San Diego Miramar College Aviation Instructional Center at Montgomery-Gibbs Executive Airport

SCH No. 2026040147

Draft Environmental Impact Report Appendices

November 2026 | 01737.00004.005

Lead Agency:

SAN DIEGO
Community College District

San Diego Community College District
3375 Camino Del Rio South, Suite 310
San Diego, CA 92108

Prepared by:

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

This page intentionally left blank

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

April 2, 2026

Subject: Notice of Preparation of a Draft 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 Miramar College Aviation Instruction Center at Montgomery-Gibbs Executive Airport

NOTICE IS HEREBY GIVEN that the San Diego Community College District (District) will prepare an Environmental Impact Report (EIR) for the San Diego Miramar College Aviation Instruction Center (AIC) at Montgomery-Gibbs Executive Airport Project (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 EIR 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 EIR 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 April 2, 2026 and will close on May 4, 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 **May 4, 2026**. Electronic comments are preferred and can be sent via email to **SDCCDMeasureHH@sdccd.edu** with **"NOP Comments for Miramar College AIC"** 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:

Joel Peterson, PhD
Vice Chancellor, Executive Operations Officer
San Diego Community College District
3375 Camino Del Rio South, Suite 310
San Diego, CA 92108

PROJECT LOCATION: The project is proposed on a 1.06-acre site located at 3873 Kearny Villa Road, City of San Diego (City), San Diego County, California. The project site is located on the western edge of the Montgomery-Gibbs Executive Airport (MYF) and is within the southwest quadrant of the airfield on the City's Airport Layout Plan Update for MYF.

Land uses surrounding the project site include State Route (SR) 163, the San Diego Police Department Air Support Unit building, the Spiders Aircraft Services Inc. building, and undeveloped areas associated with MYF to the north, a hotel and recreational space to the south, San Diego Fire-Rescue Department Station 28 to the southwest, Kearny Villa Road and SR 163 to the west, and MYF runways, taxiways, and associated structures to the east.

The project site is located on City owned property which has been leased to the District as part of a long-term ground lease. The project site contains the approximately 6,300 square foot (SF) single-story Miramar Hangar and gravel parking lot with a maximum of 40 spaces within an existing 0.42-acre lease area. The site is currently used by the District for aviation-related instruction through their Miramar College campus and hosts approximately 13 class sessions per week, each containing approximately 15 to 35 students and one to two faculty members.

Figure 1, *Regional Location*, shows the location of the project site within San Diego County. Figure 2, *Aerial Photograph*, shows the extent of the project site.

PROPOSED PROJECT: The project proposes the demolition of the existing 6,300 SF Miramar Hangar and the construction of a new approximately 18,000 SF Miramar College AIC hangar and supporting facilities, expanding the existing 0.42-acre lease area to 1.06 acres.

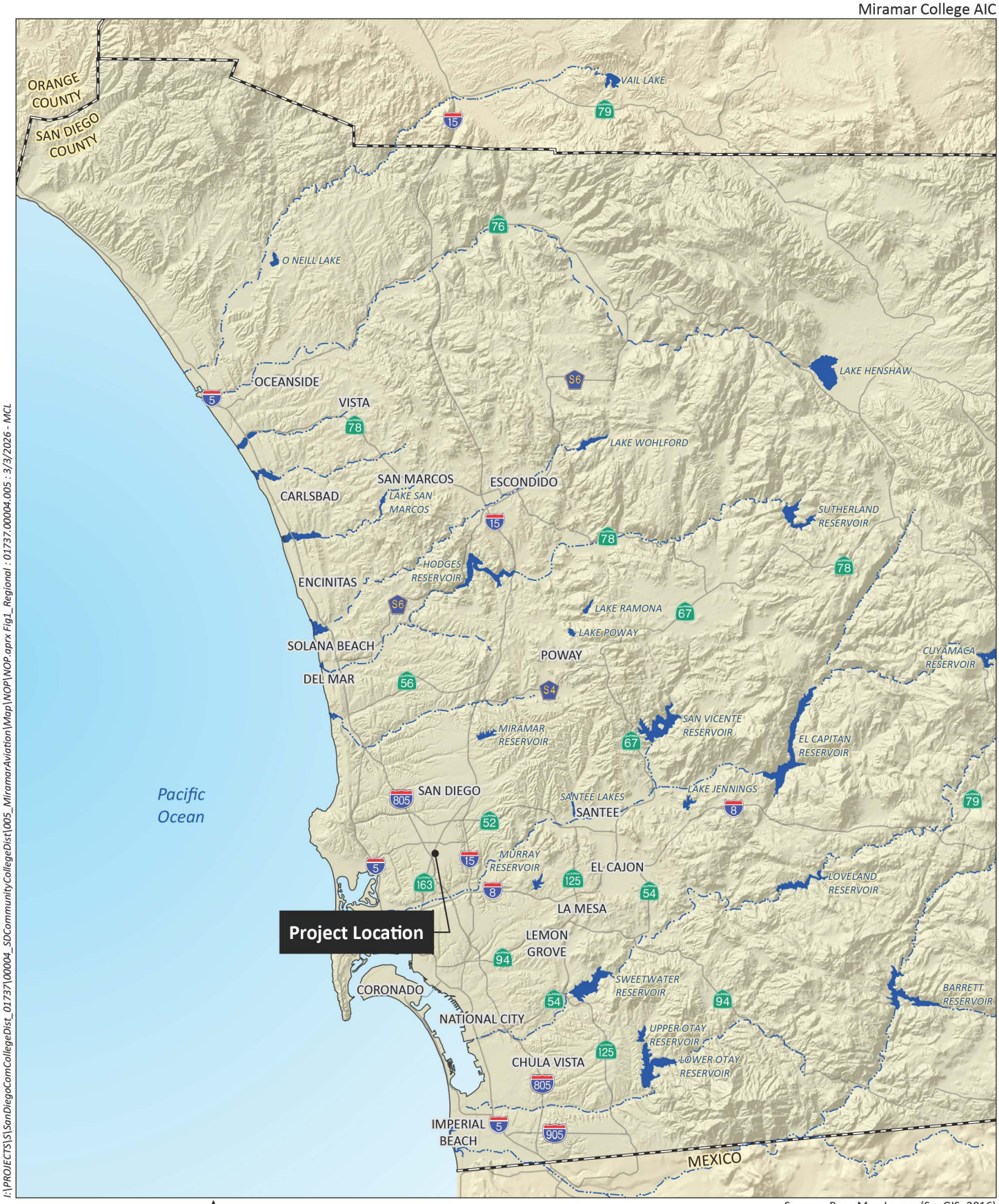
The project would provide an upgraded instructional facility for aviation maintenance technology and related Federal Aviation Administration (FAA)-certified programs to serve Miramar College students and regional workforce needs. The new Miramar College AIC would be two stories. Level 1 would include a lobby, a maintenance/hangar bay, two classrooms, offices, a custodial room, hazardous materials storage, restrooms, and utility and storage rooms. Level 2 would include one classroom, four pilot debrief rooms, air traffic control tower and en route training facilities, a conference room, break room, and restrooms. The expanded instructional facility would allow for an additional 15 class sessions per week to occur, each containing approximately 23 students. The project would additionally include an open-air storage area, student parking, and engine testing pad.

Access would be provided by the existing MYF Gate 4 east of Kearny Villa Road. The proposed Aviation Instructional Center hangar would be designed to achieve Leadership in Energy and Environmental Design (LEED) Silver equivalence consistent with District sustainability standards.

Construction is anticipated to begin in August 2027 and be completed in September 2028, with District courses resuming in the new facility in the Fall 2028 semester. During construction of the project, the District would continue aviation instruction at a temporary location that is yet to be determined.

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 EIR. 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, Mineral Resources, Population and Housing, and Wildfire. The District will focus the EIR 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, Public Services, Recreation, Transportation, Tribal Cultural Resources, and Utilities and Service Systems.

The Draft EIR 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 EIR 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\00004_SDCommunityCollegeDist\005_MiramarAviation\Map\NOP\NOP.aprx Fig1_Regional : 01737.00004.005 : 3/3/2026 - MCL

0 8 Miles

Source: Base Map Layers (SanGIS, 2016)

HELIX Environmental Planning

Regional Location

Figure 1



I:\PROJECTS\S\SanDiegoComCollegeDist_01737\00004_SDCommunityCollegeDist\005_MiramarAviation\Map\NOP\NOP.aprx Fig2_Aerial : 01737.00004.005 : 3/23/2026 - MCL

0 150 Feet

Source: Aerial (SanGIS, 2023)

HELIX Environmental Planning

Aerial Photograph

Figure 2

STATE OF CALIFORNIA — Gavin Newsom, *Governor*

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

April 2, 2026

Joel Peterson, PhD
Vice Chancellor, Executive Operations Officer
San Diego Community College District
3375 Camino del Rio South
#310
San Diego CA 92108

Re: 2026040147, Miramar College Aviation Instruction Center Project, San Diego County

To Whom It May Concern:

The Native American Heritage Commission (NAHC) has received the Notice of Preparation of a Draft Environmental Impact Report for the project referenced above. The California Environmental Quality Act (CEQA) includes a separate category of cultural resources, "tribal cultural resources" 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. Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. To determine whether a project will cause a substantial adverse change in the significance of a tribal cultural resource, a lead agency will need to determine whether there are tribal cultural resources within the project area.

Consultation with California Native American Tribes that are traditionally and culturally affiliated with the geographic area of your proposed project should occur as early as possible. Early consultation will assist in developing a plan for protecting tribal cultural resources and avoiding inadvertent discoveries of Native American human remains.

For a list of tribes that are traditionally and culturally affiliated with your project area, or for any questions or additional information regarding tribal consultation, please contact me at Andrew.Green@nahc.ca.gov.

Sincerely,

Andrew Green

Andrew Green
Cultural Resources Analyst

cc: State Clearinghouse

San Diego County Archaeological Society, Inc.

Environmental Review Committee

April 13, 2026

To: Joel Peterson, PhD
Vice Chancellor, Executive Operations Officer
San Diego Community College District
3375 Camino del Rio South, Suite 310
San Diego, California 92108

Subject: Notice of Preparation of a Draft Environmental Impact Report
San Diego Miramar College Aviation Instruction Center
at Montgomery-Gibbs Executive Airport

Dear Dr. Peterson:

Thank you for the Notice of Preparation for the subject project, which was received by this Society last month.

We are pleased to note the inclusion of cultural resources in the list of subject areas to be addressed in the DEIR and look forward to reviewing it during the upcoming public comment period. To that end, please include us in notification of the public review of the DEIR and ensure availability of a copy of the cultural resources technical report(s) that has been edited for public distribution.

SDCAS appreciates being included in the environmental review process for this project.

