*, which was adopted in December of 2025. The RTP utilizes the SANDAG Series 15 ABM 3 Regional Plan travel demand forecasting model. Within this model, the Project is located within TAZ 1698.

The RTP travel demand forecasting model assumes the continued development of the Mesa College campus with community college land uses through 2050, consistent with the Mesa2030 Comprehensive Master Plan. Therefore, the Project is considered consistent with the RTP land-use type assumptions for the area.

Since the proposed Project is consistent with the assumptions utilized in the preparation of the current SANDAG RTP, it is not necessary to conduct a cumulative-level VMT assessment of the proposed Project.

5.3 VMT Analysis Conclusions

Based on its location within a TPA, consistency with the adopted regional land use assumptions of the SANDAG Regional Plan, and absence of evidence demonstrating a substantial increase in VMT beyond baseline conditions, the Project would result in less than significant project-level and cumulative impacts related to VMT under CEQA. Consistent with CEQA Guidelines Section 15064.3, no further analysis of VMT-related impacts is required.

4542 Ruffner Street
Suite 100
San Diego, CA 92111
858.300.8800 T
www.llgengineers.com

Pasadena
Irvine
San Diego

TECHNICAL APPENDICES TO THE VMT

MESA COLLEGE MASTER PLAN

City of San Diego, California
April 15, 2026

LLG Ref. 3-25-4139

APPENDICES

APPENDIX	
A.	California State University's *Transportation Impact Study Manual, March 11, 2019.*
B.	MTS Bus Route 44 Timetables and Route Information
C.	City of San Diego *Multifamily Residential TPA* Interactive Map

APPENDIX A

CALIFORNIA STATE UNIVERSITY'S TRANSPORTATION IMPACT STUDY MANUAL, MARCH 11, 2019.

California State University

Transportation Impact Study Manual

March 11, 2019

FEHR PEERS

Table of Contents

1. Background Information 1
   1.1 Manual Purpose 1
   1.2 SB 743 Background 2
   1.3 When is a VMT Study Needed 3
   1.4 Chancellor's Office Coordination 4
2. Report and Analysis Requirements 5
   2.1 CEQA Checklist 5
   2.2 Report Requirements 7
      2.2.1 Project Description and Project Setting 7
      2.2.2 Significance Criteria, Methodologies, and Results 9
   2.3 Impact Findings and Mitigation Measures 19
   2.4 Site Access and On-Site Circulation 21
3. Agency Coordination and Guidance 23
   3.1 Congestion Management Agency 23
   3.2 Caltrans 24
   3.3 Regional Transportation Planning Agencies 25
   3.4 Air Quality Management Districts 26
   3.5 Coastal Commission 26
   3.6 Local Agencies 27

List of Tables

Table 1: Significance Criteria 10
Table 2: VMT Significance Thresholds 14
Table 3: VMT Normalization Guidance 16
Table 4: Potential Mitigation Measures 19

Appendix

Appendix A – Glossary of Acronyms
Appendix B – RTP Assumptions by Campus
Appendix C – Test Case: CSUSB Master Plan

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1. Background Information

1.1 Manual Purpose

In November 2012, the California State University (CSU) issued a Transportation Impact Study Manual (2012 CSU Manual) to assist the campuses within the CSU system in addressing transportation-related impacts under the California Environmental Quality Act (CEQA). At that time, level of service (LOS), which is based on delay to single occupant vehicles, was the metric utilized to evaluate CEQA impacts to the transportation system. Following issuance of the 2012 CSU Manual, the California legislature approved Senate Bill (SB) 743, which directed the California Office of Planning and Research (OPR) to update the CEQA Guidelines (California Code of Regulations, Title 14, Division 6, Chapter 3, sections 15000-15387) and identify an alternative metric for determining significant impacts.

The OPR process, described in greater detail below, identified use of Vehicle Miles of Travel (VMT) as the new metric in assessing impacts associated with vehicle travel. VMT is calculated, generally, by multiplying the number of trips generated by a project by the average distance those trips traveled. Furthermore, VMT can be normalized on a per person basis to evaluate the efficiency of that trip (e.g. the lower the VMT per person, the more efficient travel is).

In December of 2018, the Natural Resources Agency finalized their rule making process and released an update to the CEQA Guidelines to officially change the transportation analysis metric from LOS to VMT. It should be noted that the CEQA Guidelines do recognize the time required for lead agencies to change their analysis requirements and develop implementation procedures to complete the assessment; as such, lead agencies have until July of 2020 to complete the updates to their impact analysis guidelines to complete the transition from LOS to VMT.

CEQA *refers to the California Environmental Quality Act. This statute requires analysis and identification of potentially significant environmental impacts associated with state or local action, including approval of new development or infrastructure projects. The process of identifying these impacts is typically referred to as the environmental review process.*

LOS *refers to "level of service," a metric that assigns a letter grade to road network performance. The typical application of LOS is to measure the average amount of delay experienced by vehicle drivers at an intersection during the most congested time of day and to assign a report card range from LOS A (fewer than 10 seconds of delay) to LOS F (more than 80 seconds of delay). Under prior CEQA criteria, a certain increase in LOS results in a significant impact, which must be mitigated.*

VMT *refers to "vehicle miles traveled," a metric that accounts for the number of vehicle trips generated by a project and the length or distance of those trips. For transportation impact analysis purposes, VMT is generally expressed as*

Given the recent revisions to the CEQA Guidelines, this manual replaces the 2012 CSU Manual to provide guidance in the preparation of transportation impact assessments for projects on CSU campuses, including all lands owned by CSU, consistent with the CEQA Guidelines update. The manual can be used for projects ranging from campus master plan updates to individual campus projects, and for public-private development.

The CSU Transportation Impact Study Manual is subject to revision due to future changes in policies, guidelines or statutes.

1.2 SB 743 Background

In 2013, Governor Jerry Brown signed SB 743 into law, thus significantly changing the CEQA transportation impact analysis procedures. SB 743 required OPR to develop a new transportation analysis alternative to LOS that "promotes the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses."[1] *The changes in impact analysis methodology include the elimination of auto delay, LOS, and other similar measures of vehicular capacity or traffic congestion as a basis for determining significant vehicle-related impacts.*

As proposed by OPR and approved by the Natural Resources Agency, auto delay has been eliminated as an environmental impact under CEQA. Additionally, the process identified that VMT is generally the most appropriate measure of vehicle-related transportation impacts under CEQA. [2]

In December 2018, OPR released the current version of the *Technical Advisory on Evaluating Transportation Impacts in CEQA* (Technical Advisory) to provide advice and recommendations to CEQA lead agencies on how to implement the SB 743 changes. SB 743 requires analysis of a project's anticipated generation of VMT rather than its location-specific roadway operational impacts (i.e., LOS impacts). The Technical Advisory also recommends a variety of travel demand management mitigation strategies to mitigate a project's significant VMT impacts.

Given the departure from LOS to VMT, this manual provides instructions for analyzing transportation impacts relative to VMT, applicable significance thresholds, and recommended mitigation measures.

VMT, as defined by OPR, is normalized by dividing it by the population, employment, number of households, service population (population plus employment), and/or some other metric that effectively utilizes VMT as a measure of travel efficiency (e.g. the lower the VMT per person, the more efficient their travel patterns

[1] Public Resources Code Section 21099(b)(1)
[2] The revised Guidelines were adopted by the Natural Resources Agency in December 2018, subsequently approved by the Office of Administrative Law, and effective as of January 3, 2019.

are). As such, the shift to VMT is essentially a shift toward measuring transportation efficiency for each project.

1.3 When is a VMT Study Needed

Numerous projects are considered to be VMT reducing or make travel more efficient. One example of this would be local serving retail that is less than 50,000 sq. ft. In this example, the retail would serve local trips and likely intercept existing trips on the system that need to travel a greater distance for those local services (thus reducing average trip length and reducing VMT). Similar local-serving retail projects are not required to complete a VMT assessment.

For CSU projects, examples of projects that would be screened from VMT assessment due to their VMT reducing nature (i.e., no further analysis required) are noted below:

- Local serving retail that is less than 50,000 sq. ft., or retail that is located wholly within the core of a CSU campus;
- Childcare centers that serve students, faculty, and staff families;
- Student services facilities;
- Parking facilities that serve the campus demand and do not create "too much parking[3]";
- Healthcare centers serving students, faculty, and staff; and
- Recreation/fitness/wellness centers that serve students, faculty, and staff.
- Projects generating less than 110 vehicle trips per day, as noted in the OPR Technical Advisory[4].

For all other project types, a VMT assessment would be required, as outlined in this manual. At the outset of the project, a memo from the transportation consultant shall be provided at the beginning of the CEQA process which identifies the manner in which the Transportation Study Impact Manual will be implemented for the project.

[3] The concept reflects the notion that, if you over park a site, then it is easier/more convenient to drive and VMT per person would increase. Therefore, if the parking per FTE is not increased, the ability to drive and park remains constant, or possibly reduced, and VMT is not induced.

[4] CEQA provides a categorical exemption for existing facilities, including additions to existing structures of up to 10,000 square feet, so long as the project is in an area where public infrastructure is available to allow for maximum planned development and the project is not in an environmentally sensitive area. (CEQA Guidelines, § 15301, subd. (e)(2).) Typical project types for which trip generation increases relatively linearly with building footprint (i.e., general office building, single tenant office building, office park, and business park) generate or attract an additional 110-124 trips per 10,000 square feet. Therefore, absent substantial evidence otherwise, it is reasonable to conclude that the addition of 110 or fewer trips could be considered not to lead to a significant impact. (OPR Technical Advisory, 2018)

1.4 Chancellor's Office Coordination

Campuses embarking on any transportation impact assessment should coordinate with the Chancellor's Office to solicit input on the scope of work, assessment approach, and to verify that the latest CSU and CEQA Guidelines are being utilized.

One potential area of coordination involves whether to continue conducting LOS analysis. Although LOS is no longer required for CEQA evaluation, many cities, counties, or other agencies (including Caltrans) may still request LOS assessment as part of a campus project. In those instances, the campus shall contact the Chancellor's Office to assist in the strategy of coordinating with those agencies and their requests.

2. Report and Analysis Requirements

This chapter describes the required analytical components that shall be included in the transportation impact study (TIS). In addition to identifying the organization and information required for the report, this chapter also summarizes the analysis methodology and thresholds that shall be utilized to determine if an impact is significant.

2.1 CEQA Checklist

As noted in Chapter 1, the CEQA Guidelines have been updated related to potential transportation impacts.

CEQA Guidelines Appendix G includes a series of questions to be answered to determine if a project has the potential to result in a significant impact. The questions related to transportation impacts are listed below and are based on the CEQA Guidelines as updated in December 2018 (Appendix G, XVII. Transportation):

Would the project:

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

b) *Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?*

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

d) *Result in inadequate emergency access?*

CEQA Guidelines Section 15064.3 provides in full:

(a) Purpose.

This section describes specific considerations for evaluating a project's transportation impacts. Generally, vehicle miles traveled is the most appropriate measure of transportation impacts. For the purposes of this section, "vehicle miles traveled" refers to the amount and distance of automobile travel attributable to a project. Other relevant considerations may include the effects of the project on transit and non-motorized travel. Except as provided in subdivision (b)(2) below (regarding roadway capacity), a project's effect on automobile delay shall not constitute a significant environmental impact.

(b) Criteria for Analyzing Transportation Impacts.

(1) Land Use Projects. Vehicle miles traveled exceeding an applicable threshold of significance may indicate a significant impact. Generally, projects within one-half mile of either an existing major transit stop or a stop along an existing high-quality transit corridor should be presumed to cause a less than significant transportation impact. Projects that decrease vehicle miles traveled in the project area compared to existing conditions should be presumed to have a less than significant transportation impact.

(2) Transportation Projects. Transportation projects that reduce, or have no impact on, vehicle miles traveled should be presumed to cause a less than significant transportation impact. For roadway capacity projects, agencies have discretion to determine the appropriate measure of transportation impact consistent with CEQA and other applicable requirements. To the extent that such impacts have already been adequately addressed at a programmatic level, such as in a regional transportation plan EIR, a lead agency may tier from that analysis as provided in Section 15152.

(3) Qualitative Analysis. If existing models or methods are not available to estimate the vehicle miles traveled for the particular project being considered, a lead agency may analyze the project's vehicle miles traveled qualitatively. Such a qualitative analysis would evaluate factors such as the availability of transit, proximity to other destinations, etc. For many projects, a qualitative analysis of construction traffic may be appropriate.

(4) Methodology. A lead agency has discretion to choose the most appropriate methodology to evaluate a project's vehicle miles traveled, including whether to express the change in absolute terms, per capita, per household or in any other measure. A lead agency may use models to estimate a project's vehicle miles traveled, and may revise those estimates to reflect professional judgment based on substantial evidence. Any assumptions used to estimate vehicle miles traveled and any revisions to model outputs should be documented and explained in the environmental document prepared for the project. The standard of adequacy in Section 15151 shall apply to the analysis described in this section.

(c) Applicability. The provisions of this section shall apply prospectively as described in section 15007. A lead agency may elect to be governed by the provisions of this section immediately. Beginning on July 1, 2020, the provisions of this section shall apply statewide.

Note: Authority cited: Sections 21083 and 21099, Public Resources Code. Reference: Sections 21099 and 21100, Public Resources Code; Cleveland National Forest Foundation v. San Diego Association of Governments (2017) 17 Cal.App.5th 413; Ukiah Citizens for Safety First v. City of Ukiah (2016) 248 Cal.App.4th 256; California Clean Energy Committee v. City of Woodland (2014) 225 Cal. App. 4th 173.

The remainder of this chapter provides guidance on addressing each of the noted CEQA checklist items consistent with Section 15064.3 of the CEQA Guidelines.