Sincerely,

James W. Royle, Jr., Chairperson
Environmental Review Committee

cc: SDCAS President
File

P.O. Box 81106 San Diego, CA 92138-1106 (858) 538-0935

Department of Environmental Health and Quality
Policy, Outreach and Data
SanDiegoCounty.gov | News Updates | Engage

From: Raphael, Rita
Sent: Tuesday, April 21, 2026 4:28 PM
To: sdccdmeasurehh@sdccd.edu
Cc: Preece, Sharon <Sharon.Preece@sdcounty.ca.gov>; Cruz, JoAnn <JoAnn.Cruz@sdcounty.ca.gov> **Subject:** San Diego Community College District - San Diego Miramar College Aviation Instruction Center (AIC)

Hi,
The Department of Environmental Health and Quality (DEHQ), Hazardous Materials DivisionQ (HMD), reviewed the San Diego Miramar College Aviation Instruction Center (AIC) and has the following comments regarding the project:

HMD Comments:

1. **PLAN CHECK**: Due to the building and construction this project proposes, the owner(s)/operator(s) may be required to submit a Hazardous Materials Questionnaire to the Hazardous Materials Division (HMD) and complete a HMD Hazardous Materials Plan Check review prior to issuance of a certificate of occupancy by the Building Department. Additional information on Plan Check requirements can be found on our website at: Hazardous Materials Plan Check (sandiegocounty.gov)

2. **HAZARDOUS MATERIALS BUSINESS PLAN:** This proposal could result in facilities that store and/or handle 55 gallons or more of hazardous materials and/or generate any amount of hazardous waste or medical waste. If chemicals/hazardous materials/hazardous wastes stored in project will hold a volume greater than or equal to 55 gallons, 500 pounds or 200 cubic feet each (e.g. gasoline, diesel fuel, lubricating oil, grease, cleaning products, landscaping chemicals and fertilizers, and solvents, etc.), the facility owner/operators(s) are required to submit a Hazardous Materials Questionnaire to the Hazardous Materials Division (HMD) and complete a Hazardous Materials Plan Check review prior to operation. Any proposed activities involving the storage and handling of hazardous materials will require the owner/operator and/or contractor(s) to comply with local and state laws and regulations. Additional information on HMBP requirements can be found on our website at: HMBP (sandiegocounty.gov)

3. **HAZARDOUS WASTE:** All construction-related hazardous wastes (e.g. waste gasoline, waste diesel fuel, waste lubricating oil/grease, waste cleaning products, waste landscaping chemicals and fertilizers, and waste solvents, etc.) generated and stored onsite must be properly labeled and handled in manner to prevent release to the environment. In addition, the owner/operator must ensure any hazardous wastes generated onsite during construction is properly disposed by registered hazardous waste transporter and compliant with local and state laws and regulations. Additional information on Hazardous Waste requirements can be found on our website at: Hazardous Waste (sandiegocounty.gov)

4. **ABOVEGROUND PETROLEUM STORAGE:** If one operation has greater than or equal to 1,320 gallons of petroleum (e.g. gasoline, diesel, oil, used oil, etc.) stored in aboveground tanks and containers 55-gallons or greater in size then they are subject to regulatory requirements under the California Aboveground Petroleum Storage Act (APSA), and a Spill Prevention, Control and Countermeasures (SPCC) Plan may be required. IMPORTANT: Facilities storing an aggregate of 10,000 or more gallons of petroleum must have their SPCC plan certified by a professional engineer. Additional information on APSA can be found on our website at: APSA (sandiegocounty.gov)

5. **UNDERGROUND STORAGE TANKS:** If an underground storage tank (UST) that previously held a hazardous substance is unexpectedly discovered during the Project, the property owner/operator shall apply to the HMD for a removal permit in accordance with state law before removing the tank and connected piping. Additional information can be found on our website at: UST Plan Check

6. **CONTAMINATED SOIL:** If it is discovered that any hazardous materials and or waste has been released to the environment before or during the project, the contaminated environmental media (e.g. soil) must be removed and property managed and disposed. A Voluntary Assistance Project (VAP) may need to be initiated to ensure the hazardous materials/waste release has been properly cleaned up. See the HMD's VAP website for additional information: Voluntary Assistance Program (sandiegocounty.gov)

Please note, the HMD has the authority pursuant to state law and County Code to regulate facilities that handle or store hazardous materials and/or generate hazardous/medical wastes. The HMD will apply that authority as necessary to protect public health and the environment. Additional information about HMD can be found on our website at: Hazardous Materials Division (sandiegocounty.gov)

Respectfully ,

Rita Raphael, Office Support Specialist
Department of Environmental Health and Quality
Policy, Outreach and Data
SanDiegoCounty.gov | News Updates | Engage

DEPARTMENT OF ENVIRONMENTAL HEALTH AND QUALITY
Vector Control Program
5570 Overland Avenue Suite 102, San Diego, CA 92123
(858) 694-2888
www.sdvector.com

April 21, 2026

Joel Peterson, PhD
Vice Chancellor, Executive Operations Officer
San Diego Community College District
3375 Camino Del Rio South, Suite 310
San Diego, CA 92108

Via e-mail: SDCCDMeasureHH@sdccd.edu

COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE MIDWAY RISING SPECIFIC PLAN

Dear Mr. Peterson:

Thank you for the opportunity to comment on the Draft Environmental Impact Report (DEIR) for the above-referenced project. The County of San Diego Vector Control Program (VCP) is responsible for the protection of public health through the surveillance and control of mosquitoes that are vectors for human disease including West Nile virus (WNV).

1. The VCP respectfully requests that the Draft Environmental Impact Report address potential impacts from possible mosquito breeding sources created by the project and that the project be designed and constructed in a manner to minimize those impacts. Specifically, ensure construction-related depressions created by grading activities, vehicle tires, and excavation do not result in depressions that will hold standing water. In addition, ensure drains, BMPs, stormwater capture systems, and other structures do not create a potential mosquito breeding source. Any area that is capable of accumulating and holding at least ½ inch of water for more than 96 hours can support mosquito breeding and development. Finally, if habitat remediation is required for the project, the design should be consistent with guidelines for preventing mosquito habitat creation.

2. Pursuant to state law and County Code, the VCP has the authority to oversee and require abatement of any mosquito breeding occurring during construction or after project completion that constitutes a vector-breeding public nuisance. To protect public health, the project must be designed, constructed, and maintained in compliance with applicable laws and regulations to prevent vector breeding. The VCP will exercise its authority to require corrective action, if necessary.

3. For your information, the County of San Diego Guidelines for Determining Significance for Vectors can be accessed at

http://www.sandiegocounty.gov/content/dam/sdc/pds/docs/vector_guidelines.pdf and the California Department of Public Health Best Management Practices for Mosquito Control in California is available at https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/MosquitoesandMosquitoBorneDiseases.aspx#

The VCP appreciates the opportunity to participate in the environmental review process for this project. If you have any questions regarding these comments, please contact Daniel Valdez at 858-688-3722 or by e-mail at Daniel.Valdez@sdcounty.ca.gov.

Sincerely,

DANIEL VALDEZ, Registered Environmental Health Specialist
Vector Control Program

The City of SAN DIEGO
City Planning Department
Housing Policy & Environmental Analysis Division

April 29, 2026

Mr. Joel Peterson, PhD
Vice Chancellor, Executive Operations Officer
San Diego Community College District
3375 Camino Del Rio South, Suite 310
San Diego, CA 92108

SUBJECT: NOTICE OF PREPARATION COMMENTS FOR MIRAMAR COLLEGE AVIATION INSTRUCTION CENTER

Dear Mr. Peterson:

The City of San Diego (City) appreciates the opportunity to review the Notice of Preparation (NOP) of a Draft Environmental Impact Report (EIR) for the San Diego Community College District's (SDCCD's) San Diego Miramar College Aviation Instruction Center at Montgomery-Gibbs Executive Airport project (project). The City, as a Responsible Agency under the California Environmental Quality Act (CEQA), has reviewed the NOP and appreciates this opportunity to provide comments to SDCCD. Continued coordination between the City, SDCCD, and other local, regional, state, and federal agencies will be essential as future discretionary and/or ministerial actions on behalf of the City are required. In response to this request for public comments, the City has the following comments on the NOP for your consideration.

●●●

Responsible Agency

- The City is a "Responsible Agency," which is defined in CEQA Guidelines Section 15381 as "a public agency which proposes to carry out or approve a project, for which a Lead Agency is preparing or has prepared an EIR or Negative Declaration". The City will determine whether all potential environmental impacts, mitigation measures, monitoring program(s), and findings have been properly addressed and adopted by the Lead Agency (SDCCD) prior to any discretionary actions taken by the City.
- The goal of the City's comments and clarifications on the NOP is to aid SDCCD in further understanding the City's requirements and to ensure that the Draft EIR incorporates the analysis needed by the City for future actions to allow for project implementation.
- Please refer to the City's Development Services Department (DSD) website at http://www.sandiego.gov/development-services/ for guidance on permit submittal requirements. Staff from the DSD will be able to assist SDCCD with any future ministerial permitting and/or discretionary actions (when applicable) associated with the project.

Future City of San Diego Discretionary and Ministerial Actions

- Portions of the project are located on City-owned property which is currently leased to SDCCD as part of a long-term ground lease. Project implementation will require the approval

of a new ground lease between SDCCD and the City to expand the existing leasehold area to accommodate the project. The Draft EIR should describe and analyze the potential environmental impacts associated with the construction and operation of the project. This includes the proposed new ground lease as well as any possible real estate or other discretionary and/or ministerial actions that the City may be required to take as a Responsible Agency under CEQA for the project. The description of the proposed new ground lease and other associated City actions should be included in a separate section within the Project Description chapter of the Draft EIR and will ensure reliance on the analysis in the Final EIR for any subsequent discretionary and/or ministerial actions by the City.

- Any work within the City's public right-of-way will require ministerial review and approval in accordance with all the applicable chapters of the City of San Diego Municipal Code (SDMC) including, but not limited to, the City's Storm Water Runoff and Drainage Regulations, Noise Abatement and Control Regulations, Grading Regulations, Environmentally Sensitive Lands Regulations, and Historical Resources Regulations, and should be included in the Project Description chapter as well as the applicable issue area chapters of the Draft EIR.
- The Project Description and Utilities and Service Systems chapters of the Draft EIR should address how existing and proposed utilities within the project footprint will be protected, relocated, or upgraded as a result of the proposed improvements associated with the project.

Biological Resources

- The project is not located within or directly adjacent to the City's Multi-Habitat Planning Area (MHPA). However, the project is located approximately 500 feet from the City's MHPA and vernal pool complex, and future construction and operational activities (e.g., future grading activities, operation of the proposed engine testing pad, etc.) could result in indirect impacts to the MHPA and vernal pools. As such, the Land Use and Planning chapter of the Draft EIR should include a detailed discussion of the City's Multiple Species Conservation Program (MSCP) Subarea Plan and Vernal Pool Habitat Conservation Plan (VPHCP) and should demonstrate how the project would comply with the MSCP Subarea Plan and the MHPA Land Use Adjacency Guidelines (Section 1.4.3 of the MSCP Subarea Plan - in particular lighting, noise, and drainage) and vernal pool avoidance and minimization measures (Section 5.2.1 of the City's VPHCP). The project's biology report and Draft EIR should demonstrate how the MHPA Land Use Adjacency Guidelines and vernal pool avoidance and minimization measures are being addressed and include applicable mitigation measures and/or project conditions that would ensure compliance and reduce potential indirect impacts to below a level of significance. These conservation plans are available at https://www.sandiego.gov/biodiversity.
- The project should be designed to avoid any direct and/or indirect impacts to the earthen drainage channels that are outside of, but adjacent to, the proposed leasehold area. The Biological Resources Report and Draft EIR should note the presence of these channels and should discuss how the project would avoid direct and/or indirect impacts to these channels. If impacts are anticipated, the Biological Resources Report and Draft EIR should include a discussion of the impacts and provide appropriate mitigation measures to address these impacts.

- A biological survey report should identify any Environmentally Sensitive Lands (ESL), including wetlands, and impacts to sensitive biological resources in accordance with the City's Biology Guidelines (2018). The biological survey report must identify and map biological resources present on the site, including any portions of the site identified as part of the City's MHPA and any species considered sensitive. The western burrowing owl (*Athene cunicularia hypugaea*), a candidate species for protection, and San Diego fairy shrimp (*Branchinecta sandiegonensis*), a listed species under the California Endangered Species Act (CESA), both MSCP covered species, are known in the area. Construction methods and measures to reduce impacts should be included in the Biological Technical Report. Additionally, please include a discussion of how the project would implement the area specific management directives (ASMD's) as stated in Appendix A of the City's MSCP Subarea Plan for any MSCP Covered Species with a high to moderate potential to be impacted by the project. The project should demonstrate how the ASMD's (or Conditions of Coverage) would be implemented in order for the species to be considered "covered" by the MSCP.

Cultural, Historical, and Tribal Cultural Resources

- The Historic Resources Technical Report (HRTR) prepared for the Draft Program EIR for the Montgomery Gibbs Executive Airport Master Plan identifies the Miramar Hangar (referred to as "Building 6" in the HRTR) as eligible for listing in the San Diego Register of Historical Resources (SDRHR), California Register of Historical Resources (CRHR), and National Register of Historic Places (NRHP). The proposed demolition of the Miramar Hangar would be considered a significant impact to a historical resource under CEQA Guidelines Section 15064.5(b). The Draft EIR should include appropriate mitigation measures for direct and/or indirect impacts to this resource.
- The two existing hangars adjacent to and outside of the project footprint (referred to as "Buildings 7 and 8" in the HRTR) were also determined to be eligible for listing in the SDRHR, CRHR, and NRHP. The project should be designed to avoid any unintentional direct and/or indirect impacts to these buildings and should provide appropriate mitigation measures if direct and/or indirect impacts are anticipated.
- The project site is located within the aboriginal territory of the Kumeyaay Nation, and as such, the Draft EIR should include a discussion on the cultural history of this area including, but not limited to the historic/built-environment, archaeology, and ethnohistory.

Greenhouse Gas Emissions and the City of San Diego's Climate Action Plan

- The City updated its Climate Action Plan (CAP) in August 2022 with the goal of creating a cleaner San Diego for future generations. The CAP calls for eliminating half of all greenhouse gas emissions in the City and aims for all electricity used in the City to be from renewable sources by 2035. The City's CAP is intended to help achieve the greenhouse gas reduction targets set forth by the state of California. The Draft EIR should include a consistency analysis of this project with the City's CAP. Guidance on performing the consistency analysis can be found in the City's CEQA Significance Determination Thresholds (accessible at: https://www.sandiego.gov/sites/default/files/september_2022_ceqa_thresholds_final.pdf).

Noise

- The noise analysis in the Draft EIR should demonstrate how construction and operation of the project will comply with the City's Noise Abatement and Control Ordinance (SDMC Chapter 5, Article 9.5, Division 4).

Transportation

- Given that the project would result in trips that are distributed to the City's roadway network, the Draft EIR should include an analysis of vehicle miles travelled (VMT) using the City's CEQA Significance Determination Thresholds (accessible at: https://www.sandiego.gov/sites/default/files/september_2022_ceqa_thresholds_final.pdf).

●●●

Thank you for the opportunity to provide comments on the NOP. Please feel free to contact Rebecca Malone, Program Manager, directly via email at RMalone@sandiego.gov, or by phone at (619) 446-5371 if there are any questions regarding the content of this letter, or if SDCCD would like to meet with City staff to discuss these comments.

Sincerely,

Rebecca Malone

REBECCA MALONE
Program Manager
City of San Diego City Planning Department

RM/ep

cc: Heidi Vonblum, Director, City Planning Department
Seth Litchney, Deputy Director, City Planning Department
Elena Pascual, Senior Planner, City Planning Department
Christina Bibler, Director, Economic Development Department
Jorge Rubio, Deputy Director, Airports, Economic Development Department
Jennifer Bearse, Program Manager, Airports, Economic Development Department
Thurman Hodges, Property Agent, Airports, Economic Development Department
Frank Santana, Environmental Biologist III, Airports, Economic Development Department
Jose Garcia Jr., Deputy City Attorney, Office of the City Attorney

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

May 4, 2026

11-SD-163
PM 7.367
Miramar College Aviation Instructional Center
NOP/SCH#2026040147

Mr. Joel Peterson
Vice Chancellor, Executive Operations Officer
San Diego Community College District
3375 Camino del Rio South, Suite 310
San Diego, CA 92108

Dear Mr. Peterson:

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 Miramar College Aviation Instructional Center 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 Miramar College Aviation Instructional Center 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.

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 (GHG) 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.

[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

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.

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 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.

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.

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 VMT 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.

Glare

The proximity of the project site to SR-163 raises some concerns regarding potential glare that could pose a potential risk to motorists traveling on SR-163. The project's potential glare characteristics should be considered as part of the San Diego Community College District's Permit approval. Caltrans would want to ensure that all lighting, including reflected sunlight and reflected night lighting, within this project should be placed and/or shielded so as not to be hazardous to vehicles traveling on SR-163.

California Code, Vehicle Code - VEH § 21466.5. Current as of January 01, 2023

No person shall place or maintain or display, upon or in view of any highway, any light of any color of such brilliance as to impair the vision of drivers upon the highway. A

light source shall be considered vision impairing when its brilliance exceeds the values listed below.

The brightness reading of an objectionable light source shall be measured with a 1 1/2 -degree photoelectric brightness meter placed at the driver's point of view. The maximum measured brightness of the light source within 10 degrees from the driver's normal line of sight shall not be more than 1,000 times the minimum measured brightness in the driver's field of view, except that when the minimum measured brightness in the field of view is 10 foot-lamberts or less, the measured brightness of the light source in foot-lambert shall not exceed 500 plus 100 times the angle, in degrees, between the driver's line of sight and the light source.

The provisions of this section shall not apply to railroads as defined in Section 229 of the Public Utilities Code.

Broadband

Caltrans recognizes that teleworking and remote learning lessen the impacts of traffic on our roadways and surrounding communities. This reduces the amount of VMT and decreases the amount of GHG emissions and other pollutants. The availability of affordable and reliable, high-speed broadband is a key component in supporting travel demand management and reaching the state's transportation and climate action goals.

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

HELIX Environmental Planning

San Diego Miramar College Aviation Instructional Center at Montgomery-Gibbs Executive Airport

Air Quality and Greenhouse Gas Emissions Technical Report

October 2026 | 01737.00004.005

Prepared for:

San Diego Community College District
3375 Camino Del Rio South, Suite 310
San Diego, CA 92108

Prepared by:

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

This page intentionally left blank

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 Project Construction 2
1.2.2 Construction Best Management Practices 2

2.0 EXISTING CONDITIONS 4

2.1 Surrounding Land Uses 4
2.2 Climate and Meteorology 4
2.3 Sensitive Receptors 4
2.4 Existing Regional Air Quality 5
2.4.1 Attainment Designations 5
2.4.2 Monitored Air Quality 5
2.5 Climate Change Overview 6
2.6 Greenhouse Gases of Primary Concern 7
2.7 Greenhouse Gas Inventories 8
2.7.1 Worldwide and National Greenhouse Gas Inventory 8
2.7.2 State Greenhouse Gas Inventory 9

3.0 REGULATORY SETTING 9

3.1 Air Quality 9
3.1.1 Air Pollutants of Concern 10
3.1.2 Federal 12
3.1.3 State 14
3.1.4 Regional 15
3.1.5 District 17
3.1.6 Local 17
3.2 Greenhouse Gases 18
3.2.1 Federal 18
3.2.2 State 19
3.2.3 Regional 27
3.2.4 District 28
3.2.5 Local 30

4.0 METHODOLOGY AND SIGNIFICANCE CRITERIA 30

4.1 Methodology 30
4.1.1 Construction Emissions 31
4.1.2 Operational Emissions 33

TABLE OF CONTENTS (cont.)

Section **Page**

4.2 Guidelines for the Determination of Significance 35
4.2.1 Air Quality 35
4.2.2 Greenhouse Gases 36

5.0 AIR QUALITY IMPACT ANALYSIS 37

5.1 Issue 1: Conflict with Air Quality Plans 37
5.1.1 Impacts 37
5.1.2 Significance of Impacts 38
5.2 Issue 2: Cumulatively Considerable Net Increase of Nonattainment Criteria Pollutants 38
5.2.1 Impacts 38
5.2.2 Significance of Impacts 39
5.3 Issue 3: Impacts to Sensitive Receptors 40
5.3.1 Impacts 40
5.3.2 Significance of Impacts 41
5.4 Issue 4: Other Emissions (Such as Those Leading to Odors) 42
5.4.1 Impacts 42
5.4.2 Significance of Impacts 42

6.0 GREENHOUSE GAS IMPACT ANALYSIS 42

6.1 Issue 1: Greenhouse Gas Emissions 42
6.1.1 Impacts 42
6.1.2 Significance of Impacts 47
6.2 Issue 2: Conflict With Applicable Plans Adopted for the Purpose of Reducing Greenhouse Gas Emissions 47
6.2.1 Impacts 47
6.2.2 Significance of Impacts 49

7.0 LIST OF PREPARERS 49

8.0 REFERENCES 50

LIST OF APPENDICES

A CalEEMod Output

TABLE OF CONTENTS (cont.)

LIST OF FIGURES

No.	Title	Follows Page
1	Regional Location	2
2	Aerial Photograph	2
3	Proposed Site Plan	2

LIST OF TABLES

No.	Title	Page
1	Air Quality Monitoring Data	5
2	Global Warming Potentials and Atmospheric Lifetimes	8
3	California Greenhouse Gas Emissions by Sector	9
4	Common Sources and Human Health Effects of Criteria Air Pollutants	11
5	Ambient Air Quality Standards	12
6	San Diego Air Basin Attainment Status	14
7	Anticipated Construction Schedule	32
8	Construction Equipment Assumptions	32
9	Screening-Level Thresholds for Air Quality Impact Analysis	36
10	Maximum Daily Construction Emissions	39
11	Daily Operational Emissions	39
12	Construction GHG Emissions By Year	43
13	Operational GHG Emissions	43
14	Scoping Plan Consistency Analysis	44

This page intentionally left blank

ACRONYMS AND ABBREVIATIONS

°F	degrees Fahrenheit
µg/m^3	micrograms per cubic meter
2022 Scoping Plan	2022 Scoping Plan for Achieving Carbon Neutrality
AAM	annual arithmetic mean
AB	Assembly Bill
ADA	Americans with Disabilities Act
ADT	average daily trips
AIC	Aviation Instructional Center
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
CNRA	California Natural Resources Agency
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
County	County of San Diego

ACRONYMS AND ABBREVIATIONS (cont.)