2.2 Report Requirements

This section of the Manual outlines the requirements for completing a TIS for projects proposed within the CSU system. In general, the study should include the following organization:

- Chapter 1 – Project Description and Project Setting
- Chapter 2 – Significance Criteria, Analysis Methodologies, and Results
- Chapter 3 – Impact Findings and Mitigation Measures
- Chapter 4 – Site Access and On-Site Circulation Assessment

2.2.1 Project Description and Project Setting



The Project Description and Project Setting provide the context for determining the study area for the impact analysis. The TIS study area refers to the geographical boundary within which the project's impacts on the transportation systems will be assessed. The study area should be viewed as the "area of influence" of a project. The extent of a TIS study area depends on the location (setting) and size/type of the project (description), and the technical questions anticipated to be asked by decision makers and the public. Defining the study area needs to be done through a process that results in substantial evidence (facts, analysis, etc.) to support the study area delineation. The boundary should extend as far as needed to accurately evaluate the significant impacts of the project and ensure that trip length information is not truncated at geographic boundaries (e.g. the entire trip length shall be accounted for).

Consideration of all travel modes and facilities (i.e., transit, pedestrian, bicycle, vehicle, rail, etc.) should take place when selecting the study area boundary. Guidance from CSU shall be obtained on the boundary delineation.

- The study area shall extend a sufficient distance from the project site to identify all potentially significant impacts, as supported by substantial evidence.
- Additional facilities may be studied based on circumstances unique to the site. TIS preparers shall consult with CSU to determine whether to consult with the host city or county early regarding any additional study locations based on local or site-specific issues.

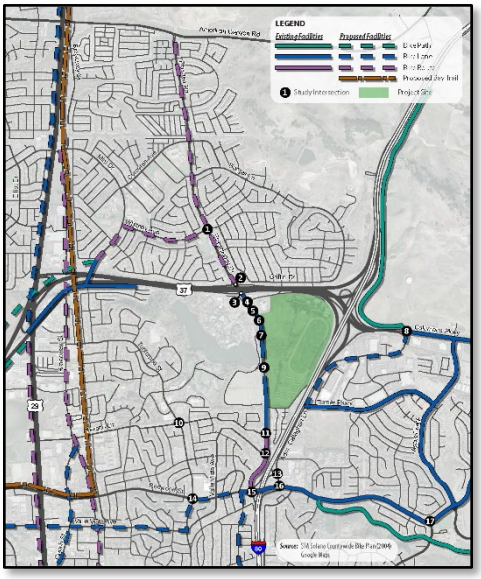
2.2.1.1 Roadway Network Description



The TIS shall provide a map that shows the Project site and identifies transportation facilities in the study area. The TIS shall provide a brief description of the study area roadways near the site. At a minimum, the TIS should state the number of travel lanes, direction of travel, the extents of each roadway, and the relation to the Project site. The TIS can also describe typical street cross-sections and other aspects of the streets such as on-street parking, bicycle and pedestrian facilities, median treatment, speed limit, etc. For state facilities, the latest available average daily traffic (ADT) counts near the Project site should also be reported[5].

2.2.1.2 Bicycle and Pedestrian Facility Description

The description and analysis of bicycle and pedestrian facilities will vary for each campus depending on the availability and usage. It is expected that urban locations will have more pedestrian and bicycle travel facilities and will require more detailed analysis than non-urban locations. At a minimum, the TIS shall provide the following information:



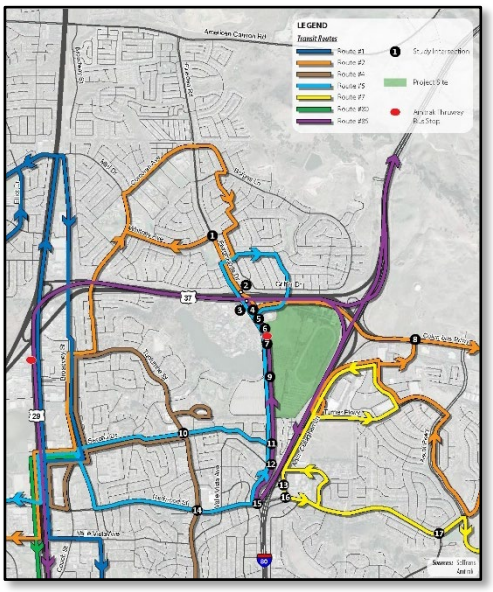
- A qualitative description of existing bicycle and pedestrian facilities in the Project vicinity. This would consist of identifying the location and type of bicycle facilities, presence of sidewalks, and the level of usage.
- A map showing existing and planned bicycle facilities in the study area.
- A description of different bicycle facility types. The local jurisdiction's bicycle plan should be consulted for a description of the facility types.
- A more detailed discussion of existing bicycle and pedestrian facilities and activities in the Project vicinity, including identification of nearby pedestrian and bicycle corridors. Major deficiencies in the existing system, such as street segments with missing sidewalks, obstacles, or non-Americans with Disabilities Act (ADA)-compliant facilities, should also be identified.

[5] Caltrans traffic counts can be found at traffic-counts.dot.ca.gov/

- A discussion of bicycle and pedestrian access between the Project site, nearby transit stops, and land uses that generate a high number of pedestrians or bicyclists (i.e., parking facilities, other campus buildings).
- A qualitative discussion based on observations of bicycle and pedestrian activity in the study area and at study area intersections.
- A description of bicycle parking in the Project vicinity, which may include location, type and usage of bicycle parking (racks, lockers, etc.)
- Graphics showing pedestrian and bicycle volumes in the study area and/or at study area intersections, if available.

2.2.1.3 Transit Facilities Description and Analysis

The description and analysis of transit facilities will vary for each site depending on the transit service and ridership in the Project area. At a minimum, the TIS shall provide the following:



- A qualitative description of transit service in the Project area, including campus shuttle service, local bus service, and regional bus, trolley, or rail service (such as Amtrak, or Bay Area Rapid Transit (BART) in the Bay Area, or the San Diego Trolley).
- A map showing transit routes within two miles of the Project site.
- Information on route operations, including hours of operations, time between stops of transit vehicles (headways), vehicle capacities, and load factors (i.e., a capacity analysis based on passenger counts).
- Information on bus stops near the Project site, such as bus stop locations.

2.2.2 Significance Criteria, Methodologies, and Results

The significance criteria refer to the criteria utilized to determine whether the transportation-related impacts of the proposed project would be significant within the meaning of CEQA. The significance criteria set forth below have been developed consistent with the CEQA Appendix G checklist questions, noted above and shall be utilized to evaluate potential project impacts. Table 1, Significance Criteria, lists the criteria to be applied in assessing transportation-related impacts; that is, the project would result in significant impacts if it would trigger any of the listed criteria.

Table 1: Significance Criteria

Impact Categories	CSU Significance Criteria
Plan Conflict	The project would conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle and pedestrian facilities.
VMT Impacts[6]	The project would result in a VMT-related impact as described below
Hazard Impact	The project would substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
Emergency Access Impact	The project would result in inadequate emergency access.

CEQA Checklist Questions:

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

b) Will the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?

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

d) Will the project result in inadequate emergency access?

2.2.2.1 Evaluation Approach and Methodology

2.2.2.1.1 Plan Conflicts

The TIS should identify plans, ordinances, or policies addressing the circulation system, including transit, roadways, bicycle lanes, and pedestrian paths. The consistency of a proposed project with the policies and standards shall be assessed to inform the impact conclusions using the significance criteria identified in **Table 1**. The various agencies and policies that will apply to most CSU projects are described below.

[6] Refer to Table 2: VMT Thresholds and Measurements by Project Type

CSU Campus Policies and Programs

The TIS should list the relevant circulation plans and other relevant transportation information identified in the current Campus Master Plan. A description of the Campus Travel Demand Management Plan (if applicable), current programs, and effectiveness (i.e. commute club membership, average carpool occupancy, changes in bicycle use, etc.) shall be included in this section.

Local Agency Policies and Standards

For information purposes, the TIS should list the transportation related programs, plans, and policies published in the adopted General Plan of the host city or county. The most relevant policies are those regarding planned improvements, including new roadways and new pedestrian and bicycle facilities, and policies and programs to enhance and encourage non-auto mode usage. Note that as a state agency, CSU is not required to comply with local plans, policies or regulations).

Congestion Management Program

The TIS must evaluate the Project's consistency with the relevant Congestion Management Program (CMP) requirements, where applicable, related to transit, bicycles, pedestrians, and other non-automotive uses. If the local CMP only requires LOS assessment for project evaluation, then that assessment shall not be included in the TIS as it is no longer required by CEQA upon implementation of SB 743. However, all other non-automotive analyses required by the CMP shall be assessed in the TIS to determine whether the project would conflict with the CMP.

2.2.2.1.2 VMT Impacts

This section describes the methodology and significance criteria for evaluating VMT impacts for CSU projects.

Screening Criteria

Please note that this section describes potential ways to screen projects from VMT assessment. However, projects that may be screened from VMT assessment may still need to address other assessments to comply with CEQA requirements.

Projects Screened From VMT Assessment

As noted in Chapter 1, the following CSU project types would generally not be required to complete a full VMT assessment; that is, identifying and describing the project as falling within one of these categories would constitute a less than significant impact related to VMT for CEQA purposes:

- Local serving retail that is less than 50,000 sq. ft., or retail that is located wholly within the core of a CSU campus;
- Childcare centers that serve students, faculty, and staff families;
- Student services facilities;
- Parking facilities that serve the campus demand and do not create "too much parking[7]";
- Healthcare centers serving students, faculty, and staff;
- Recreation/fitness/wellness centers that serve students, faculty, and staff; and
- Projects generating less than 110 vehicle trips per day, as noted in the OPR Technical Advisory[8].

Please note that, for those project listed above, the transportation consultant must still use engineering judgement to in completing the screening; that is, if these project types have the potential to increase VMT per person for some unique reason, then the project should undertake a full VMT assessment.

Projects Screened From Project Level VMT Assessment

In addition to the project types identified above, screening from project-level assessment may be applicable to certain other types of projects that do not meet the above project type on the basis that certain characteristics (e.g. location) are such that it can be assumed such project types would not result in significant VMT impacts. These project types and screening attributes are noted below as they have the *potential* to decrease the number of trips and/or the trip length around their development, further decreasing VMT. Importantly, however, this screening exemption is not absolute and if the transportation consultant reaches a conclusion that the project is appropriately screened from project-level analysis, it is essential that the study include substantial evidence supporting the conclusion. Additionally, although these projects would be screened from project level VMT assessment, they would still need to complete a *cumulative* level assessment to determine consistency with the Regional Transportation Plan (RTP) produced by the local Metropolitan Planning Organization (MPO) or Regional Transportation Planning Agency (RTPA).

- Development in Transit Priority Areas (TPA[9]);

[7] The concept reflects the notion that, if you over park a site, then it is easier/more convenient to drive and VMT per person would increase. Therefore, if the parking per FTE is not increased, the ability to drive and park remains constant, or possibly reduced, and VMT is not induced.

[8] Note – this screening criteria is described in OPR's technical advisory. If using this threshold, the transportation consultant should be aware that this is a trip-based benchmark; not a VMT-based benchmark. The user should review the trip length tied to the project to ensure that those would not be considered abnormally lengthy which would constitute potential concern related to CEQA significance.

[9] TPAs are defined as development located within a one-half mile of either an existing major transit stop (defined as a rail transit stop, ferry terminal served by either bus or rail transit, or the intersection of two or more major bus routes with 15-minute or better headways during the peak commute periods) or a stop along an existing high quality transit corridor (defined as a fixed route bus service with headways of 15-minutes or better).

- Development in a low-VMT generating area of the city, sub-region, or region; or
- On-campus housing serving students, faculty, and staff.

TPAs should be identified by the transportation consultant for applicability in the area. Low-VMT generating areas of the city, sub-region, or region can be identified by the transportation consultant by reviewing the VMT per person for the traffic analysis zone (TAZ[10]) for the referenced region. If the proposed land use is consistent with what is currently in the study area and the TAZ is identified as generating lower than existing VMT (compared to the city, sub-region, or regional VMT per person average), then the project can be screened from project level assessment.

As previously noted, although the project types described above can be screened from *project* level assessment, the proposed project needs to be assessed for its consistency with the RTP assumptions. If the project is not consistent with the RTP assumptions, then it would be screened out from project-level assessment but would require assessment of the effect upon regional or city VMT (i.e., it would require a cumulative assessment).

Some agencies (such as SACOG in Sacramento) have a checklist to determine RTP consistency and the campus should review local requirements for determining RTP consistency. If a checklist is not available, then consistency must be verified. To verify consistency, the land use information and assumptions in the local or regional travel demand forecasting model[11] should be reviewed.

Projects Requiring a Full VMT Assessment

For projects that do not meet any of the screening criteria described above, a transportation impact study including a full VMT assessment will be required. To complete this assessment, the traffic consultant will be required to determine if the project-generated VMT per service population is less than 15% of the existing regional, sub-regional, or citywide VMT per service population to determine whether the project would result in any project-related significant VMT impacts. The consultant must also evaluate the project's *effect* on VMT to determine if the project would increase or decrease the forecasted regional total VMT, i.e., would result in significant cumulative impacts.

For those projects not screened from further analysis, **Table 2** summarizes the VMT significance thresholds to be applied in assessing impacts associated with CSU projects; separate thresholds are identified for

[10] TAZ refers to a specific geographic location related to land use inputs into the regional or local travel demand forecasting model.

[11] The appendix contains a list of RTP assumptions related to campus use as of August 2018 to assist in verifying RTP consistency. Although this information has been summarized to assist staff with a consistency determination, the user should verify the land use inputs independently for accuracy.

application to project-level and cumulative impacts. These thresholds are consistent with the thresholds set forth in the OPR Technical Advisory, which recommends a significance threshold of 15% below existing VMT for project-level impacts associated with specific projects when measuring VMT on a per person or per capita basis (i.e., the project's travel efficiency should be 15% better than existing travel efficiency).

Table 2: VMT Significance Thresholds

Impact Categories	CSU Significance Thresholds
Project Level Impacts	➢ Residential Projects: VMT / Resident exceeds threshold of 15% below existing regional, sub-regional, or citywide VMT / Resident ➢ Office/Industrial: VMT / Employee exceeds threshold of 15% below existing regional, sub-regional, or citywide VMT / Employee ➢ Mixed-Use: VMT / Service Population[12] exceeds threshold of 15% below existing regional, sub-regional, or citywide VMT / Service Population ➢ Commuter Student Growth: VMT / Commuter Student exceeds threshold of 15% below existing regional, sub-regional, or citywide VMT / Commuter Student ➢ University Employment: VMT / Employee exceeds threshold of 15% below existing regional, sub-regional, or citywide VMT / Employee
Cumulative Impacts	➢ Residential Projects: VMT / Resident under the "with project" condition exceeds the Citywide, regional or sub-regional VMT / Resident identified under the RTP/SCS condition ➢ Office/Industrial: VMT / Employee under the "with project" condition exceeds the Citywide, regional, or sub-regional VMT / Employee identified under the RTP/SCS condition ➢ Mixed-Use: VMT / Service Population[2] under the "with project" condition exceeds the Citywide, regional, or sub-regional VMT / Service Population identified under the RTP/SCS condition ➢ Commuter Student Growth: VMT / Commuter Student under the "with project" condition exceeds the Citywide, regional or sub-regional VMT / Commuter Student identified under the RTP/SCS condition ➢ University Employment: VMT / Employee under the "with project" condition exceeds the Citywide, regional, or sub-regional VMT / Employee identified under the RTP/SCS condition

[12] Service population is typically defined as population plus employment. For campuses, service population is defined as population plus employment plus students. The transportation consultant shall not double count resident students twice in this evaluation (i.e., shall not count students that also live on campus).

VMT Methodology

As previously noted, VMT is defined as the number of trips generated by a project multiplied by the length of each trip. There are multiple methodologies that can be used to calculate VMT for a project, so special attention must be paid to how the project VMT is estimated.

VMT assessment under SB 743 is an efficiency metric, essentially evaluating the efficiency of the land use and transportation system by comparing the VMT per person that would result under the proposed project to the existing region or city VMT per capita. As such, the VMT methodology must be able to calculate the VMT for the project utilizing the exact same methodology used to estimate the VMT at the regional, sub-regional, or citywide scale so that an "apples-to-apples" comparison can be made.

The "best" tool presently available to estimate VMT at all CSU campus locations is the local or regional travel demand forecasting model. The travel demand models estimate trip generation, distribution, and assignment by land use type. Additionally, given the local or regional context of the project, the travel demand model can be utilized to develop the regional or citywide comparative efficiency metrics related to VMT.

As noted later in this manual, consistent with the OPR Technical Advisory for SB 743 implementation, VMT should be normalized as an efficiency rate for evaluation, the transportation consultant isn't evaluating the total VMT generated by the project; rather they are comparing the efficiency of travel on a per person basis to local, sub-regional, or regional travel efficiency averages. Depending on the proposed use being evaluated, the normalization should focus on specific types of VMT (identified as VMT by trip purpose) and should be normalized to the appropriate capita denominator (employment for employment uses, population for residential uses, students for educational uses, etc.). For example, increased employment uses should focus on home-based-work trip purposes estimated from the model and would be normalized per employee; home-based-work trips are those trips made from home to work and back home. This "commute trip" VMT estimate would be compared to the regional, sub-regional, or citywide VMT for the same trip purpose per employee to evaluate potential impacts of the project.

Please note that some travel demand models have limitations related to the application of isolating VMT by trip purpose or have constraints related to the model's ability to fully account for existing VMT in the model study area (especially if the project is located near the near the model's geographic boundary). As such, the traffic consultant shall use professional judgment to adjust the model results (if needed) in order to provide an accurate accounting of VMT per person, as required in **Table 3, VMT Normalization Guidance**.

Table 3: VMT Normalization Guidance

Project Type	VMT Trip Purpose Type[1, 2, 3, 4, 5, 6]
University Commuter Student Growth	Home-Based Other (Attraction)
University Master Plans and Other Mixed-Use Projects where new VMT would be generated (including FTE increases or other projects that include multiple uses)	Home-Based Work (Production & Attraction) + Home-Based Other (Production & Attraction) + Non-Home-Based (Production & Attraction)
University Employment	Home-Based Work (Attraction)
Market-rate or non-university housing	Home-Based Work (Production) + Home-Based Other (Production)
Student/Faculty/Staff Housing	Home-Based Work (Production & Attraction) + Home-Based Other (Production & Attraction)
Office/Industrial or off-campus commercial/retail greater than 50,000 sq. ft. (typically implemented as a Public-Private Partnership project)	Home-Based Work (Attraction)
Events and Recreational Projects[7,8]	Home-Based Other (Attraction)
Development located in a Transit Priority Area	See categories above for the most appropriate metric

Notes

1. Home-Based Work trips are trips in which either the origin or destination of the trip is the traveler's home, and either the origin or destination of the trip is the traveler's workplace.
2. Trip Production is the home end (either the origin or destination) of a Home-Based trip, or it is the destination of a Non-Home-Based trip.
3. Home-Based Other trips are trips in which either the origin or destination of the trip is the traveler's home, and either the origin or destination of the trip is a location other than the traveler's workplace, such as a place to buy goods or services, or a place to engage in social or recreational activities.
4. Trip Attraction is the non-home end (either the origin or destination) of a Home-Based trip, or destination of a Non-Home-Based trip.
5. Service Population is comprised of the employment population plus student population plus any additional residency not captured in the noted populations (e.g. faculty or staff housing could have spouses or children living there that are not already accounted for in the employment or student population).
6. Non-Home-Based trips are trips in which neither the origin nor destination of the trip is the traveler's home.
7. Examples of these types of projects include hotels, arenas, performing arts centers, and conference centers.
8. In the context of events and recreational projects, production-based trips are those generated by the residential land uses. Attractions, on the other hand, are trips that are destinations and are usually generated by employment or educational uses. Isolating these trip types allows the analyst to isolate the specific trip types accordingly.

To be consistent with current best practices, the transportation consultant shall review the travel demand model to ensure that it meets the following three criteria to be deemed acceptable for use in the assessment:

1. The scale of the model should match that of the project to ensure that the model accounts for all regional influence areas and accounts for the total VMT generated by the project (i.e., confirm it does not artificially truncate VMT information due to a small geographic boundary).
2. The model should be calibrated and validated within the study area by the transportation consultant related to VMT estimation. The model's validation in the study area should be verified for each forecast time period (i.e., daily, AM peak hour, PM peak hour, etc.) and for each mode analyzed. The model trip length information and VMT estimates should also be compared to available data to verify accuracy. The model validation should include static and dynamic tests. Static validation tests should include those specified in Travel Forecasting Guidelines (Caltrans, 1992), and Model Validation and Reasonableness Checking Manual (FHWA, 1997). Dynamic tests verify that the model contains an appropriate level of sensitivity related to the types of transportation network or land use changes associated with the project.
3. The model's land use or socioeconomic forecasts should be tested for reasonableness by the transportation consultant. Models are used to forecast travel demand for a specific horizon year (i.e., 20 years). The land use and socioeconomic forecasts need to match the horizon year and be based on reasonable market conditions that reflect past and future development trends for the specific study area. Additionally, the model needs to include any reasonably foreseeable development projects.

Project Generated VMT Assessment (Project Impacts)

To estimate the project generated VMT, the travel demand model should be run for the base year and future year condition, isolating out the VMT generated by the project as noted in **Table 3**. Since the project generated VMT should reflect the opening year of the project for individual projects or the buildout year for master plan projects, the traffic consultant must interpolate the VMT estimates between the base year and future year model results assuming linear interpolation (typically, a model's base year is several years prior to the opening year of the project). The same interpolation and model runs shall be utilized to estimate citywide, regional, or sub-regional VMT that is to be utilized for comparative purposes.

Using the model in this fashion, the transportation consultant shall complete the following assessment:

- Existing Conditions – existing VMT per capita for the citywide, regional, or sub-regional area
- Project Conditions – VMT per capita for the proposed project to be compared to the Existing Conditions
- Cumulative No Project Conditions – RTP-consistent VMT per capita at the citywide, regional, or sub-regional level
- Cumulative Plus Project Conditions – VMT per capita at the citywide, regional, or sub-regional level

Project Effect on VMT Assessment (Cumulative Impacts)

For the cumulative assessment, the transportation consultant shall evaluate the project's *effect* on VMT. To undertake this assessment, the user must input the project into the travel demand model and determine if the project would result in an increase or decrease in the regional, sub-regional, or citywide VMT per capita.

The traffic consultant may need to complete a redistribution of land uses to ensure that the "no project" assessment and the "with project" assessment contain the same land use control totals for the city, region, or sub-region, especially if the project is large enough that it would affect land use absorption elsewhere in the city, region, or sub-region (e.g. a proposed housing project on the campus does not change the regional population estimates; it just reallocates where they live). The consultant also will need to work with the Chancellor's Office to identify the most appropriate method of land use allocation, but the following approaches are considered acceptable for completing the cumulative assessment:

- Add the proposed land use to the travel demand model (note, this will not maintain regional control totals, but should produce appropriate results for most projects); or
- Utilize an economist to identify where else in the local region development would not occur with implementation of the project to maintain regional land use control totals (this would be appropriate for campus development that includes significant housing (i.e., more than 1,000 housing units or employees that were not anticipated in the RTP); or
- The traffic consultant would review all Traffic Analysis Zones (TAZs) within a five- to ten-mile radius of the project site and reduce growth proportionately across all TAZs showing growth to maintain regional land use control totals.

Fehr & Peers completed a "test case" for VMT assessment as part of manual preparation using the CSU San Bernardino master plan as the test project to evaluate through the VMT methodology and significance criteria. The results of this test case are summarized in a presentation included as Appendix C.

2.2.2.1.3 Hazard Impacts

The transportation consultant should review the project and determine if there is a specific design component that would create a hazardous condition. Typically, this review looks at project geometrics and the consultant would provide a professional opinion related to modal conflicts and/or consistency with typical design standards.

Additionally, the transportation consultant should review the land use context where the project is expected to contribute a different mix of travel such that the volume, mix, or speed of traffic was not anticipated as part of the original transportation network design (applies to all modes). Increasing trips on a facility that

was not originally designed for that volume, mix, or speed of traffic is another important consideration that should be addressed.

2.2.2.1.4 Emergency Access Impacts

The transportation consultant shall work with the campus to contact emergency services (fire and/or police) and solicit their input related to emergency accessibility for the project site. Additionally, CSU projects are required to follow the State University Administrative Manual (SUAM) which requires the State Fire Marshal to review all projects prior to implementation. As such, the consultant should reference the university requirements related to the SUAM which would result in a less-than-significant finding related to emergency accessibility impacts.

2.3 Impact Findings and Mitigation Measures

This section of the Transportation Impact Study shall summarize the results of the impact analysis (using the methodologies and significance criteria and thresholds identified above).

For significant impacts, feasible mitigation measures shall be recommended. **Table 4, Potential Mitigation Measures**, lists those potential mitigation measures that shall be considered by the transportation consultant and campus; the measures are listed by corresponding impact category. The specific mitigation measures to be selected will depend on the specific impact identified.

Table 4: Potential Mitigation Measures

Impact Category	Potential Mitigation Measures
Plan Conflict	➢ Provide for access to, from, and through the development for pedestrians and bicyclists ➢ Designate Class I bicycle paths, Class II bicycle lanes, and other appropriate facilities on-campus ➢ Provide bus turn-outs, bus shelters, additional bus stops, and park-and-ride lots ➢ Address planned transit facilities in project design, if feasible ➢ Coordinate with local transit providers to improve service to the area

VMT Impacts	➢ Revisit project design features and or proposed land uses with an eye towards reducing project trips or reducing trip lengths ➢ Look for other measures to reduce trip lengths or the number of trips generated through Transportation Demand Management (TDM) measures (see additional guidance below) ➢ If a regional program is available to reduce VMT, a fair-share payment toward that program shall be paid if all significant impacts have not been mitigated through all other feasible mitigation measures
Hazard Impact	➢ Optimize location of access driveway(s) ➢ Improve sight distances at intersections and driveways to standard engineering practice ➢ Provide for yield or stop control ➢ Restrict certain turn movements
Emergency Access Impact	➢ As noted above, projects would be required to be reviewed by the State Fire Marshal as part of the SUAM procedures. As such, no significant emergency access impacts are anticipated and, therefore, no mitigation would be required.

VMT Mitigation – Transportation Demand Management Strategies

For those projects that result in significant VMT-related impacts, implementation of a TDM mitigation measure represents potentially feasible mitigation to assist in reducing such impacts, if not fully eliminating the impacts. In preparing a TDM mitigation measure, each campus shall consider the following VMT reduction strategies to mitigate those impacts:

- Revisit project design features and or proposed land uses with an eye towards reducing project trips or reducing trip lengths. In a master plan context, examples include: increasing on-campus housing (thereby reducing commuter trips to the campus), limiting parking on the campus to discourage vehicle trips, coordinating with regional transit agencies to expand transit service to the campus, improving bicycle/pedestrian facilities both on- and off- campus, and other measures that decrease the need and/or desirability for people to drive to/from the campus.
- After all feasible TDM strategies have been included within the recommended mitigation measure, if there are remaining (i.e., residual) significant VMT-related impacts, the transportation consultant needs to determine whether there are any fee (i.e., fair-share) programs specific to VMT reduction that have been adopted and are applicable to CSU, generally, and the campus geographic area, specifically. Currently, there are very few such programs available to reduce VMT significant impacts

through a fair-share payment program (only a handful of VMT-based nexus programs exists in the state). If a valid regional program applicable to CSU is available to reduce VMT at the time the transportation consultant is conducting the VMT analysis, and impacts have not been reduced to less than significant with implementation of other VMT-reduction strategies, then, following consultation with the Chancellor's Office and General Counsel, a fair-share payment toward that program in an amount necessary to reduce the remaining impacts to less than significant shall be considered.