District	San Diego Community College District
DPM	diesel particulate matter
EO	Executive Order
EV	electric vehicle
FAA	Federal Aviation Administration
g/L	grams per liter
GHG	greenhouse gas
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
LMA	Local Mobility Analysis
mg/m^3	milligrams per cubic meter
MMT	million metric tons
mph	miles per hour
MPO	metropolitan planning organization
MT	metric ton
MYF	Montgomery-Gibbs Executive Airport
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
NOAA	National Oceanic and Atmospheric Administration
NO_X	nitrogen oxides
O_3	ozone
OEHHA	Office of Environmental Health Hazard Assessment

ACRONYMS AND ABBREVIATIONS (cont.)

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
PRC	Public Resources Code
project	San Diego Miramar College Aviation Instructional Center at Montgomery-Gibbs Executive Airport Project; Miramar College AIC Project
RAQS	2022 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
SDFD	San Diego Fire-Rescue Department
SDG&E	San Diego Gas and Electric
SF	square foot/feet
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
UNFCCC	United Nations Framework Convention on Climate Change
USEPA	U.S. Environmental Protection Agency
VMT	vehicle miles traveled
VOC	volatile organic compound
ZEV	zero-emission vehicle

This page intentionally left blank

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 Miramar College Aviation Instructional Center at Montgomery-Gibbs Executive Airport Project (Miramar College AIC Project or project). The project involves the demolition of an existing hangar and construction of an expanded and modernized instructional facility for use by the Aviation Operations Program offered at Miramar College. The project site is located on the southwestern portion of Montgomery-Gibbs Executive Airport at 3873 Kearny Villa Road in the City of San Diego (City).

The project would result in emissions of air pollutants during both construction and operation. 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 degradation of roadway intersections, 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 potential impacts on air quality would be less than significant.

The project would result in GHG emissions during both its construction and operational phases. The project 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, the California Community Colleges Sustainability and Climate Action goals, or the City's Climate Action Plan. Potential impacts related to GHG emissions would be less than significant.

This page intentionally left blank

1.0 INTRODUCTION

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's (District's) proposed San Diego Miramar College Aviation Instructional Center at Montgomery-Gibbs Executive Airport Project (Miramar College AIC Project 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 project site is located at 3873 Kearny Villa Road within the central portion of the City of San Diego (City), San Diego County (County), California. Refer to Figure 1, *Regional Location*. The proposed project site is generally located north of Aero Drive, south and east of State Route (SR) 163 and Kearny Villa Road, and west of Interstate (I-) 15 and Ruffin Road. The project is proposed on a 1.06-acre site that is currently comprised of the 6,300 square foot (SF) Miramar Hangar, surface parking, and gravel and paved areas used for aircraft and engine testing. Refer to Figure 2, *Aerial Photograph*.

The project site is located in the southwest quadrant of the Montgomery-Gibbs Executive Airport (also referred to by its Federal Aviation Administration [FAA] identifier "MYF") which is owned and operated by the City Airports Division as a general aviation airport. MYF is located north of Aero Drive, east of SR 163, south of Balboa Avenue, and west of Ruffin Road. The project site is additionally located within the community of Kearny Mesa, which is approximately 4,400 acres and is bound by SR 52 to the north, I-805 to the west, I-15 to the east, and properties lying to the south of Aero Drive and along the western edge of I-15 to the south. MYF occupies over 500 acres of the Kearny Mesa community.

1.2 PROJECT DESCRIPTION

The project would involve the demolition of the existing 6,300 SF Miramar Hangar and construction of an expanded and modernized instructional facility, referred to as the Miramar College AIC, and supporting facilities. The upgraded instructional facility would support the programs offered within the Aviation Operations Program at Miramar College, including the specific programs of Aircraft Maintenance, Pilot Training, and Air Traffic Control. The proposed Miramar College AIC would be approximately 18,000 SF and would be located in the same general location as the existing hangar in the northwestern portion of the project site. To accommodate this upgraded instructional facility and the needs of the Aviation Operations Program, the project would additionally involve the expansion of the existing 0.42-acre lease area to 1.06 acres.

The expanded instructional facility would allow for an additional 15 class sessions per week to occur (three class sessions per day), for a total of 28 class sessions per week. Each class session would contain an average of 23 students. The engine testing activity, which occurs on the eastern portion of the project site once a week under existing conditions, would occur twice a week in the same location to account for these additional class sessions. Class sessions would occur between 8:00 a.m. and 10:00 p.m. Monday through Friday, with the potential for special Saturday class sessions to occur.

The new Miramar College AIC would be two stories with a maximum height of 32 feet. Level 1 would include a lobby, a maintenance/hangar bay, two classrooms, offices, a custodial room, restrooms, and utility and storage rooms. In addition, trash enclosures, an air compressor, and a hazardous waste collection area would be located along the northern perimeter of level 1. Level 2 would include one classroom, four pilot debrief rooms, air traffic control tower and en route training facilities, a conference room, break room, and restrooms. Refer to Figure 3, *Proposed Site Plan*.

The project would additionally include repaving of the existing open-air storage area and engine testing pad on the eastern portion of the project site. Access would continue to be provided by the existing MYF Gate 4 east of Kearny Villa Road which would connect to a paved parking area located southeast of the new hangar. This parking area would provide approximately 70 parking spaces for students and faculty and would include nine electric vehicle (EV) ready spaces and seven EV charging spaces. An additional nine parking spaces would be provided along the southern perimeter of the proposed Miramar College AIC, which would include four Americans with Disabilities Act (ADA) accessible spaces and one EV charging station. Bicycle racks and secure bicycle storage lockers would be provided near the southeastern area of the Miramar College AIC. Additional site improvements would include the addition of accessible paths of travel within the lease area. The fence located along the western boundary of the project site would remain in its existing location, and a new gate would be installed where the existing gate is located.

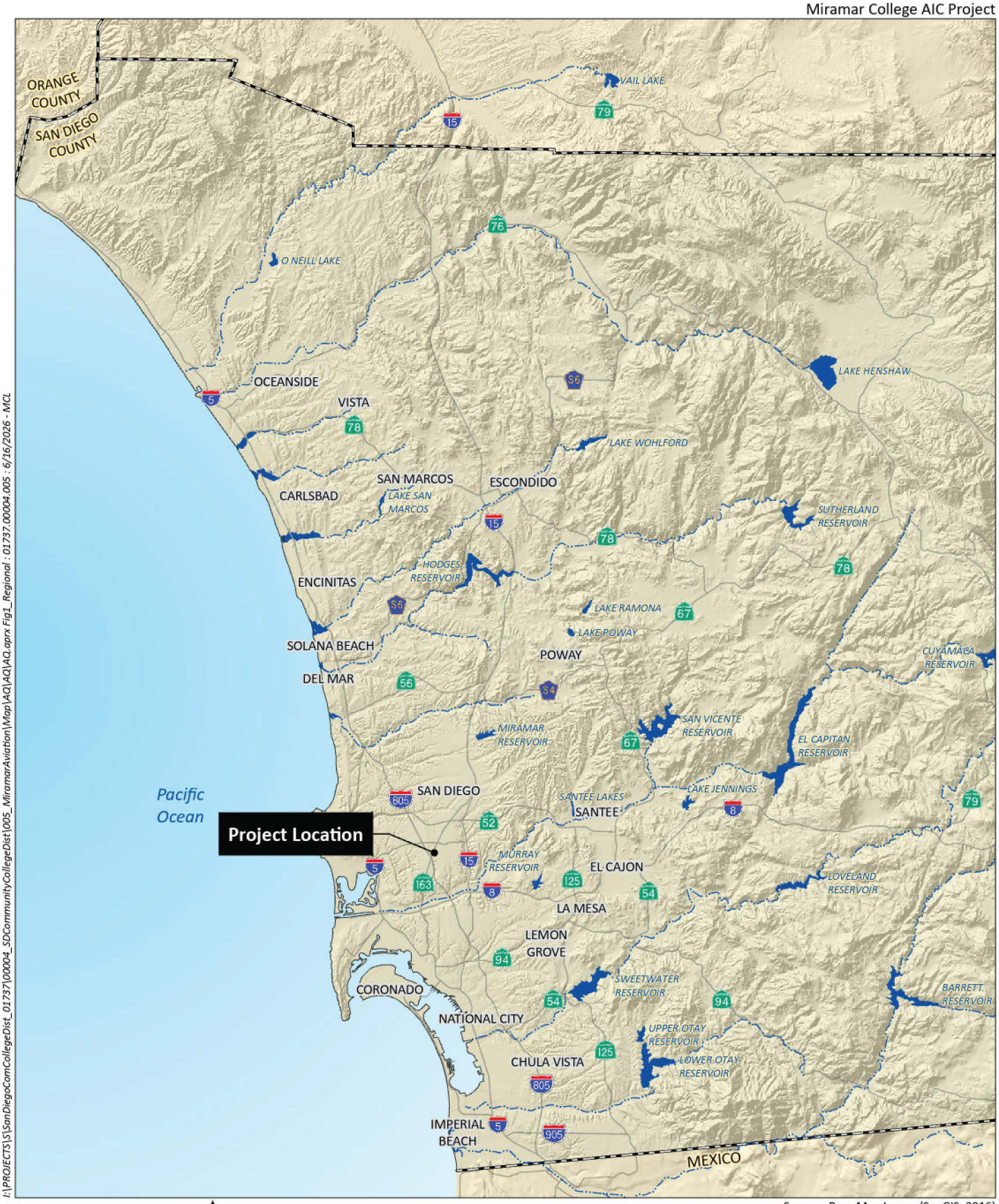
The project would include the construction of connections to existing City-owned utility lines located in Kearny Villa Road to the west of the project site, including water and fire water. The project would involve the installation of a new sewer lateral to connect to an existing on-site sewer main located west of the proposed Miramar College AIC. In addition, the project would involve coordination with San Diego Gas and Electric (SDG&E) for new underground electric power lines that would connect to a new SDG&E transformer, which would be installed on the western side of the proposed building. The project would not involve natural gas connections. The project would include the installation of a storm drain along the perimeter of the proposed building which would connect to a modular wetland system and underground vault located near the southwestern corner of the building. In addition, a storm drain would be constructed along the central portion of the parking lot which would connect to a modular wetland system and underground vault located in the western portion of the parking lot. Consistent with the District Sustainability Levels framework, the proposed project would be designed to achieve the level of Certified/ Coast Live Oak (Sustainable Performance) and would include high-efficiency low-flow plumbing fixtures and water-conserving appliances.

1.2.1 Project Construction

Construction is anticipated to begin in September 2027 and be completed in September 2028, with District courses resuming in the new facility in the Fall 2028 semester. The construction staging area would be located within the southern portion of the project site. During construction of the project, the District would continue aviation instruction at a temporary location that is yet to be determined.