- Several regional agencies are exploring a VMT mitigation banking system that, if implemented, could be utilized to off-set significant VMT-related impacts. Although such a banking system currently does not yet exist in the state, this potential mitigation measure could exist in the future, and the transportation consultant must research the then-present availability of any such programs, with a related report to the campus and Chancellor's Office.

In light of the fact VMT mitigation programs have not yet been developed in most areas of the state, the mitigation measure most available that can affect VMT on campuses is implementation of a comprehensive TDM program. In this regard, CSU has developed a comprehensive TDM manual that provides a framework for development of a TDM program tailored to the setting of each campus.

Anticipated VMT reductions associated with several TDM strategies presently can be calculated using information from the California Air Pollution Control Officers (CAPCOA) guidance or other approved VMT calculation methodology.

Full implementation of all feasible TDM measures will mitigate significant VMT impacts to the extent feasible. TDM measures, which likely will be required in many circumstances, should be considered early in the project development process, along with the costs of implementation of such measures.

TDM Measure
Parking
Student, Faculty and Staff Permits
Daily Parking Pricing
Short Term/Hourly Parking
Preferential Parking for Carpools and Vanpools
Transit
Reduced/Subsidized Transit Fares
Universal Transit Pass
Shuttle Services
Walking/Bicycling
Walking and Biking Incentives
Bicycle Parking and Showers
On-site Bicycle Maintenance
Bikesharing
Other
On Campus Amenities
On Campus Housing
Guaranteed Ride Home Program (for Employees)
Carpool and Vanpool Incentives
Marketing and Educational Campaigns
Carsharing
Pre-tax Commuter Benefits (for Employees)
Ridematching Program

2.4 Site Access and On-Site Circulation

The analysis of on-site circulation is required to identify the adequacy of the site design. The level of detail in the analysis is to match the level of detail provided in the project site plan and will also be affected by the project type – i.e., a Master Plan update will be reviewed more broadly relative to campus-wide circulation

system requirements, whereas a new building or parking structure can receive a more localized and operational review.

The site plan review and circulation assessment should include the following considerations. This portion of the review should be completed by a registered State of California Civil or Traffic Engineer.

- Existence of any current traffic hazards in the local area such as high-collision locations.
- Applicability of context-sensitive design practices compatible with adjacent neighborhoods or other areas that may be impacted by the project traffic.
- Close proximity of proposed site driveway(s) to other driveways or intersections that may create a traffic hazard.
- Adequacy of corner sight distance or stopping sight distance at project access points.
- Adequacy of on-site vehicle, bicycle, and pedestrian circulation, provision of safe pedestrian paths between residential areas and academic buildings and other campus destinations, and between the site and nearby transit facilities.
- Project site design, including project construction activities, resulting in inadequate emergency access or response times.

3. Agency Coordination and Guidance

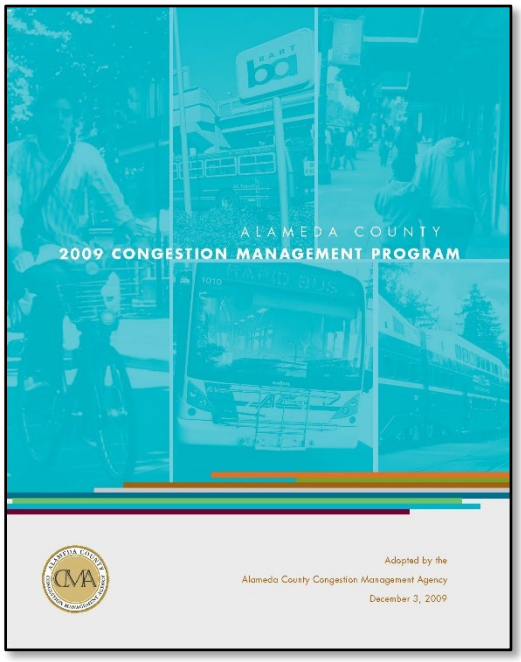
Campuses embarking on any transportation assessment should coordinate with the Chancellor's Office to solicit input on the scope of work, process, and to verify that the latest CSU and CEQA Guidelines are being utilized.

As previously noted, although LOS is no longer required for CEQA evaluation, many cities, counties, or other agencies (including Caltrans) may still request LOS assessment as part of a campus project. In those instances, the campus shall contact the Chancellor's Office to assist in the strategy of coordinating with those agencies and their requests.

The remainder of this chapter summarizes key agencies with which coordination may be required when preparing a TIS.

3.1 Congestion Management Agency

In 1990, the State of California passed Proposition 111, which requires urban counties to establish Congestion Management Agencies (CMA) to conduct certain transportation-related functions, including oversight of a portion of the state gas tax. CMAs are directed by boards consisting of representatives from the applicable county and each city within the county. The CMAs are required to maintain and periodically update a Congestion Management Program (CMP), consisting of the following elements:



- Traffic LOS standards applicable to a designated system of State highways and principal arterial streets;
- Transportation System Performance Measures to evaluate current and future multi-modal system performance for the movement of people and goods;
- A seven-year capital improvement program (CIP) containing projects to maintain or improve the performance of the multi-modal system for the movement of people and goods;
- A set of procedures to analyze the impacts of land use decisions made by local jurisdictions on regional transportation systems; and
- A travel demand element that promotes transportation alternatives to the single-occupant vehicle.

In addition to preparing, adopting and implementing a CMP, each CMA includes a countywide computerized travel demand model based on a uniform database. The CMA must also establish procedures for preparing Deficiency Plans when LOS standards are violated.

CMP requirements vary from county to county, but generally require assessment of project impacts on the primary roadway network (freeways and major arterials), using a trigger for impact assessment based on project size or number of trips generated; note that certain counties, including San Diego, have opted out of the CMP program. The CMP performance objectives are often different than those maintained by a local city or Caltrans, reflecting a county-wide perspective on congestion management and multi-modal transportation system operations. For example, a corridor-level metric such as average travel speed or vehicle density may be used as opposed to individual intersection or roadway segment LOS.

Given the direction of SB 743 to eliminate LOS from CEQA documents and utilize VMT for determining CEQA impacts, each campus will need to review the requirements identified within the CMP to determine applicability to the campus and corresponding TIS. If applicable requirements only focus on LOS assessments within the CMP, then no technical analysis will be required. However, if a CMP requires assessment of other modes or metrics, then the transportation assessment will need to address consistency with those modal requirements.

3.2 Caltrans

The California Department of Transportation (Caltrans) operates and maintains the State's highway system. Transportation impact studies prepared for CSU projects within a study area that includes Caltrans facilities should coordinate with Caltrans on the scope of the transportation assessment, including the standard practices of the local Caltrans District. Notwithstanding SB 743, Caltrans may require additional analysis beyond VMT, including, for example, queue analysis at Caltrans facility on- and off-ramps as related to potential safety impacts.

In recent years, Caltrans has begun moving toward a multi-modal, "complete streets" perspective in managing its facilities, to include not just freeways but many urban thoroughfares. Several guidance documents are available to support impact assessment on such routes, including Complete Streets Implementation Action Plan (February 2010) and Smart Mobility 2010 (February 2010).

In furtherance of the "complete streets" approach, in November 2016, Caltrans published interim guidance relative to SB 743. These guidelines supersede the previous Caltrans' guidance related to traffic impact analyses (published in 2002) that were largely focused on vehicle LOS. The guidance specifically states:

> *"Past LD-IGR practices primarily utilized Level of Service to identify various impacts to the State Highway System (SHS), and often limited its recommended mitigation to traditional road*

improvements. Although Caltrans recognized that Lead Agencies could implement other measures, such as improvements to other modes of transportation or incentive programs to encourage use of other modes, the Lead Agencies often rely on Caltrans' recommended measures. Going forward, efforts to fulfill our LD-IGR obligation should consider multimodal solutions to not only improve access to destinations for all system users (motorists, transit riders, bicyclists, pedestrians), but also encourage efficient land use that helps achieve the multitude of goals sought, including quality of life, economic prosperity, the development of multimodal networks, and GHG emissions reduction ."

3.3 Regional Transportation Planning Agencies

Regional transportation planning agencies (RTPA) are one of three regional agencies responsible for regional planning in California. The Caltrans Director designates the official regional transportation planning agency for each of California's 58 counties. For each county, the regional transportation planning agency is established through one of the following:

- created by statute,
- the metropolitan planning organization (MPO) serves as the regional transportation planning agency, or
- a local transportation commission or county transportation commission serves as the regional transportation planning agency.

Prior to the passage of SB 743, the purpose of the RTPA was to monitor LOS on regional roadways and prepare regional plans and programs to improve all modes of transportation locally and regionally. Under the new CEQA guidelines established pursuant to SB 743, RTPAs will have the responsibility of developing plans to reduce VMT. This change from vehicular LOS to regional VMT will align transportation metrics and mitigation measures with those required for air quality and covered in the Sustainable Communities Strategy (SCS). The SCS integrates land use and transportation strategies to achieve greenhouse gas (GHG) emission reduction targets. SB 375 requires each metropolitan planning organization to prepare a SCS.

In tandem with an SCS, agencies are likely to prepare a Regional Transportation Plan (RTP), which is a long-range planning document identifying future transportation improvements and the funding available within the region. The RTP/SCS collectively identifies improvements across the entire transportation system, including the roadway network and public transit systems.

Transportation impact studies prepared for CSU projects shall review the project's consistency with the RTP/SCS and document those consistency findings as outlined in prior chapters of this manual.

3.4 Air Quality Management Districts

Air Quality Management Districts (AQMDs) are comprised of locally elected officials from each jurisdiction within the district. The purpose of the districts is to regulate sources of air pollution. In September 2006, the State of California passed AB 32, the Global Warming Solutions Act of 2006, which requires the state to achieve a specified statewide GHG emissions reduction cap by 2020. Since the passage of AB 32, the California Air Resources Board and regional AQMDs have been developing guidance on the evaluation of GHG baselines and reduction strategies. Senate Bill 375 (SB 375) provides incentives in the form of CEQA streamlining to encourage community design that supports reduction in per capita GHG emissions. This effort has been further supported by the passage of SB 743.

CSU projects that require CEQA clearance may need to provide inputs, such as vehicle trips and vehicle-miles travelled, to the consultant preparing the air quality analysis of the project. Most AQMDs provide a set of guidelines to assist Lead Agencies in evaluating potential air quality impacts of projects and plans. Impact assessment for air quality assessment within a District's governing area should generally be prepared consistent with the guidelines set by the District.

3.5 Coastal Commission

The California Coastal Commission (CCC) is a state agency that partners with coastal cities and counties to regulate the use of land and water in the coastal zone under the California Coastal Act. The California Coastal Act includes provisions relating to transportation and public services in the context of new development. For example, Chapter 3, Article 6, Section 30250 (Location; Existing Developed Area), states that most new development must be located in proximity to existing developed areas in order to consolidate public services. Likewise, Section 30252 (Maintenance and Enhancement of Public Access) states that new development should maintain and improve public access to the coast, including measures such as extending transit service, mixing land uses in developed areas, providing bicycle and pedestrian circulation within the development, and providing adequate parking and/or increased transit service.

To maintain consistency with the Coastal Act, local governments prepare Local Coastal Programs (LCP) for CCC approval. The LCP guides development in the coastal zone and consists of a Land Use Plan, consistent with the local jurisdiction's general plan land uses, and an Implementation Plan, which is typically integrated with the local government's zoning code. Though the LCP plans vary by jurisdiction, a given LCP may directly address transportation considerations, such as the provision of new bicycle storage facilities at beach parking lots and standards for maximum roadway width through the coastal zone. Once the CCC adopts the LCP, the local agency that put forth the LCP is responsible for issuing coastal permits concurrent

with that planning document. The CCC only directly issues permits for land not covered under an LCP and addresses appeals of coastal permits.

CSU transportation impact studies for projects within the coastal zone shall review the goals and policies set by the applicable LCP and determine the project's consistency with those goals and policies. (Note: The term "coastal zone" is a legally defined term. Campuses should consult with the General Counsel's office to determine whether the subject project would be located within the coastal zone.)

3.6 Local Agencies

Local agencies in California typically have the ability to control land use and transportation within the City. However, CSU campuses are not subject to local land use control. As such, local agencies may approach a campus during a TIS without the understanding of their lack of control over campus land use decisions.

As such, local agencies may comment on environmental documents as they are a responsible (e.g. they are responsible for the areas around the campus). These local agencies are governed by the policies contained in their General Plan (which includes goals, policies, and maps related to transportation in its Circulation Element). Additionally, many cities have completed other transportation plans (such as Active Transportation Plans (ATPs), Bicycle Master Plans, Transit Master Plans, etc.) that guide the planning and implementation of those transportation facilities in their City.

Many cities have specific General Plan targets related to LOS. As such, local agencies may ask for intersection or roadway segment analysis to show the project's consistency with their policies. As noted above, LOS is no longer required for CEQA assessment and the CSU is not subject to these local land use control policies. Therefore, if a local agency does request LOS assessment (or any other assessment hat is not consistent with this manual), the Chancellor's office shall be consulted immediately to determine the most appropriate approach to coordinating with the local agency.

Appendix A – Glossary of Acronyms

SB – Senate Bill

AB – Assembly Bill

LOS – Level of Service for intersection or roadway operations

VMT – Vehicle Miles of Travel

TISM – CSU Traffic Impact Study Manual

CEQA – California Environmental Quality Act

OPR – California Office of Planning and Research

MP – Master Plan

RTP – Regional Transportation Plan

SCS – Sustainable Communities Strategy

TPA – Transit Priority Area

FTE – Full Time Equivalent

TDM – Transportation Demand Management

Appendix B – RTP Assumptions

Model Inputs and VMT Estimates for Campuses

Note: This information is meant simply as a reference for the CSU campuses. For project applications, campuses need to verify with the Metropolitan Planning Organizations and other entities that manage the below models that the information associated with them is correct before they use it.