1.2.2 Construction Best Management Practices

The project 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):



I:\PROJECTS\S\SanDiegoComCollegeDist_01737\00004_SDCommunityCollegeDist\005_MiramarAviation\Map\AQ\AQ\AQ.aprx Fig1_Regional : 01737.00004.005 : 6/16/2026 - MCL

0 8 Miles

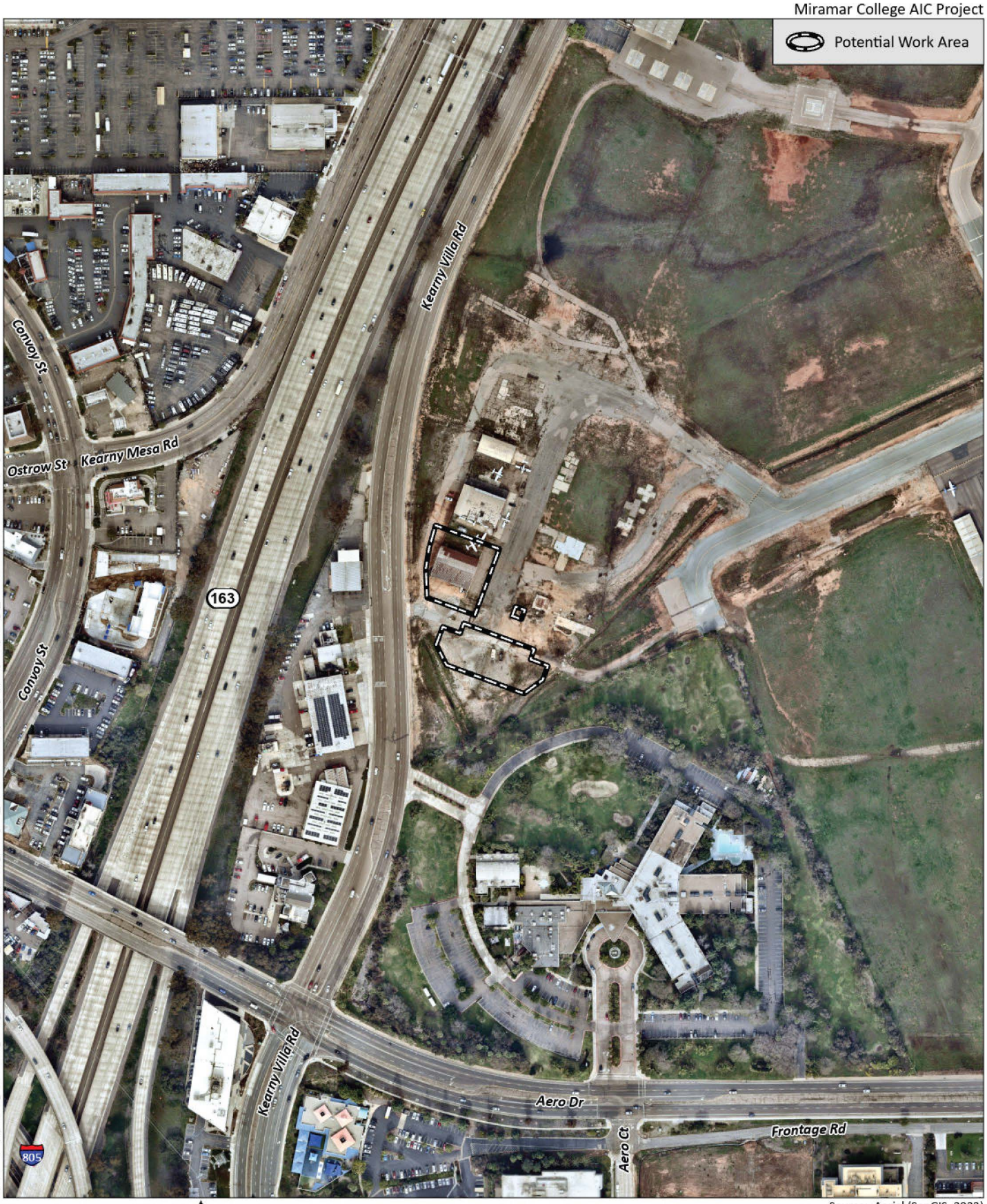
Source: Base Map Layers (SanGIS, 2016)

HELIX Environmental Planning

Regional Location

Figure 1

Miramar College AIC Project



I:\PROJECTS\S\SanDiegoComCollegeDist_01737\00004_SDCommunityCollegeDist\005_MiramarAviation\Map\AQ\AQ\AQ_aprx Fig2_Aerial : 01737.00004.005 : 6/16/2026 - MCL

0 300 Feet

Source: Aerial (SanGIS, 2023)

HELIX Environmental Planning

Aerial Photograph

Figure 2



HELIX Environmental Planning

Proposed Site Plan

Figure 3

(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 project site is located in the southwest quadrant of MYF. Land uses surrounding the project site include SR 163, the San Diego Police Department Air Support Unit building, the Spiders Aircraft Services Inc. building, and undeveloped areas associated with MYF to the north, a hotel and recreational space to the south, San Diego Fire-Rescue Department (SDFD) Station 28 to the southwest, Kearny Villa Road and SR 163 to the west, and MYF runways, taxiways, and associated structures to the east. 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 monoxide (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 2026). The annual average maximum temperature in the project area is approximately 72.4 degrees Fahrenheit (°F), and the annual average minimum temperature is approximately 56.2°F. Total precipitation in the project area averages 11 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.

As discussed in Section 2.1, the project site is surrounded by commercial and institutional uses. The nearest sensitive land use is a multi-family residential development called AMLI Aero located at the southeast corner of Aero Drive and Aero Court, approximately 1,300 feet south of the project.

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 San Diego Kearny Villa Road monitoring station located approximately 2.5 miles north 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 2025) 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 (O3) – Kearny Villa Road			
Maximum concentration 1-hour period (ppm)	0.095	0.091	0.112
Maximum concentration 8-hour period (ppm)	0.083	0.080	0.081
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 (PM10) – Countywide			
Maximum 24-hour concentration (µg/m3)	243	175	152
Days above federal standard (>150 µg/m3)	3	1	01
Fine Particulate Matter (PM2.5) – Kearny Villa Road			
Maximum 24-hour concentration (µg/m3)	13.9	24.5	21.1
Measured Days above 24-hour federal standard (>35 µg/m3)	0	0	0
Annual average (µg/m3)	6.8	7.0	8.0

Pollutant Standard	2022	2023	2024
Exceed federal annual standard (>9.0 µg/m3)	No	No	No
Exceed state annual standard (>12 µg/m3)	No	No	No
Nitrogen Dioxide (NO2) – 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 2026a; SDAPCD 2025

[1] While the reported maximum 24-hour concentration exceeds 150 µg/m^3, SDAPCD reports no daily exceedance for 2024.

ppm = parts per million; µg/m3 = micrograms per cubic meter

As shown in Table 1, monitoring data at the Kearny Villa Road station reported exceedances of the 1-hour state ozone standard in 2022 and 2024 and exceedances of the 8-hour state and federal ozone standard each of the three years sampled. The Kearny Villa Road station reported no exceedances of the federal and state standards for $PM_{2.5}$ or NO_2 between 2022 and 2024 (CARB 2026a). 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 2025).

2.5 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 temperature record shows a decades-long trend of warming, with Earth's average surface temperature in 2024 confirmed as the warmest on record. Per scientists at the National Aeronautics and Space Administration's [NASA's] Goddard Institute for Space Studies, global temperatures in 2025 were around 2.1 °F higher than the 1951-1980 average and 0.2 °F cooler than 2024 (NASA 2026). GHG emissions from human activities are the most significant driver of observed climate change since the mid-20th 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 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).

2.6 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 May 2026, the CO_2 concentration exceeded 432 ppm, an approximately 54 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.

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 2, *Global Warming Potentials and Atmospheric Lifetimes*. As shown in Table 2, the GWP for common GHGs ranges from 1 (CO_2) to 22,800 (SF_6).

Table 2
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

2.7 GREENHOUSE GAS INVENTORIES

2.7.1 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).

2.7.2 State Greenhouse Gas Inventory

CARB performed statewide inventories for the years 1990 to 2023, as shown in Table 3, *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 2026b). For comparison, the 1990 baseline inventory for AB 32 is also shown in Table 3 (CARB 2007). Emissions are quantified in MMT CO_2e.

Table 3
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 2026b.
MMT = million metric tons; CO_2e = carbon dioxide equivalent

As shown in Table 3, 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.

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 4, *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 4
COMMON SOURCES AND HUMAN HEALTH EFFECTS OF CRITERIA AIR POLLUTANTS

Pollutant	Major Human-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 2026c; 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 2026d). 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 2026d).

3.1.2 Federal

3.1.2.1 Federal Clean Air Act

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 the 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 5, *Ambient Air Quality Standards*, shows the federal and state ambient air quality standards for these pollutants.

Table 5
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 6, *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 6
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 5). 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 6, 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 2026e). 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).

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).

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).

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).

3.1.5 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 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. **KPI:** 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 District Architect.

3.1.6 Local

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 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 photovoltaic (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 2026f).

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 (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 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

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 the California Emissions Estimator Model (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. The CalEEMod output files are included in Appendix A, *CalEEMod Output*, of this report.

As discussed in Section 3.1.3.2, Public Laws 119-15, 119-16, and 119-17 were signed into law in June 2025, nullifying various USEPA rules regarding California advanced clean car and truck emissions standards. These laws may ultimately lead to increased mobile emissions depending on how they are implemented by the State. However, near term mobile emissions are expected to remain mostly accurate at buildout, which is relatively near term. As of the date of this report, CARB has not implemented revisions to EMFAC in response to these Public Laws. Because CalEEMod relies on EMFAC emission factors, estimated mobile source emissions would not be materially different from those presented in this report.

4.1.1 Construction Emissions

As described above, construction emissions are assessed using CalEEMod, Version 2022.1. The CalEEMod output files are included in Appendix A, *CalEEMod Output*.

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. Based on these inputs, the model calculates emissions of CO, PM_{10}, $PM_{2.5}$, SO_2, the ozone precursors VOC and NO_X, and the GHGs CH_4, N_2O, and CO_2.

CalEEMod estimates construction GHG emissions for each year of construction activity based on the annual construction equipment profile and other factors determined as needed to complete all phases of construction by the target completion year. As such, each calendar year with construction activity has varying quantities of GHG emissions.

4.1.1.1 Construction Activities

Construction emissions were estimated based on the construction schedule provided by the District Architect, which assumes construction would be completed in one phase commencing in September 2027 and completing in September 2028. 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).

Construction activities would include site preparation (clearing and grubbing), demolition, grading, trenching for underground utilities, building construction, paving, and architectural coatings. Construction is assumed to occur five days per week with equipment operating up to eight hours per day. Site preparation would include the removal of vegetation and debris, estimated at approximately 10 truckloads. During demolition, approximately 25 truckloads of debris would be removed from the project site. Grading would be balanced onsite resulting in no haul truck trips. The anticipated construction schedule provided by the District Architect is provided below in Table 7, *Anticipated Construction Schedule*.

Table 7
ANTICIPATED CONSTRUCTION SCHEDULE

Activity	Start Date	End Date	Workdays
Site Preparation	9/30/2027	10/20/2027	15
Demolition	10/21/2027	11/24/2027	25
Grading	11/25/2027	12/22/2027	20
Underground Utilities	1/3/2028	3/24/2028	60
Building Construction	1/3/2028	7/14/2028	140
Paving	7/15/2028	8/25/2028	30
Architectural Coating	7/15/2028	9/22/2028	50

CalEEMod output provided in Appendix A

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. Construction equipment estimates for all activities were provided by the District Architect. Table 8, *Construction Equipment Assumptions*, presents a summary of the equipment assumptions.

Table 8
CONSTRUCTION EQUIPMENT ASSUMPTIONS

Activity	Equipment Type	Number	Hours per Day
Site Preparation	Skid Steer Loader	1	8
	Rubber Tired Loader	1	8
	Forklift	1	8
Demolition	Concrete/Industrial Saws	1	8
	Skid Steer Loaders	1	8
	Excavators	1	8
	Rubber Tired Loaders	1	8

Activity	Equipment Type	Number	Hours per Day
	Forklifts	1	8
	Aerial Lifts	1	8
Grading	Graders	1	8
	Excavators	1	8
	Rollers	1	8
	Rubber Tired Loaders	1	8
	Off-Highway Trucks	1	6
Underground Utilities	Excavators	1	8
	Rubber Tired Loaders	1	8
	Off-Highway Trucks	1	6
Building Construction	Forklifts	2	6
	Tractors/Loaders/Backhoes	1	6
	Skid Steer Loaders	1	8
	Pumps	1	6
	Cranes	1	6
	Off-Highway Trucks	1	8
Paving	Pumps	1	8
	Forklifts	1	8
Architectural Coating	Air Compressors	1	6

CalEEMod output provided in Appendix A

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 phase, hauling trips were modeled based on assumptions provided by the District Architect. CalEEMod default worker, vendor, and haul trip distances and fleet mixes 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 project were estimated using CalEEMod. The CalEEMod output files for the full buildout of the project are included in Appendix A. Operational sources of emissions include mobile (on-road vehicles), area, energy, water/wastewater, solid waste, refrigerant, and aircraft engine testing. The methodology for each of the remaining 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 project's Local Mobility Analysis (LMA), the project would result in 222 average daily trips (ADT) (Linscott, Law & Greenspan Engineers 2026a). CalEEMod default vehicle speeds, trip purposes, and trip distances were applied to the trips associated with the project.

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. Project implementation would not include any natural gas fireplaces, wood fireplaces, or wood stoves. Accordingly, there are no emissions associated with hearths from the project. Emissions associated with all other area sources were estimated using the CalEEMod default values.

4.1.2.3 Energy Sources

The project 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 contribute to GHG emissions.

In accordance with District policies, the project would be all-electric (would not use natural gas). Therefore, the natural gas use per square foot for the project was set to zero. Per the District Architect, the project would consume between 200,000 and 400,000 kilowatt-hours of electricity per year. This analysis conservatively assumed consumption would be 400,000 kilowatt-hours per year.

4.1.2.4 Water and Wastewater Sources

Water-related GHG emissions are from the conveyance and treatment of water and wastewater. The District Architect estimated the project would consume 273,750 gallons of indoor water per year and 24,000 gallons of outdoor water per year. However, the actual amount of outdoor water that would be consumed by the project would be less as this estimation assumed that the project would include the installation of landscaping, which has been subsequently removed from the project. As such, the modeling of emissions associated with water usage represents a conservative analysis.

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. Based on data provided by the District Architect, the project is estimated to generate 18 tons of solid waste per year.

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 Aircraft Engine Testing

As discussed in Section 1.2, the project would allow for an additional three class sessions per day resulting in the engine testing activity, which occurs on the eastern portion of the project site once a week under existing conditions, to occur twice a week in the same location. This additional weekly test was modeled assuming a general aviation piston engine as classified by USEPA. Emission factors from USEPA's *Generic Aircraft Type Emission Factors* were used assuming one test cycle would be similar to one landing and take-off cycle (USEPA 2014).

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 project 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 project 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 threshold 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

The Attainment Plan and RAQS are the applicable air quality plans for the project region. These plans rely on information from CARB and SANDAG, 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 as part of the development of their respective general plans. As such, projects that propose development consistent with the growth anticipated by the local jurisdictions'

general plans and which do not result in criteria pollutant and precursor emissions in excess of the applicable emissions thresholds would be considered consistent with the Attainment Plan and RAQS.

As discussed previously, the project proposes the redevelopment and expansion of an instructional facility. The project would continue the existing use of the project site and would be consistent with the adjacent airport uses and surrounding uses. The project site is mapped as an Institutional land use in the Kearny Mesa Community Plan and would continue this land use with project implementation. Furthermore, as discussed in Section 5.2, below, the project's construction and operation activities would not result in pollutant emissions in excess of applicable thresholds. Because emissions would be below the applicable thresholds, and because the project would be consistent with the land use designation for the project site, the project would not conflict with or obstruct implementation of the Attainment Plan or RAQS for the SDAB. Impacts would be less than significant.

5.1.2 Significance of Impacts

Implementation of the project 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 project would generate criteria pollutants and ozone precursors during construction activities and on an ongoing basis during 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, project construction and 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 Construction Emissions

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 each of the near-term projects are shown in Table 10, *Maximum Daily Construction Emissions*. The data are presented as the maximum anticipated daily emissions. The complete CalEEMod output is provided in Appendix A to this report.

Table 10
MAXIMUM DAILY CONSTRUCTION EMISSIONS

Calendar Year	Pollutant Emissions (pounds per day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
2027	1.1	7.3	11.5	<0.1	0.7	0.4
2028	2.0	11.0	17.0	<0.1	0.5	0.4
Maximum Daily Emissions	**2.0**	**11.0**	**17.0**	**<0.1**	**0.7**	**0.4**
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)
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 10, the project's short-term construction-related criteria pollutant and precursor emissions would be below the screening thresholds. Therefore, construction of the project would not result in a cumulatively considerable net increase of criteria pollutants for which the project region is nonattainment.

5.2.1.2 Operational Emissions

Operational emissions associated with buildout of the project was estimated using CalEEMod, as described in Section 4.1.2. Operational emissions calculations and model outputs are provided in Appendix A. Table 11, *Daily Operational Emissions*, presents the summary of the increase in daily operational emissions for the project in comparison with the daily thresholds provided in Table 9.

Table 11
DAILY OPERATIONAL EMISSIONS

Category	Pollutant Emissions (pounds per day)					
	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Mobile	0.8	0.6	5.7	<0.1	1.4	0.4
Area	0.5	<0.1	0.8	<0.1	<0.1	<0.1
Aircraft Engine Testing	0.2	0.1	12.0	<0.1	0.2	0.2
Total Daily Emissions[1]	**1.5**	**0.6**	**18.5**	**<0.1**	**1.6**	**0.5**
Screening Thresholds	*137*	*250*	*550*	*250*	*100*	*67*
Significant Impact?	***No***	***No***	***No***	***No***	***No***	***No***

Source: CalEEMod (output data is provided in Appendix A)
[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 11, the increase in emissions of all criteria pollutants and ozone precursors associated with operation of the project would be below the daily thresholds. Therefore, operation of the project would not result in a cumulatively considerable net increase of criteria pollutants for which the project region is nonattainment.

5.2.2 Significance of Impacts

Implementation of the project 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 Construction Activities

Implementation of the project would result in the use of heavy-duty construction equipment, haul trucks, 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 demolition 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 site and the highly dispersive nature of DPM, construction would not expose sensitive receptors to substantial DPM concentrations.

5.3.1.2 Operational Activities

Potential impacts to sensitive receptors during project operation are analyzed for CO hotspots and exposure to 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 the project 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 does not have 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).

The project's Local Mobility Analysis includes an analysis of traffic volumes for project-affected intersections. The highest volume analyzed intersection would be the intersection of Kearny Villa Road and Aero Drive which is forecast to carry 4,199 vehicles during the afternoon peak hour in the Opening Year plus project scenario (Linscott, Law & Greenspan Engineers 2026a). This traffic volume is substantially below the 44,000 vehicles per hour screening level for CO hotpots suggested by the Bay Area Air District. Therefore, long-term operation of the project would not expose sensitive receptors to substantial localized concentrations of CO.

Operational TAC Emissions

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 project would include academic and parking uses and would not represent a substantial source of TACs. Furthermore, as noted in Section 2.3, the nearest existing sensitive receptor is located farther than CARB's 1,000-foot recommended siting distance from the project site. As such, the project would not expose sensitive receptors to substantial pollutant concentrations.

5.3.2 Significance of Impacts

Implementation of the project 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

As discussed above in Section 3.1, SDAPCD Rule 51 prohibits 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. Any unreasonable odor discernible at the property line of the project site is considered a significant odor impact.

Implementation of the project 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 construction. Accordingly, the project 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 project, involving academic and parking uses, would not include these uses. Furthermore, the project would not result in any changes to the types of activities already occurring on the project site. The project 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 project 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. 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 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

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

GHG emissions associated with construction of the project were estimated using CalEEMod, as described in Section 4.1.1. Construction emissions calculations and model outputs are provided in Appendix A. Table 12, *Construction GHG Emissions by Year*, presents the summary of the total GHG emissions associated with the construction of the project.

Table 12
CONSTRUCTION GHG EMISSIONS BY YEAR

Year	Total Emissions (MT CO_2e)
2027	52.9
2028	243.5
Total Construction Emissions	**296.4**

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

Operational Emissions

The GHG emissions associated with buildout of the project were estimated using CalEEMod as described in Section 4.1.2. For informational purposes, the project's total annual GHG emissions for the first full year of operation (2029) are shown in Table 13, *Operational GHG Emissions*. Appendix A contains the CalEEMod output files.

Table 13
OPERATIONAL GHG EMISSIONS

Emission Sources	2029 Emissions (MT CO_2e)
Vehicular (Mobile)	171.8
Area	0.3
Energy	8.6
Water/Wastewater	0.4
Solid Waste	5.6
Refrigerants	<0.1
Aircraft Engine Testing	3.5
Total[1]	**190.1**

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

6.1.1.2 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 14, *Scoping Plan Consistency Analysis*.

Table 14
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.** The project's parking area would provide approximately 70 parking spaces for students and faculty and would include 9 EV ready spaces and 7 EV charging spaces. An additional nine parking spaces would be provided along the southern perimeter of the proposed Miramar College AIC which would include one additional EV charging station. Development of the project 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 project would not inhibit the implementation of City or other jurisdiction's actions to support statewide ZEV deployment. The District is currently in the process of purchasing ZEVs for maintenance and facilities staff as vehicles are replaced. As described above, vehicle charging locations within project parking areas would also be available.