Campus	Potential Travel Demand Forecasting Models to Estimate VMT	Base Year	Base Year - Employment	Base Year - Students	Future Year	Future Year - Employment	Future Year - Students	Other Dedicated VMT Estimators Available	Information on Existing Campus VMT Estimates	Link to Reports with VMT Estimates	Notes
Northern											
Cal Maritime	• Solano/Napa Activity Based Model (Solano/Napa) • The Bay Area's Metropolitan Transportation Commission's Travel Model One (TMO) Activity Based Model	• **Solano/Napa:** 2015 • **TMO:** 2010	• **Solano/Napa:** 329 • **TMO:** 645	• **Solano/Napa:** 291 • **TMO:** 573	• **Solano/Napa:** 2040 • **TMO:** 2040	• **Solano/Napa:** 414 • **TMO:** 727	• **Solano/Napa:** 364 • **TMO:** 640	N/A	• The "Increase in VMT After Implementation of the Master Plan" was calculated on page 334 of the report "California State University Maritime Academy Physical Master Plan Environmental Impact Report" but the total VMT of the campus was not calculated. • The increase in VMT was not broken down by user type. • Not enough information was provided to know whether this increase was calculated based on full or half accounting, or whether it was calculated in accordance with SB 743 guidelines.	California State University Maritime Academy Physical Master Plan Environmental Impact Report: https://www.dropbox.com/s/peqxbtupcfr798u/Cal%20Maritime%20Academy%20Project%20Public%20Review%20Draft%20EIR.pdf?dl=0	There are no trip-based travel demand forecasting models (TDMs) for this area.
Chico	Butte County Association of Governments (BCAG) Model	2014	N/A (see "Notes" column)	16,500	2036	N/A (see "Notes" column)	23,504	N/A	N/A	N/A	• The City of Chico has its own VISUM TDM. If you'd like information from that model, contact the City. Although note that the City uses the BCAG model instead of its own TDM. • There is no land use category represented in the BCAG model.
East Bay	• **For the Concord campus:** Contra Costa Transportation Authority (CCTA) 4 Step Model • **For the Hayward campus:** Trip-based Alalmeda County Transportation Commission (ACTC) Travel Demand Model	2010 for both models	• **CCTA:** 107 • **ACTC:** 1,774	• **CCTA:** 900 • **ACTC:** 13,061	2040 for both models	• **CCTA:** 210 • **ACTC:** 2,161	• **CCTA**: 0 • **ACTC:** 13,061	This online tool called "Simulated VMT per Capita by Place of Residence": https://mtc.maps.arcgis.com/apps/webappviewer/index.html?id=5dac76d69b3d41e583882e146491568b	N/A	N/A	
Humboldt	Humboldt County Travel Demand Forecasting model	See "Notes" column	See "Notes" column	See "Notes" column	See "Notes" column	See "Notes" column	See "Notes" column	See "Notes" column	N/A	N/A	We reached out to Caltrans about information on this TDM multiple times and did not hear back.
Sacramento	• Sacramento Metropolitan Travel Demand Model (SACMET) • Sacramento Activity-Based Travel Simulation Model (SACSIM)	• **SACMET:** 2012 • **SACSIM:** 2012	• **SACMET:** 3,388 • **SACSIM:** 3,239	• **SACMET:** 28,016 • **SACSIM:** 28,016	• **SACMET:** 2036 • **SACSIM:** 2036	• **SACMET:** 4,262 • **SACSIM:** 3,890	• **SACMET:** 36,419 • **SACSIM:** 36,419	N/A	• Reductions in VMT from commuter student trips between campus, and other trips (e.g. shopping trips) if the Campus Master Plan was implemented were estimated on pages 68 and 73, for Existing Plus Project and Future Plus Project conditions, respectively, but total VMT of the campus was not estimated. • Reductions in VMT for other user types, like faculty or staff, weren't estimated. • Not enough information was provided to know whether full or half accounting was used, or if VMT was estimated in accordance with SB 743 guidelines	CSU Sacramento Master Plan: http://www.csus.edu/aba/facilities/documents/csu%20sacramento%20master%20plan%20final%20eir%20_%20web.pdf	
San Francisco	• SF-Champ, San Francisco's TDM • The Bay Area's Metropolitan Transportation Commission's Travel Model One (TMO) Activity Based Model	• **SF-Champ:** 2012 • **TMO:** 2015	• **SF-Champ:** 881 • **TMO:** 9,410	• **SF-Champ:** 18,651 • **TMO:** 24,550	2040 for both models	• **SF-Champ:** 1,545 • **TMO:** 11,656	• **SF-Champ:** 18,651 • **TMO:** 31,298	N/A	• Total Miles Traveled per day by users of the SF State Shuttle Bus, people who drive alone, people who carpool, people who use the Muni Diesel Vehicles, and people who use the Muni Electric Vehicles were calculated on page 15 of the campus' Climate Action Plan. • Not enough information provided to know whether full or half accounting was used, or if SB 743 guidelines were followed.	San Francisco State University Climate Action Plan: https://sustain.sfsu.edu/sites/default/files/assets/doc/SFState_CAP.pdf	
San José	• Valley Transportation Authority (VTA) TDM • City of San Jose (San Jose) TDM	• **VTA:** 2013 • **San Jose:** 2008	• **VTA:** 2,869 • **San Jose:** 3,712	• **VTA:** 34,100 • **San Jose:** 34,100	• **VTA:** 2040 • **San Jose:** 2030	• **VTA:** 3,164 • **San Jose:** ?	• **VTA:** 34,100 • **San Jose:** ?	A sketch-level VMT tool that the City of San Jose developed here, although this tool is more appropriate for land development projects than campuses: http://www.sanjoseca.gov/vmt	N/A	N/A	We do not have access to Future Year Employment and College Population inputs for the City of San José's TDM.

Campus	Potential Travel Demand Forecasting Models to Estimate VMT	Base Year	Base Year - Employment	Base Year - Students	Future Year	Future Year - Employment	Future Year - Students	Other Dedicated VMT Estimators Available	Information on Existing Campus VMT Estimates	Link to Reports with VMT Estimates	Notes
Sonoma	Sonoma County Transportation Authority (SCTA) 4 Step Model	2005	6,404	8,384	2030	471,404	24,498	N/A	N/A	N/A	
Central											
Bakersfield	Kern Council of Governments (Kern COG) TDM	2017	1,392	9,368	2042	1,589	14,751	The Mixed Use Developed (MXD) Trip Generation and Travel Demand Management (TDM) post-processor for project-level VMT tool.	• VMT was estimated for the University Place Office Park Project, on page 86 of the report "CSUB University Place Office Park Project - Draft Initial Study-Mitigated Negative", but total VMT for the campus was not estimated. • The CalEEMod tool was used to estimate VMT. • VMT was not broken down by user type. • Not enough information was provided to know whether full or half accounting was used to estimate VMT, or if VMT was estimated based on SB 743 guidelines.	CSUB University Place Office Park Project Draft Initial Study: http://www.csub.edu/discover/_files/CSUB_Office_Draft_IS-MND.pdf	The post-processor VMT tool is not meant for universities, it's just a general tool.
Fresno	Fresno Council of Governments (Fresno COG) Model	2014	12,661	16,256	Both 2035 and 2042 are Future Years	• **2035:** 14,190 • **2042:** 13,904	• **2035:** 19,259 • **2042:** 20,013	Envision Tomorrow: https://frego.com/envision-tomorrow/	N/A	N/A	
Monterey Bay	Association of Monterey Bay Area Governments (AMBAG) TDM	2010	485	4,596	2035	454	5,170	N/A	Total campus VMT was not estimated, however the potential of the Promontory Project to decrease VMT was discussed on page 69 of The Promontory at California State University Monterey Bay (CSUMB) Specific Plan. Exactly how much VMT would decrease from the project was not discussed. The report just says that since the project is an infill development, VMT should decrease.	Initial Study for The Promontory at California State University Monterey Bay Specific Plan: https://csumb.edu/sites/default/files/images/st-block-88-1471897379448-raw-rbfthepromontoryatcsumbinitialstudymitigatednegativedeclaration.pdf	
San Luis Obispo	San Luis Obispo Council of Governments (SLOCOG) TDM	**SLOCOG:** 2010	**SLOCOG:** 2,843	**SLOCOG:** 19,325	**SLOCOG:** 2020	**SLOCOG:** 2,945	**SLOCOG:** 24,000	N/A	• VMT was estimated on page 273 of the Draft Environmental Impact Report for CSU San Luis Obispo's 2035 Master Plan • VMT was broken down by the following user types: Faculty/Staff and Off-Campus Students • Full accounting was used to estimate VMT, which is consistent with SB 743 guidelines	Draft Environmental Impact Report for CSU San Luis Obispo's 2035 Master Plan: http://masterplan.calpoly.edu/wp-content/uploads/2017/11/01_Cal-Poly-Master-Plan-2035-Draft-EIR_November-2017.pdf	The City of San Luis Obispo has its own TDM, however Fehr & Peers does not have access to recent copies of it. If you'd like to use that model, please contact the City.
Stanislaus	Stanislaus Council of Governments (StanCOG) TDM	2008	96	8,601	Not Available	Not Available	Not Available	N/A	N/A	N/A	We do not have access to Future Year inputs for the StanCOG TDM.
Southern											
Channel Islands	Ventura County Transportation Commission (VCTC) TDM	2012	835	4,617	2040	835	4,824	N/A	•Annual VMT from the East Campus Residential Neighborhood Project was estimated on page 254 of the report "CSUCI Specific Reuse Plan Amendment Draft Environmental Impact Report" but total VMT for the campus was not estimated. • Annual VMT from the project was estimated for passenger cars, light/medium trucks, heavy trucks/other, and motorcycles. • Not enough information was provided to determine whether full or half accounting was used, or if VMT was estimated based on SB 743 guidelines.	CSUCI Specific Reuse Plan Amendment Draft Environmental Impact Report: https://www.csuci.edu/ci-2025/documents/specific-reuse-plane-phase-2-draft-eir.pdf	
Dominguez Hills	Southern California Association of Governments (SCAG) TDM	2012	2,061	12,933	2040	2,568	13,017	N/A	N/A	N/A	
Fullerton	• Orange County Transportation Authority Model (OCTAM) TDM • SCAG TDM	2012 for both models	• **OCTAM:** 1,526 • **SCAG:** 6,242	• **OCTAM:** 31,635 • **SCAG:** 31,847	2040 for both models	• **OCTAM:** 2,266 • **SCAG:** 9,088	• **OCTAM:** 34,747 • **SCAG:** 32,210	N/A	N/A	N/A	
Long Beach	SCAG TDM	2012	7,128	38,131	2040	7,854	38,379	N/A	N/A	N/A	
Los Angeles	• City of Los Angeles' (LA) TDM • SCAG TDM	2012 for both models	• **LA:** 2,335 • **SCAG:** 508	• **LA:** 26,472 • **SCAG:** 26,472	2040 for both models	• **LA:** 3,244 • **SCAG:** 1,284	• **LA:** 26,644 • **SCAG:** 26,644	N/A	• Total campus VMT was not estimated, but an estimated decrease in VMT by commuter students due to the North Campus Project was discussed on page 52 of The North Campus Project Environmental Impact Report. • Decreases in VMT for other user types, like faculty, were not discussed. • Full accounting was used, which is consistent with SB 743 guidelines.	Final EIR for the North Campus Project: http://www.calstatela.edu/sites/default/files/groups/FPDC/preliminary_csula_north_campus_eir.pdf	