2022 Scoping Plan Priority Areas	2022 Scoping Plan Priority GHG Reduction Strategies	Project Consistency Statement
VMT Reduction	Reduce or eliminate minimum parking standards	**Consistent.** The District does not have minimum parking standards. Although the project would include new parking facilities, these improvements would accommodate 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 project would not impede implementation of these policies or future complete street improvements on City roadways.
	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 project site is located within a transit priority area with easy access to public transit services. The District would continue to provide transit passes for sale at the discounted student rate established by Metropolitan Transit System.
	Increase public access to clean mobility options by planning for and investing in electric shuttles, bike share, car share, and walking	**Consistent.** The project would provide accessible pathways throughout the project site to accommodate student and faculty access to the Miramar College AIC and associated parking and engine testing pad area. The proposed pedestrian improvements would be constructed with ADA-compliant curb ramps and high-contrast tactile warning strips (i.e., yellow truncated dome pads). There are various planned transit, pedestrian, and bicycle facilities along Kearny Villa Road and Aero Drive in the vicinity of the project site. Project implementation would not preclude the City from implementing these planned improvements.
	Implement parking pricing or transportation demand management pricing strategies	**Consistent.** Parking on campus facilities 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.

2022 Scoping Plan Priority Areas	2022 Scoping Plan Priority GHG Reduction Strategies	Project Consistency Statement
VMT Reduction (cont.)	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 project would expand the existing instructional facility allowing for 15 additional class sessions per week. As mentioned previously, the project site is within a transit priority area with easy access to public transit services.
	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 project would be an infill development within the boundaries of the MYF, which is fully developed 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 project's development would be all-electric in accordance with District sustainability policies outlined in the District Design Guidelines and Standards Manual. Construction of District facilities are 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.
	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 project would replace an existing building with new construction that would be all electric and more energy efficient.
	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 project would replace an existing building with new construction that would be all electric and more energy efficient.
	Facilitate deployment of renewable energy production and distribution and energy storage on privately owned land uses (e.g., permit streamlining, information sharing)	**Consistent.** 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 project, the District would continue to evaluate the feasibility of incorporating such technology on campuses as it is available and economically feasible.

2022 Scoping Plan Priority Areas	2022 Scoping Plan Priority GHG Reduction Strategies	Project Consistency Statement
Building Decarbonization (cont.)	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.** Additional renewable energy production and storage technologies are considered by the District as feasible.

Source: CARB 2022

As shown in Table 14, the project would not impede implementation of the GHG reduction strategies identified in the 2022 Scoping Plan. Rather, many of the District policies would be consistent with these GHG reduction strategies. Therefore, buildout of the project 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 project would not generate GHG 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

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 are evaluated based on whether the project would conflict with or obstruct implementation of CARB's 2022 Scoping Plan, the California Community Colleges Sustainability and Climate Action goals, or the City's CAP.

6.2.1.1 California Air Resources Board 2022 Scoping Plan

As discussed 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 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. 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.

6.2.1.2 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.

6.2.1.3 City of San Diego 2022 Climate Action Plan

The first step in determining CAP consistency for development projects is to assess the project's consistency with the growth projections used in the development of the CAP. Because the CAP uses growth projections based on implementation of the adopted General Plan and Community Plans, the first step in determining a project's consistency with the CAP is to demonstrate its consistency with the land use and zoning designations.

As discussed previously, the project proposes the redevelopment and expansion of an instructional facility. The project would continue the existing use of the project site and would be consistent with the adjacent airport uses and surrounding uses. The project site is mapped as an Institutional land use in the Kearny Mesa Community Plan and would continue this land use with project implementation. Therefore, the project is consistent with the growth projections used in the development of the CAP.

The second step in demonstrating CAP consistency is implementation of the regulations set forth in San Diego Municipal Code Chapter 14, Article 3, Division 14 to ensure that new development is consistent with the CAP's assumptions for relevant CAP strategies 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 Climate Action Plan for the cumulative impacts analysis of GHG emissions. The CAP Consistency Regulations are applicable to development of three or more residential dwelling units, non-residential development of at least 5,000 SF, and parking facilities. Project-specific measures identified in the CAP Consistency Regulations include the following:

- Pedestrian enhancements that reduce heat island effects through the planting of trees or installation of shade structures;
- Pedestrian amenities such as trash receptacles, seating, or public artwork for every 250 linear feet of street frontage;
- Provision of electric bicycle parking spaces with outlets for charging;
- Two trees planted for every 5,000 SF of lot area;

The project would be required to comply with the applicable portions of the CAP Consistency Regulations consistent with the San Diego Municipal Code. Therefore, the project would be consistent with the City's CAP and buildout of the project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

6.2.2 Significance of Impacts

The project 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
Yara Fisher, AICP	Principal Planner/Project Manager

8.0 REFERENCES

Bay Area Air District. 2023. 2022 CEQA Guidelines, Chapter 4 – Screening for Criteria Air Pollutants and Precursors. Revised April 20, 2023. Available at: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa-guidelines-2022/ceqa-guidelines-chapter-4-screening_final-pdf.pdf?sc_lang=en.

2022. Justification Report: CEQA Thresholds for Evaluating the Significance of Climate Impacts From Land Use Projects and Plans. April. Available at: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa-thresholds-2022/justification-report-pdf.pdf?la=en.

California Air Pollution Control Officers Association (CAPCOA). 2022. User's Guide for CalEEMod Version 2022.1. Available at: http://www.caleemod.com/.

California Air Resources Board (CARB). 2026a. iADAM: Air Quality Data Statistics. Top 4 Summary. Available at: https://www.arb.ca.gov/adam/topfour/topfour1.php. Accessed June 11.

2026b. Current California GHG Emission Inventory Data. Available at: https://ww2.arb.ca.gov/ghg-inventory-data. Accessed June 11.

2026c. California Ambient Air Quality Standards. Available at: https://ww2.arb.ca.gov/resources/california-ambient-air-quality-standards. Accessed June 11.

2026d. Overview: Diesel Exhaust and Health. Available at: https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health. Accessed June 11.

2026e. State Implementation Plan Background. Available at: https://ww2.arb.ca.gov/our-work/programs/california-state-implementation-plans/about. Accessed June 11.

2026f. California's Greenhouse Gas Vehicle Emission Standards under Assembly Bill 1493 of 2002 (Pavley). Available at: http://www.arb.ca.gov/cc/ccms/ccms.htm. Accessed June 11.

2024. Ambient Air Quality Standards. July 16. Available at: https://ww2.arb.ca.gov/sites/default/files/2024-08/AAQS%20Table_ADA_FINAL_07222024.pdf.

2022. 2022 Scoping Plan for Achieving Carbon Neutrality. December. Available at: https://ww2.arb.ca.gov/sites/default/files/2023-04/2022-sp.pdf.

2007. California Greenhouse Gas Inventory. November 19. Available at: https://ww2.arb.ca.gov/sites/default/files/classic/cc/ghg_inventory_ipcc_all_90-04_AR4.pdf.

2005. Air Quality and Land Use Handbook: A Community Health Perspective. April. Available at: https://ww2.arb.ca.gov/sites/default/files/2023-05/Land%20Use%20Handbook_0.pdf.

California Community Colleges. 2025. California Community Colleges Board of Governors Climate Action and Sustainability Framework. Available at: https://www.cccco.edu/-/media/CCCCO-Website/docs/data-resources/californiacommunitycollegesboardofgovernorsclimateactionandsustainabilityframeworka11y-1.pdf?la=en&hash=F54B7AC18C3A1DA9110D347B71F4DA7E4D88D5E5. January 15.

California Department of Resources Recycling and Recovery (CalRecycle). 2019. California's Short-Lived Climate Pollutant Reduction Strategy. Available at: https://calrecycle.ca.gov/organics/slcp/. Accessed June 11, 2026.

California Energy Commission (CEC). 2025. CCR Title 24 Part 6, 2025 Building Energy Efficiency Standards. Available at: https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2025-building-energy-efficiency. Accessed June 11, 2026.

California Natural Resources Agency (CNRA). 2009. Final Statement of Reasons for Regulatory Action: Amendments to the State CEQA Guidelines Addressing Analysis and Mitigation of Greenhouse Gas Emissions Pursuant to SB 97. December. Available at: https://resources.ca.gov/CNRALegacyFiles/ceqa/docs/Final_Statement_of_Reasons.pdf.

Climate Watch. 2023. Historical GHG Emissions. Available at: https://www.climatewatchdata.org/ghg-emissions. Accessed June 11, 2026.

Governor's Office of Planning and Research. 2008. CEQA and Climate Change: Addressing Climate Change Through California Environmental Quality Act (CEQA) Review. June 19. Available at: https://lci.ca.gov/ceqa/docs/20210720-june08-ceqa.pdf.

Intergovernmental Panel on Climate Change (IPCC). 2021. Climate Change 2021. The Physical Science Basis. Working Group I Contribution to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change. Available at: https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_FullReport_small.pdf.

2014. Mitigation of Climate Change. Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. Available at: https://www.ipcc.ch/report/ar5/wg3/.

2013. Climate Change 2013: The Physical Science Basis. Working Group I Contribution to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. Available at: https://www.ipcc.ch/report/ar5/wg1/.

2007. Climate Change 2007: The Physical Science Basis. Summary for Policymakers. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. February. Available at: https://www.ipcc.ch/report/ar4/wg1/.

Iowa Environmental Mesonet. 2026. Station Data & Metadata / CA ASOS. Available at: https://mesonet.agron.iastate.edu/sites/monthlysum.php?station=MYF&network=CA_ASOS. Accessed May 19.

Linscott, Law & Greenspan Engineers. 2026. Local Mobility Analysis – SDCCD Miramar Aviation Project at Montgomery-Gibbs Airport. June 16.

National Aeronautics and Space Administration, Goddard Institute for Space Studies (NASA). 2026. NASA Releases Global Temperature Data. January 14. Available at: https://www.nasa.gov/news-release/nasa-releases-global-temperature-data/.

National Oceanic and Atmospheric Administration (NOAA). 2026. Trends in Atmospheric Carbon Dioxide. Available at: https://www.esrl.noaa.gov/gmd/ccgg/trends. Accessed June 11.

Office of Environmental Health Hazard Assessment (OEHHA). 2015. Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments. February. Available at: https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf.

Ramboll. 2023. CalEEMod Construction Default Updates. June. Available at: https://caleemod.com/documents/CalEMod_Activity_Defaults_Update_27June2023_r1.pdf.

San Diego Association of Governments (SANDAG). 2025. 2025 Regional Plan. Adopted December 12. Available at: https://www.sandag.org/planning/regional-plan-landing/current-plan.

San Diego, City of (City). 2022a. City of San Diego Climate Action Plan. Available at: https://www.sandiego.gov/sites/default/files/san_diegos_2022_climate_action_plan_0.pdf.

2022b. California Environmental Quality Act Significance Determination Thresholds City of San Diego. September. Available at: https://www.sandiego.gov/sites/default/files/september_2022_ceqa_thresholds_final.pdf.

San Diego Community College District (District). 2023. Climate Action Plan. Available at: https://www.sdcity.edu/faculty-staff/committees/facilities-planning/docs/SDCCD%20Climate%20Action%20Plan%202023.pdf.