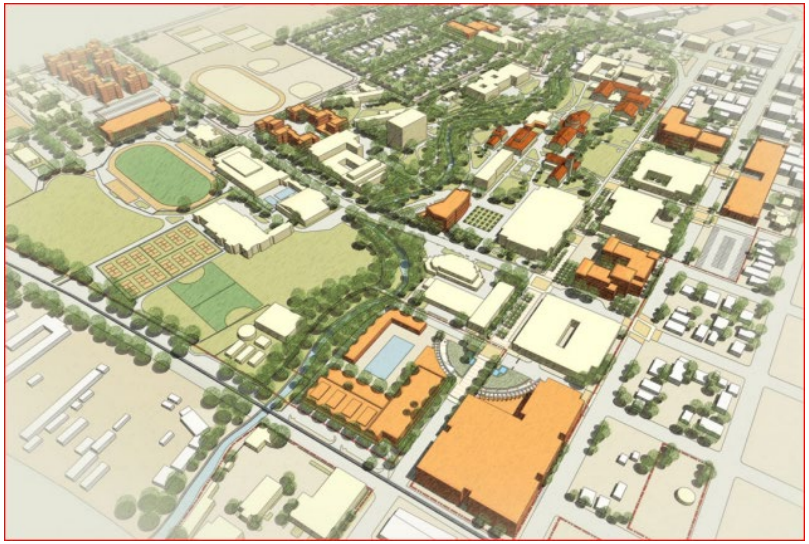
Campus	Potential Travel Demand Forecasting Models to Estimate VMT	Base Year	Base Year - Employment	Base Year - Students	Future Year	Future Year - Employment	Future Year - Students	Other Dedicated VMT Estimators Available	Information on Existing Campus VMT Estimates	Link to Reports with VMT Estimates	Notes
Northridge	• City of Los Angeles' (LA) TDM • SCAG TDM	2012 for both models	• **LA:** 11,826 • **SCAG:** 6,321	• **LA:** 36,438 • **SCAG:** 36,438	2040 for both models	• **LA:** 12,540 • **SCAG:** 6,507	• **LA:** 36,674 • **SCAG:** 36,674	N/A	Total campus VMT has not been estimated, but it was predicted that the Tseng College of Extended Learning Building Project would not significantly increase VMT, on page 17 of the CSUN 2005 Master Plan Update Final EIR Addendum.	This report is not available online. For more information on the CSUN 2005 Master Plan Update Final EIR, see: http://www.csun.edu/pubrels/envision2035/documents.html	
Pomona	• SCAG TDM • Pomona Traffic Analysis Model (PTAM)	• **SCAG:** 2012 • **PTAM:** 2008	• **SCAG:** 3,842 • **PTAM:** 224	• **SCAG:** 28,907 • **PTAM:** 27,737	• **SCAG:** 2040 • **PTAM:** 2035	• **SCAG:** 4,746 • **PTAM:** 241	• **SCAG:** 29,095 • **PTAM:** 29,737	N/A	• Estimated VMT reductions from commuter students by replacing student housing are included on page 43 of the Final Environmental Impact Report (EIR) for Student Housing Replacement, but total campus VMT was not estimated. VMT reductions were not calculated for other users, such as faculty. • Full accounting was used to estimate the VMT reductions, which is consistent with SB 743 guidelines. • Reducing VMT by Faculty and Staff by 10% is a goal of the Climate Action Plan (CAP), as stated on page 18, but the CAP doesn't include VMT estimates.	• Final EIR for Student Housing Replacement: https://www.cpp.edu/~fpm/planning-design-construction/docs/student-housing-replacement-final-eir-08-2016.pdf • CAP: https://www.cpp.edu/~sustainability/pdf/CPP_CAP_091109.pdf	
San Bernardino	• For main campus: San Bernardino Traffic Analysis Model (SBTAM) • For Palm Desert campus: Riverside County Traffic Analysis Model (RIVTAM)	• **SBTAM:** 2012 • **RIVTAM:** 2008	• **SBTAM:** 0 • **RIVTAM:** 826	• **SBTAM:** 17,800 • **RIVTAM:** 0	• **SBTAM:** 2040 • **RIVTAM:** 2035	• **SBTAM:** 612 • **RIVTAM:** 2,016	• **SBTAM:** 25,100 • **RIVTAM:** 0	N/A	• On page 93 of the Final EIR for CSU San Bernardino's 2016 Campus Master Plan, VMT was estimated for the main campus for existing and master plan enrollment. Under each condition, VMT was broken down by the following user types: on-campus students, off-campus students, and faculty/staff. For Master Plan enrollment, an additional user type was analyzed: "Discovery Park Employees". • Full accounting was used to estimate VMT, which is consistent with SB 743. • VMT was also estimated in the Final EIR for the 2016 Campus Master Plan for CSU San Bernardino's Palm Desert Campus, on page 96. • VMT was estimated for existing and master plan enrollment. Under each condition, VMT was broken down by: off-campus students and faculty/staff. For Master Plan Enrollment, there was an additional user type: on-campus students. • Full accounting was used to estimate VMT for the Palm Desert Campus, which is consistent with SB 743	• Master Plan for CSUSB: https://www.csusb.edu/sites/csusb/files/08-28-17%20CSUSB%20Final%20EIR_appendices%20%28WEB%29.pdf • Master Plan for CSUSB, Palm Desert: https://www.csusb.edu/sites/csusb/files/12-19-2017%20CSUSB%20PDC%20Final%20EIR%202016%20Campus%20Master%20Plan.pdf	
San Diego	San Diego Association of Governments (SANDAG) TDM	2012	11,979	10,892	2050	39,157	15,961	N/A	• On page 10 of the report "Pathways Toward Zero-Carbon Campus Commuting: Innovative in Measuring, Understanding, and Reducing Greenhouse Gas Emissions", Annual Total Miles for 2016-2017 for students, faculty, and staff were calculated, but the report doesn't say how this number was calculated or whether the methodology is consistent with SB 743. • Page 40 of the GHG emissions section of the EIR for a new student housing project says that the project would result in 3,793 VMT per day, but there are no details on how that number was calculated	• Pathways Toward Zero-Carbon Campus Commuting: https://trid.trb.org/view/1496845 • GHG Emissions section of the EIR: http://advancement.sdsu.edu/PDFs/FEIR/Revised_DEIR/4_7_Greenhouse_Gas_Emissions.pdf	
San Marcos	SanDAG TDM	2012	2,536	7,405	2050	12,260	10,854	N/A	N/A	N/A	

Appendix C – Test Case: CSUSB Master Plan

SB 743 Implementation

Step 2 – Master Plan or Non-Screened Out Project Generated VMT Assessment

- Key considerations:
  - To ensure the ability to maintain consistency between efficiency metrics, recommend use of the local or regional travel demand model.
  - Can compare campus VMT/person (or other efficiency metric) to citywide or regional totals



Test Case – CSUSB MP

Project Generated VMT Assessment

- Draft Threshold: CSU projects should estimate VMT per person and strive to be 15% less than the citywide, subregional, or regional average – **Master Plan generated VMT**
- Consistent with the State guidelines/recommendations

Test Case – CSUSB MP

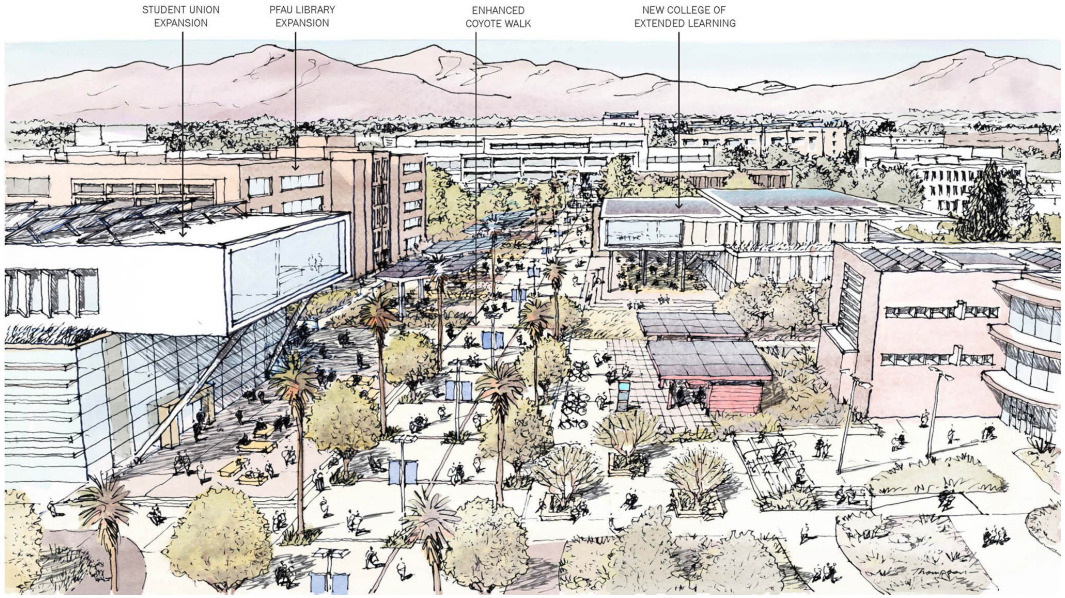
Master Plan Generated VMT Assessment

Table 2: Project Impact Assessment		
VMT Per Service Population (Includes Students as Noted Above)	**Existing VMT**	**15% Below Existing Threshold (Project Impact)**
Project Generated VMT	***16.0***	
Citywide (City of San Bernardino) VMT	22.4	***19.0***
Regional VMT	23.6	***20.1***
Does Project Exceed Applicable Project Threshold?		***No***

SB 743 Implementation

Step 3 – Effect on VMT (Cumulative Assessment)

- Is the Master Plan/project better than or worse than RTP assumptions (e.g. is VMT per person higher compared to the RTP)



Test Case – CSUSB MP

Effect on Regional or City VMT (Cumulative Assessment)

- Draft Threshold: CSU projects should result in VMT per person that is the same as or lower than the citywide, subregional, or regional average – **Effect on VMT (Cumulative Assessment)**
    - Is regional or citywide VMT increasing with the project?
- Consistent with the State guidelines/ recommendations

Test Case – CSUSB MP

Effect on Regional or City VMT (Cumulative Assessment)

Table 3: Cumulative Impact Assessment			
VMT Per Service Population (Includes Students as Noted Above)	**2040 RTP/SCS**	**2040 With Project**	**Difference**
City of San Bernardino	25.5	25.3	-0.2
Valley Region of San Bernardino	28.0	27.9	-0.1
Does Project Exceed Cumulative Threshold?			**No**

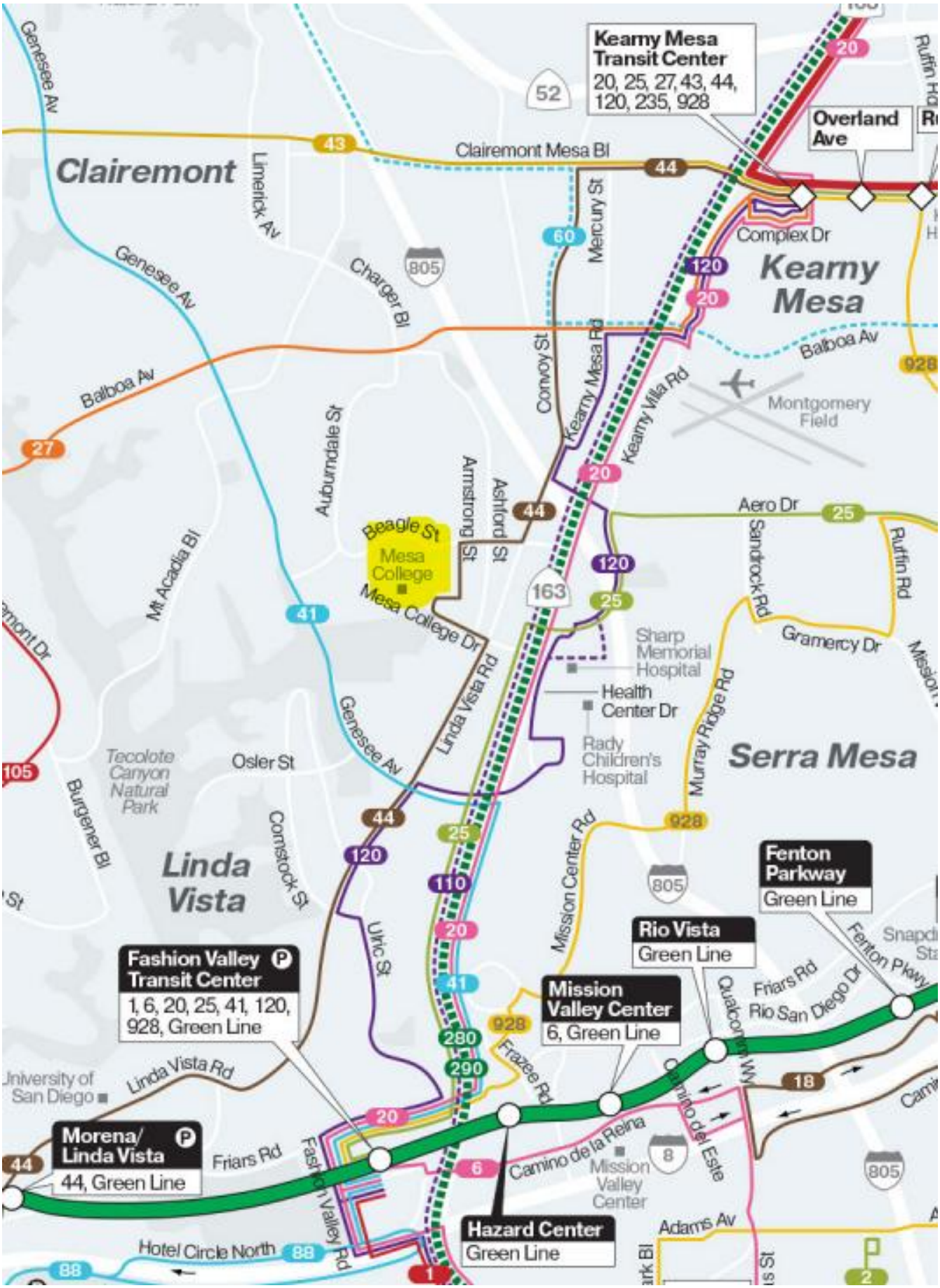
Test Case – CSUSB MP

Step 4 - Impacts and Mitigation

- No Significant Impacts As:
  - Master Plan Generated VMT was less than 15% of the Citywide and Regional averages
  - Effect on VMT (Cumulative) was less than the Citywide or sub-regional average
- Mitigation:
  - No impacts, so no mitigation required
  - If mitigation is required for a significant impact, consider land use changes such as more on-campus housing, land use location change, and/or transportation demand management (TDM)
  - Roadway improvements are no longer required to mitigate significant impacts
  - Campus's can invest in TDM instead of roadway improvements; supports CAP Goals and Active Transportation

APPENDIX B

MTS BUS ROUTE 44 TIMETABLES AND ROUTE INFORMATION


Kearny Mesa Transit Center
20, 25, 27, 43, 44, 120, 235, 928
Overland Ave
Clairemont
Clairemont Mesa Bl
Kearny Mesa
Complex Dr
Balboa Av
Montgomery Field
Aero Dr
Sandrock Rd
Ruffin Rd
Gramercy Dr
Mesa College
Mesa College Dr
Beagle St
Sharp Memorial Hospital
Health Center Dr
Rady Children's Hospital
Serra Mesa
Murray Ridge Rd
Kearny Villa Rd
Kearny Mesa Rd
Convoy St
Mercury St
Charger Bl
Limerick Av
Genesee Av
Auburndale St
Armstrong St
Ashford St
Mt Acadia Bl
Linda Vista Rd
Tecolote Canyon Natural Park
Osler St
Burgener Bl
Comstock St
Ulric St
Linda Vista
Mission Center Rd
Fenton Parkway
Green Line
Rio Vista
Green Line
Fenton Pkwy
Friars Rd
Rio San Diego Dr
Quaker Ln
Mission Valley Center
6, Green Line
Fashion Valley Transit Center
1, 6, 20, 25, 41, 120, 928, Green Line
Frazee Rd
Camino de la Reina
Camino del Este
Mission Valley Center
Morena/ Linda Vista
44, Green Line
Hazard Center
Green Line
Hotel Circle North
Adams Av
University of San Diego
Fashion Valley Rd

Fare Information
Información de tarifas
sdmts.com/fares

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MTS **sdmts.com**

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MTS Information & Trip Planning *MTS Información y planeo de viaje*	**619-233-3004**
Customer Service / Suggestions *Servicio al cliente / Sugerencias*	**619-557-4555**
Lost and Found *Objetos extraviados*	**619-233-3004**
Transit Store 12th & Imperial Transit Center M–F / *L-V* 8am–5pm	**619-234-1060**
TTY/TDD (teletype for hearing impaired) *Teletipo para sordos*	**619-234-5005** **888-722-4889**

Buses on all MTS routes are accessible via lift or ramp.
Autobuses en todas las rutas de MTS son accesibles mediante un ascensor o rampa.

Alternative formats available upon request. Call: (619) 557-4555.
Formato alternativo disponible al preguntar. Llamar: (619) 557-4555.

Effective January 25, 2026

44

Bus Route

Kearny Mesa Transit Center ↔ Old Town Transit Center

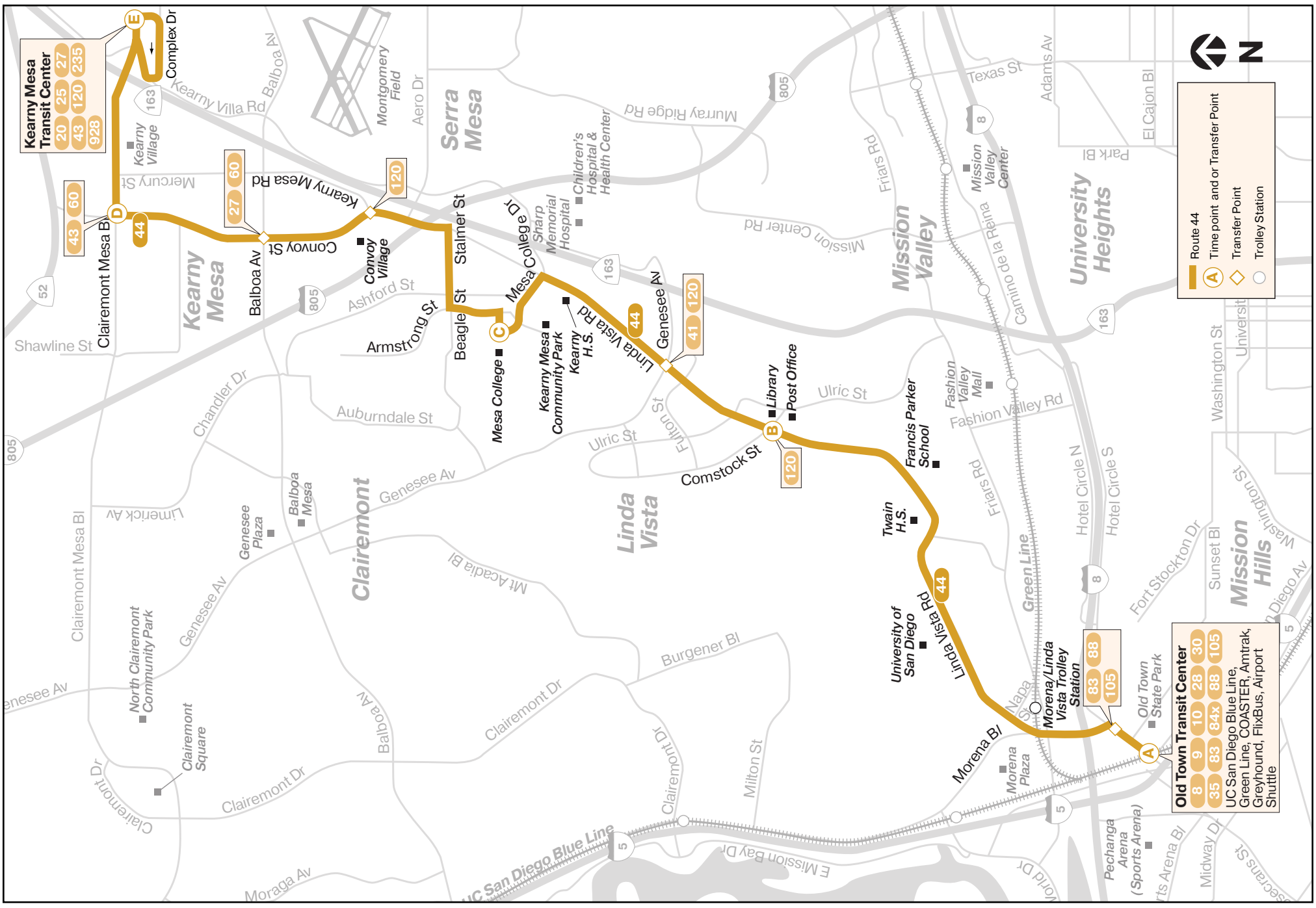
via Linda Vista / Mesa College

Destinations
- Convoy Street
- Mesa College
- University of San Diego
- Old Town State Park

Trolley Connections
- Morena/Linda Vista
- Old Town

Subject to change without notice
Sujeto a cambios sin previo aviso

MTS



44 Sunday • *domingo*

Old Town Transit Center → Kearny Mesa Transit Center

A Old Town Transit Center **DEPART**	B Linda Vista Rd. & Comstock St.	C Mesa College	D Clairemont Mesa Bl. & Convoy St.	E Kearny Mesa Transit Center **ARRIVE**
6:25a	6:34a	6:41a	6:50a	6:54a
6:55	7:04	7:11	7:20	7:24
7:19	7:29	7:37	7:47	7:52
7:49	7:59	8:07	8:17	8:22
8:25	8:35	8:44	8:55	9:00
8:55	9:05	9:14	9:25	9:30
9:25	9:36	9:46	9:59	10:04
9:55	10:06	10:16	10:29	10:34
10:25	10:36	10:46	10:59	11:04
10:55	11:06	11:16	11:29	11:34
11:25	11:36	11:46	11:59	**12:04p**
11:55	**12:06p**	**12:16p**	**12:29p**	**12:34**
12:25p	**12:37**	**12:47**	**1:01**	**1:06**
12:55	**1:07**	**1:17**	**1:31**	**1:36**
1:25	**1:37**	**1:47**	**2:01**	**2:06**
1:55	**2:07**	**2:17**	**2:31**	**2:36**
2:25	**2:37**	**2:47**	**3:01**	**3:06**
2:55	**3:07**	**3:17**	**3:31**	**3:36**
3:25	**3:37**	**3:47**	**4:01**	**4:06**
3:55	**4:07**	**4:17**	**4:31**	**4:36**
4:25	**4:37**	**4:47**	**5:01**	**5:06**
4:55	**5:07**	**5:17**	**5:31**	**5:36**
5:25	**5:36**	**5:45**	**5:58**	**6:03**
5:55	**6:06**	**6:15**	**6:28**	**6:33**
6:25	**6:36**	**6:45**	**6:58**	**7:03**
6:55	**7:06**	**7:15**	**7:28**	**7:33**
7:19	**7:30**	**7:38**	**7:50**	**7:55**
7:49	**8:00**	**8:08**	**8:20**	**8:25**
8:19	**8:29**	**8:37**	**8:48**	**8:53**
8:49	**8:59**	**9:07**	**9:18**	**9:23**
9:19	**9:28**	**9:36**	**9:46**	**9:51**
9:49	**9:58**	**10:06**	**10:16**	**10:21**

Kearny Mesa Transit Center → Old Town Transit Center

E Kearny Mesa Transit Center **DEPART**	D Convoy St. & Clairemont Mesa Bl.	C Mesa College	B Linda Vista Rd. & Comstock St.	A Old Town Transit Center **ARRIVE**
6:02a	6:07a	6:16a	6:24a	6:33a
6:31	6:37	6:47	6:55	7:04
7:04	7:10	7:21	7:29	7:39
7:34	7:40	7:51	7:59	8:09
8:02	8:08	8:20	8:29	8:39
8:30	8:36	8:49	8:58	9:09
8:54	9:00	9:13	9:22	9:33
9:24	9:30	9:43	9:52	10:03
9:54	10:00	10:13	10:22	10:33
10:21	10:27	10:41	10:51	11:03
10:51	10:57	11:11	11:21	11:33
11:21	11:27	11:41	11:51	**12:03p**
11:51	11:57	**12:11p**	**12:21p**	**12:33**
12:21p	**12:27p**	**12:41**	**12:51**	**1:03**
12:51	**12:57**	**1:11**	**1:21**	**1:33**
1:21	**1:27**	**1:41**	**1:51**	**2:03**
1:51	**1:57**	**2:11**	**2:21**	**2:33**
2:21	**2:27**	**2:41**	**2:51**	**3:03**
2:51	**2:57**	**3:11**	**3:21**	**3:33**
3:21	**3:27**	**3:41**	**3:51**	**4:03**
3:51	**3:57**	**4:11**	**4:21**	**4:33**
4:21	**4:27**	**4:41**	**4:51**	**5:03**
4:51	**4:57**	**5:11**	**5:21**	**5:33**
5:21	**5:27**	**5:41**	**5:51**	**6:03**
5:54	**6:00**	**6:13**	**6:22**	**6:33**
6:24	**6:30**	**6:43**	**6:52**	**7:03**
6:54	**7:00**	**7:13**	**7:22**	**7:33**
7:27	**7:32**	**7:44**	**7:53**	**8:03**
8:03	**8:08**	**8:20**	**8:29**	**8:39**
8:33	**8:38**	**8:50**	**8:59**	**9:09**
9:06	**9:11**	**9:22**	**9:30**	**9:39**

44 Monday through Friday • *lunes a viernes*

Old Town Transit Center → Kearny Mesa Transit Center

	A	B	C	D	E
	Old Town Transit Center **DEPART**	Linda Vista Rd. & Comstock St.	Mesa College	Clairemont Mesa Bl. & Convoy St.	Kearny Mesa Transit Center **ARRIVE**
	5:19a	5:28a	5:36a	5:45a	5:49a
	5:49	5:58	6:06	6:15	6:19
	6:19	6:29	6:38	6:48	6:53
	6:34	6:44	6:54	7:05	7:10
	6:49	6:59	7:09	7:20	7:25
	7:04	7:15	7:25	7:37	7:42
	7:19	7:30	7:40	7:52	7:57
M	7:29	7:40	7:50	—	—
	7:34	7:45	7:55	8:07	8:12
M	7:44	7:55	8:05	—	—
	7:49	8:00	8:10	8:22	8:27
M	7:59	8:10	8:20	—	—
	8:04	8:15	8:25	8:37	8:42
M	8:14	8:25	8:35	—	—
	8:19	8:30	8:40	8:52	8:57
M	8:29	8:40	8:50	—	—
	8:34	8:45	8:55	9:07	9:12
M	8:44	8:55	9:05	—	—
	8:49	9:00	9:10	9:22	9:27
M	8:59	9:10	9:20	—	—
	9:04	9:15	9:25	9:37	9:42
	9:19	9:30	9:40	9:52	9:57
	9:34	9:45	9:55	10:07	10:12
	9:49	10:00	10:10	10:22	10:27
	10:04	10:15	10:25	10:37	10:42
	10:19	10:30	10:40	10:52	10:57
	10:34	10:45	10:55	11:07	11:12
	10:49	11:00	11:10	11:22	11:27
	11:04	11:15	11:25	11:38	11:44
	11:19	11:30	11:40	11:53	11:59
	11:34	11:45	11:55	**12:08p**	**12:14p**
	11:49	**12:00p**	**12:10p**	**12:23**	**12:29**
	12:04p	**12:15**	**12:25**	**12:38**	**12:44**
	12:19	**12:30**	**12:40**	**12:53**	**12:59**
	12:34	**12:45**	**12:55**	**1:08**	**1:14**
	12:49	**1:00**	**1:10**	**1:23**	**1:29**
	1:04	**1:15**	**1:25**	**1:38**	**1:44**
	1:19	**1:30**	**1:40**	**1:53**	**1:59**
	1:34	**1:45**	**1:55**	**2:08**	**2:14**
	1:49	**2:00**	**2:10**	**2:23**	**2:29**
	2:04	**2:15**	**2:25**	**2:38**	**2:44**
	2:19	**2:30**	**2:40**	**2:53**	**2:59**
	2:34	**2:46**	**2:56**	**3:10**	**3:16**
	2:49	**3:01**	**3:11**	**3:25**	**3:31**
	3:04	**3:16**	**3:26**	**3:40**	**3:46**
	3:19	**3:31**	**3:41**	**3:55**	**4:01**
	3:34	**3:46**	**3:56**	**4:10**	**4:16**
	3:49	**4:01**	**4:11**	**4:25**	**4:31**
	4:04	**4:16**	**4:26**	**4:40**	**4:46**
	4:19	**4:31**	**4:41**	**4:55**	**5:01**
	4:34	**4:46**	**4:56**	**5:10**	**5:16**
	4:49	**5:01**	**5:11**	**5:25**	**5:31**
	5:04	**5:16**	**5:26**	**5:40**	**5:46**
	5:19	**5:31**	**5:41**	**5:55**	**6:01**
	5:34	**5:45**	**5:55**	**6:08**	**6:14**
	5:49	**6:00**	**6:10**	**6:23**	**6:29**
	6:04	**6:15**	**6:25**	**6:38**	**6:44**
	6:19	**6:30**	**6:40**	**6:53**	**6:59**
	6:34	**6:45**	**6:55**	**7:08**	**7:14**
	6:49	**7:00**	**7:09**	**7:21**	**7:26**
	7:04	**7:15**	**7:24**	**7:36**	**7:41**
	7:19	**7:30**	**7:39**	**7:51**	**7:56**
	7:49	**7:59**	**8:08**	**8:19**	**8:24**
	8:19	**8:29**	**8:38**	**8:49**	**8:54**
	8:49	**8:59**	**9:08**	**9:19**	**9:24**
	9:19	**9:28**	**9:36**	**9:46**	**9:51**
	9:49	**9:58**	**10:06**	**10:16**	**10:21**
	10:26	**10:35**	**10:43**	**10:52**	**10:56**
	11:04	**11:13**	**11:21**	**11:30**	—
	11:34	**11:43**	**11:51**	12:00a	—

Kearny Mesa Transit Center → Old Town Transit Center

	E	D	C	B	A
	Kearny Mesa Transit Center **DEPART**	Convoy St. & Clairemont Mesa Bl.	Mesa College	Linda Vista Rd. & Comstock St.	Old Town Transit Center **ARRIVE**
	—	4:28a	4:37a	4:45a	4:54a
	—	4:58	5:07	5:15	5:24
	5:23a	5:28	5:37	5:45	5:54
	5:51	5:56	6:06	6:14	6:24
	6:21	6:26	6:36	6:44	6:54
	6:34	6:40	6:51	6:59	7:09
	6:49	6:55	7:06	7:14	7:24
	7:02	7:08	7:19	7:28	7:39
	7:17	7:23	7:34	7:43	7:54
	7:32	7:38	7:49	7:58	8:09
	7:47	7:53	8:04	8:13	8:24
	8:02	8:08	8:19	8:28	8:39
	8:17	8:23	8:34	8:43	8:54
	8:32	8:38	8:49	8:58	9:09
	8:47	8:53	9:04	9:13	9:24
	9:02	9:08	9:19	9:28	9:39
	9:17	9:23	9:34	9:43	9:54
	9:30	9:36	9:48	9:57	10:09
	9:45	9:51	10:03	10:12	10:24
	10:00	10:06	10:18	10:27	10:39
	10:15	10:21	10:33	10:42	10:54
	10:27	10:34	10:47	10:57	11:09
	10:42	10:49	11:02	11:12	11:24
	10:57	11:04	11:17	11:27	11:39
	11:12	11:19	11:32	11:42	11:54
	11:27	11:34	11:47	11:57	**12:09p**
	11:42	11:49	**12:02p**	**12:12p**	**12:24**
	11:57	**12:04p**	**12:17**	**12:27**	**12:39**
	12:12p	**12:19**	**12:32**	**12:42**	**12:54**
	12:27	**12:34**	**12:47**	**12:57**	**1:09**
	12:42	**12:49**	**1:02**	**1:12**	**1:24**
	12:57	**1:04**	**1:17**	**1:27**	**1:39**
	1:12	**1:19**	**1:32**	**1:42**	**1:54**
	1:27	**1:34**	**1:47**	**1:57**	**2:09**
	1:42	**1:49**	**2:02**	**2:12**	**2:24**
	1:57	**2:04**	**2:17**	**2:27**	**2:39**
	2:12	**2:19**	**2:32**	**2:42**	**2:54**
	2:27	**2:34**	**2:47**	**2:57**	**3:09**
	—	—	M **2:57**	**3:07**	**3:19**
	2:42	**2:49**	**3:02**	**3:12**	**3:24**
	—	—	M **3:12**	**3:22**	**3:34**
	2:57	**3:04**	**3:17**	**3:27**	**3:39**
	—	—	M **3:27**	**3:37**	**3:49**
	3:12	**3:19**	**3:32**	**3:42**	**3:54**
	—	—	M **3:42**	**3:52**	**4:04**
	3:27	**3:34**	**3:47**	**3:57**	**4:09**
	—	—	M **3:57**	**4:07**	**4:19**
	3:42	**3:49**	**4:02**	**4:12**	**4:24**
	—	—	M **4:12**	**4:22**	**4:34**
	3:57	**4:04**	**4:17**	**4:27**	**4:39**
	—	—	M **4:27**	**4:37**	**4:49**
	4:12	**4:19**	**4:32**	**4:42**	**4:54**
	—	—	M **4:42**	**4:52**	**5:04**
	4:27	**4:34**	**4:47**	**4:57**	**5:09**
	—	—	M **4:57**	**5:07**	**5:19**
	4:42	**4:49**	**5:02**	**5:12**	**5:24**
	4:57	**5:04**	**5:17**	**5:27**	**5:39**
	5:12	**5:19**	**5:32**	**5:42**	**5:54**
	5:31	**5:37**	**5:49**	**5:58**	**6:09**
	5:46	**5:52**	**6:04**	**6:13**	**6:24**
	6:01	**6:07**	**6:19**	**6:28**	**6:39**
	6:16	**6:22**	**6:34**	**6:43**	**6:54**
	6:31	**6:37**	**6:49**	**6:58**	**7:09**
	7:00	**7:05**	**7:16**	**7:24**	**7:34**
	7:30	**7:35**	**7:46**	**7:54**	**8:04**
	8:00	**8:05**	**8:16**	**8:24**	**8:34**
	8:30	**8:35**	**8:46**	**8:54**	**9:04**
	9:00	**9:05**	**9:16**	**9:24**	**9:34**
	9:32	**9:37**	**9:47**	**9:55**	**10:04**
	10:02	**10:07**	**10:17**	**10:25**	**10:34**
	10:32	**10:37**	**10:47**	**10:55**	**11:04**

M =Operates during Fall and Spring Semesters when Mesa College is in session. / *Opera durante los semestres del otoño y primavera en los días escolares de Mesa College.*

44 Saturday • *sábado*

Old Town Transit Center → Kearny Mesa Transit Center

A	B	C	D	E
Old Town Transit Center **DEPART**	Linda Vista Rd. & Comstock St.	Mesa College	Clairemont Mesa Bl. & Convoy St.	Kearny Mesa Transit Center **ARRIVE**
6:25a	6:34a	6:41a	6:50a	6:54a
6:55	7:04	7:11	7:20	7:24
7:19	7:29	7:37	7:47	7:52
7:49	7:59	8:07	8:17	8:22
8:25	8:35	8:44	8:55	9:00
8:55	9:05	9:14	9:25	9:30
9:25	9:36	9:46	9:59	10:04
9:55	10:06	10:16	10:29	10:34
10:25	10:36	10:46	10:59	11:04
10:55	11:06	11:16	11:29	11:34
11:25	11:36	11:46	11:59	**12:04p**
11:55	**12:06p**	**12:16p**	**12:29p**	**12:34**
12:25p	**12:37**	**12:47**	**1:01**	**1:06**
12:55	**1:07**	**1:17**	**1:31**	**1:36**
1:25	**1:37**	**1:47**	**2:01**	**2:06**
1:55	**2:07**	**2:17**	**2:31**	**2:36**
2:25	**2:37**	**2:47**	**3:01**	**3:06**
2:55	**3:07**	**3:17**	**3:31**	**3:36**
3:25	**3:37**	**3:47**	**4:01**	**4:06**
3:55	**4:07**	**4:17**	**4:31**	**4:36**
4:25	**4:37**	**4:47**	**5:01**	**5:06**
4:55	**5:07**	**5:17**	**5:31**	**5:36**
5:25	**5:36**	**5:45**	**5:58**	**6:03**
5:55	**6:06**	**6:15**	**6:28**	**6:33**
6:25	**6:36**	**6:45**	**6:58**	**7:03**
6:55	**7:06**	**7:15**	**7:28**	**7:33**
7:19	**7:30**	**7:38**	**7:50**	**7:55**
7:49	**8:00**	**8:08**	**8:20**	**8:25**
8:19	**8:29**	**8:37**	**8:48**	**8:53**
8:49	**8:59**	**9:07**	**9:18**	**9:23**
9:19	**9:28**	**9:36**	**9:46**	**9:51**
9:49	**9:58**	**10:06**	**10:16**	**10:21**
10:34	**10:43**	**10:51**	**11:00**	—
11:34	**11:43**	**11:51**	12:00a	—

Kearny Mesa Transit Center → Old Town Transit Center

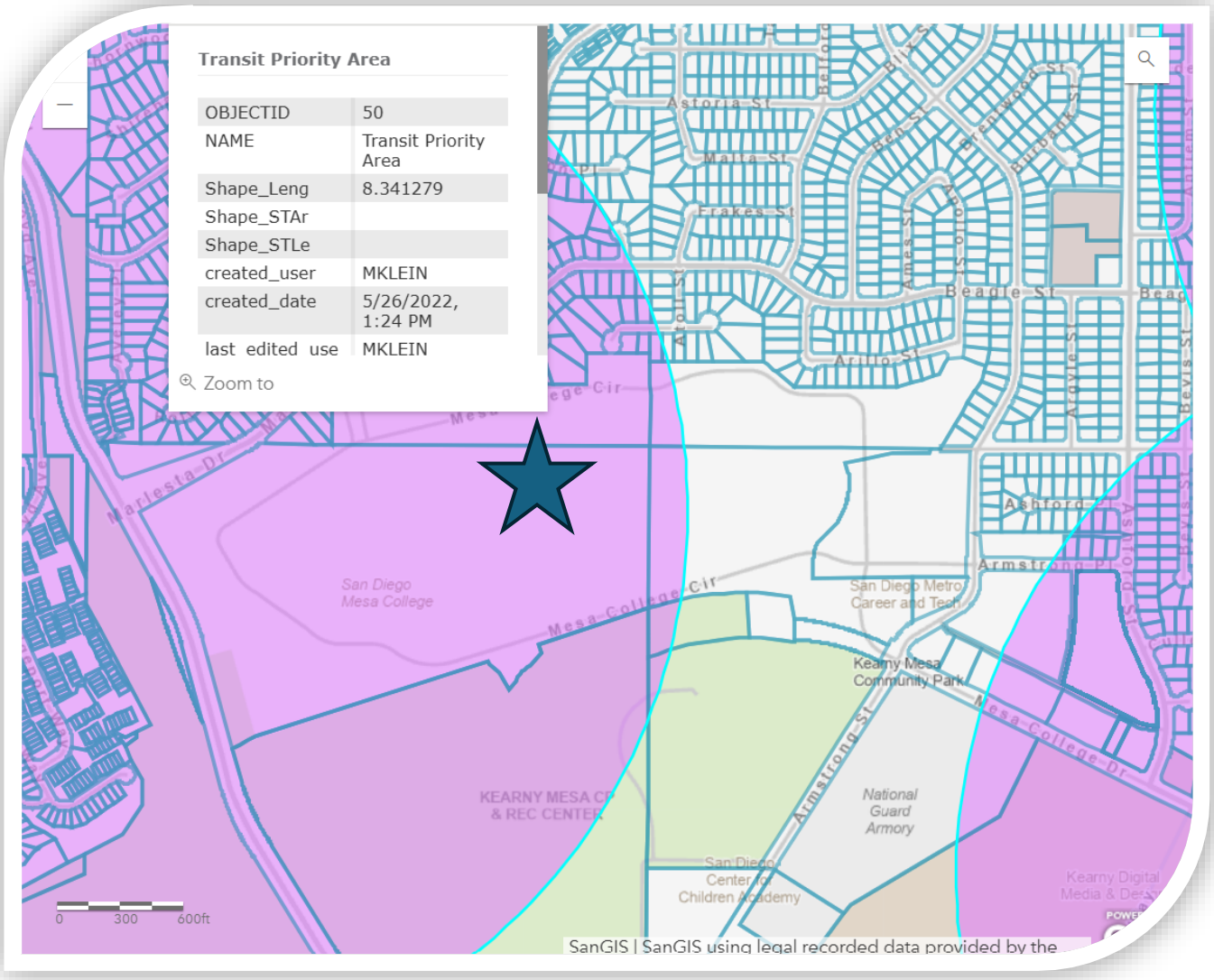
E	D	C	B	A
Kearny Mesa Transit Center **DEPART**	Convoy St. & Clairemont Mesa Bl.	Mesa College	Linda Vista Rd. & Comstock St.	Old Town Transit Center **ARRIVE**
5:32a	5:37a	5:46a	5:54a	6:03a
6:02	6:07	6:16	6:24	6:33
6:31	6:37	6:47	6:55	7:04
7:04	7:10	7:21	7:29	7:39
7:34	7:40	7:51	7:59	8:09
8:02	8:08	8:20	8:29	8:39
8:30	8:36	8:49	8:58	9:09
8:54	9:00	9:13	9:22	9:33
9:24	9:30	9:43	9:52	10:03
9:54	10:00	10:13	10:22	10:33
10:21	10:27	10:41	10:51	11:03
10:51	10:57	11:11	11:21	11:33
11:21	11:27	11:41	11:51	**12:03p**
11:51	11:57	**12:11p**	**12:21p**	**12:33**
12:21p	**12:27p**	**12:41**	**12:51**	**1:03**
12:51	**12:57**	**1:11**	**1:21**	**1:33**
1:21	**1:27**	**1:41**	**1:51**	**2:03**
1:51	**1:57**	**2:11**	**2:21**	**2:33**
2:21	**2:27**	**2:41**	**2:51**	**3:03**
2:51	**2:57**	**3:11**	**3:21**	**3:33**
3:21	**3:27**	**3:41**	**3:51**	**4:03**
3:51	**3:57**	**4:11**	**4:21**	**4:33**
4:21	**4:27**	**4:41**	**4:51**	**5:03**
4:51	**4:57**	**5:11**	**5:21**	**5:33**
5:21	**5:27**	**5:41**	**5:51**	**6:03**
5:54	**6:00**	**6:13**	**6:22**	**6:33**
6:24	**6:30**	**6:43**	**6:52**	**7:03**
6:54	**7:00**	**7:13**	**7:22**	**7:33**
7:27	**7:32**	**7:44**	**7:53**	**8:03**
8:03	**8:08**	**8:20**	**8:29**	**8:39**
8:33	**8:38**	**8:50**	**8:59**	**9:09**
9:06	**9:11**	**9:22**	**9:30**	**9:39**
9:31	**9:36**	**9:47**	**9:55**	**10:04**
10:31	**10:36**	**10:47**	**10:55**	**11:04**

A Saturday or Sunday schedule will be operated on the following holidays and observed holidays / *Se operará con horario de sábado o domingo durante los siguientes días festivos y feriados observados*
New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving, Christmas

APPENDIX C

CITY OF SAN DIEGO MULTIFAMILY RESIDENTIAL TPA INTERACTIVE MAP

Multifamily Residential Transit Priority Area (TPA) Map



END OF APPENDICES