San Diego County Air Pollution Control District (SDAPCD). 2026. Attainment Status. Available at: https://www.sdapcd.org/content/sdapcd/planning/attainment-status.html. Accessed June 11.

2025. Monitoring and Technical Services Annual Air Quality Monitoring Network Report. Posted Publicly on May 31. Available at: https://www.sdapcd.org/content/dam/sdapcd/documents/monitoring/2024-Network-Report.pdf.

2023. 2022 Regional Air Quality Strategy (RAQS). Available at: https://www.sdapcd.org/content/dam/sdapcd/documents/grants/planning/Att.%20A%20-%202022%20RAQS.pdf.

2021. Rule 67.0.1 Architectural Coatings. Adopted February 10. Available at: https://www.sdapcd.org/content/dam/sdapcd/documents/rules/current-rules/Rule-67.0.1-eff010122.pdf.

2020. 2020 Plan for Attaining the National Ambient Air Quality Standards for Ozone in San Diego County. October. Available at: https://www.sdapcd.org/content/dam/sdapcd/documents/grants/planning/Att%20A%20(Attainment%20Plan)_ws.pdf.

San Diego County Air Pollution Control District (SDAPCD) (cont.)

2019. Rule 20.2 New Source Review Non-Major Stationary Sources. Revised June 26. Available at: https://www.sdapcd.org/content/dam/sdapcd/documents/rules/current-rules/Rule-20.2.pdf.

2009. Rule 55 Fugitive Dust Control. Adopted June 24. Available at: https://www.sdapcd.org/content/dam/sdapcd/documents/rules/current-rules/Rule-55.pdf.

1997. Rule 50 Visible Emissions. Available at: https://www.sdapcd.org/content/dam/sdapcd/documents/rules/current-rules/Rule-50.pdf.

1976. Rule 51 Nuisance. Available at: https://www.sdapcd.org/content/dam/sdapcd/documents/rules/current-rules/Rule-50.1.pdf.

South Coast Air Quality Management District (SCAQMD). 1993. CEQA Air Quality Handbook.

U.S. Environmental Protection Agency (USEPA). 2026a. Criteria Air Pollutants. Available at: https://www.epa.gov/criteria-air-pollutants. Last updated January 23.

2026b. Proposed Endangerment and Cause or Contribute Findings for Greenhouse Gases under the Clean Air Act. Last updated February 10. Available at: https://www.epa.gov/climate-change/endangerment-and-cause-or-contribute-findings-greenhouse-gases-under-section-202a. Accessed June 11.

2025. NAAQS Table. Available at: https://www.epa.gov/criteria-air-pollutants/naaqs-table. Last updated November 4.

2024. Inventory of U.S. Greenhouse Gas Emissions and Sinks 1990–2022. EPA 430-R-24004. April. Available at: https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks-1990-2022.

2014. Generic Aircraft Type Emission Factors. Available at: https://www.epa.gov/sites/default/files/2016-04/documents/nei2014_genericef_table.pdf.

This page intentionally left blank

Appendix A

CalEEMod Output

Miramar College AIC 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

2.3. Operations Emissions Compared Against Thresholds

2.4. Operations Emissions by Sector, Unmitigated

3. Construction Emissions Details

3.1. Demolition (2027)

3.1.1. Onsite - Unmitigated

3.1.2. Offsite - Unmitigated

3.2. Site Preparation (2027)

3.2.1. Onsite - Unmitigated

3.2.2. Offsite - Unmitigated

3.3. Grading (2027)

3.3.1. Onsite - Unmitigated

3.3.2. Offsite - Unmitigated

3.4. Building Construction (2028)

3.4.1. Onsite - Unmitigated

3.4.2. Offsite - Unmitigated

3.5. Paving (2028)

3.5.1. Onsite - Unmitigated

3.5.2. Offsite - Unmitigated

3.6. Architectural Coating (2028)

3.6.1. Onsite - Unmitigated

3.6.2. Offsite - Unmitigated

3.7. Underground Infrastructure (2028)

3.7.1. Onsite - Unmitigated

3.7.2. Offsite - 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

5.1. 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

5.9. 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

8.4. Construction

8.4.1. Construction Phases

8.4.2. Off-Road Equipment

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

8.5.5. Solid Waste

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Miramar College AIC
Construction Start Date	8/1/2027
Operational Year	2029
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50000
Precipitation (days)	19.8000
Location	3873 Kearny Villa Rd, San Diego, CA 92123, USA
County	San Diego
City	San Diego
Air District	San Diego County APCD
Air Basin	San Diego
TAZ	6901
EDFZ	12
Electric Utility	San Diego Gas & Electric
Gas Utility	San Diego Gas & Electric
App Version	2022.1.1.44

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)	18.0000	1000sqft	0.88440	18,000.0	3,800.00	3,800.00	—	—

Parking Lot	7.65000	1000sqft	0.17562	0.00000	0.00000	—	—	—

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.	2.05660	2.00120	7.45268	10.3827	0.02694	0.26576	0.09102	0.34858	0.24458	0.02242	0.26478	—	2,966.29	2,966.29	0.11857	0.03540	0.42945	2,980.15
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.95085	1.64000	11.0117	16.9911	0.04213	0.39681	0.50701	0.67947	0.36515	0.10024	0.40022	—	4,670.28	4,670.28	0.18675	0.07799	0.03190	4,690.23
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.85582	0.75627	3.66053	5.35932	0.01331	0.12952	0.05633	0.17739	0.11920	0.01156	0.13075	—	1,464.02	1,464.02	0.05850	0.01724	0.08182	1,470.70
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.15619	0.13802	0.66805	0.97808	0.00243	0.02364	0.01028	0.03237	0.02175	0.00211	0.02386	—	242.385	242.385	0.00969	0.00285	0.01355	243.491

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	0.41376	0.34605	2.76375	6.04132	0.00900	0.11045	0.09102	0.20147	0.10126	0.02242	0.12368	—	1,069.34	1,069.34	0.04449	0.02543	0.42945	1,078.46
2028	2.05660	2.00120	7.45268	10.3827	0.02694	0.26576	0.08282	0.34858	0.24458	0.02020	0.26478	—	2,966.29	2,966.29	0.11857	0.03540	0.34406	2,980.15
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	1.31322	1.10465	7.25752	11.5203	0.02224	0.31845	0.50701	0.67947	0.29305	0.10024	0.34547	—	2,533.34	2,533.34	0.10405	0.07799	0.03190	2,545.97
2028	1.95085	1.64000	11.0117	16.9911	0.04213	0.39681	0.14625	0.54306	0.36515	0.03507	0.40022	—	4,670.28	4,670.28	0.18675	0.05121	0.01412	4,690.23
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.14487	0.12075	0.93396	1.56609	0.00274	0.03380	0.05633	0.09013	0.03098	0.01058	0.04156	—	316.542	316.542	0.01328	0.00818	0.05660	319.369
2028	0.85582	0.75627	3.66053	5.35932	0.01331	0.12952	0.04787	0.17739	0.11920	0.01156	0.13075	—	1,464.02	1,464.02	0.05850	0.01724	0.08182	1,470.70
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.02644	0.02204	0.17045	0.28581	0.00050	0.00617	0.01028	0.01645	0.00565	0.00193	0.00758	—	52.4071	52.4071	0.00220	0.00135	0.00937	52.8752
2028	0.15619	0.13802	0.66805	0.97808	0.00243	0.02364	0.00874	0.03237	0.02175	0.00211	0.02386	—	242.385	242.385	0.00969	0.00285	0.01355	243.491

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	0.37724	0.31699	2.61593	5.68115	0.00830	0.10862	0.00018	0.10879	0.09993	0.00003	0.09995	—	898.932	898.932	0.03646	0.00729	0.00000	902.017
2028	2.02864	1.97731	7.34926	10.0492	0.02644	0.26477	0.00000	0.26477	0.24359	0.00000	0.24359	—	2,829.29	2,829.29	0.11477	0.02295	0.00000	2,839.00
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	1.26070	1.05934	7.12471	11.0267	0.02173	0.31744	0.27465	0.52424	0.29204	0.04159	0.31437	—	2,353.29	2,353.29	0.09546	0.01909	0.00000	2,361.37
2028	1.88978	1.58693	10.8814	16.4384	0.04163	0.39582	0.00000	0.39582	0.36415	0.00000	0.36415	—	4,473.42	4,473.42	0.18146	0.03629	0.00000	4,488.77

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.13468	0.11298	0.88197	1.47424	0.00250	0.03317	0.03015	0.06332	0.03052	0.00407	0.03459	—	263.991	263.991	0.01071	0.00214	0.00000	264.897
2028	0.83609	0.73945	3.60891	5.17789	0.01309	0.12909	0.00000	0.12909	0.11876	0.00000	0.11876	—	1,393.00	1,393.00	0.05651	0.01130	0.00000	1,397.78
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.02458	0.02062	0.16096	0.26905	0.00046	0.00605	0.00550	0.01156	0.00557	0.00074	0.00631	—	43.7068	43.7068	0.00177	0.00035	0.00000	43.8568
2028	0.15259	0.13495	0.65863	0.94497	0.00239	0.02356	0.00000	0.02356	0.02167	0.00000	0.02167	—	230.627	230.627	0.00936	0.00187	0.00000	231.419

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	0.03652	0.02906	0.14782	0.36017	0.00069	0.00184	0.09084	0.09268	0.00134	0.02239	0.02372	—	170.405	170.405	0.00802	0.01814	0.42945	176.441
2028	0.03357	0.02825	0.10342	0.33355	0.00050	0.00099	0.08282	0.08381	0.00099	0.02020	0.02120	—	137.000	137.000	0.00380	0.01244	0.34406	141.147
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.08541	0.06051	0.56047	0.74051	0.00265	0.00729	0.23236	0.23965	0.00508	0.05865	0.06373	—	521.075	521.075	0.02634	0.06637	0.03190	541.544
2028	0.06107	0.05307	0.13033	0.55268	0.00050	0.00099	0.14625	0.14724	0.00099	0.03507	0.03606	—	196.861	196.861	0.00529	0.01492	0.01412	201.453
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.01019	0.00777	0.05199	0.09186	0.00024	0.00063	0.02618	0.02681	0.00046	0.00651	0.00697	—	52.5507	52.5507	0.00257	0.00604	0.05660	54.4720
2028	0.01973	0.01682	0.05162	0.18143	0.00022	0.00044	0.04787	0.04831	0.00044	0.01156	0.01200	—	71.0156	71.0156	0.00200	0.00594	0.08182	72.9170
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.00186	0.00142	0.00949	0.01676	0.00004	0.00011	0.00478	0.00489	0.00008	0.00119	0.00127	—	8.70036	8.70036	0.00043	0.00100	0.00937	9.01847
2028	0.00360	0.00307	0.00942	0.03311	0.00004	0.00008	0.00874	0.00882	0.00008	0.00211	0.00219	—	11.7574	11.7574	0.00033	0.00098	0.01355	12.0722

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.	1.55082	1.47041	0.58963	18.5153	0.02465	0.25151	1.34749	1.59901	0.17051	0.34176	0.51227	10.2255	1,687.33	1,697.56	1.12566	0.06108	3.73354	1,747.63
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.39906	1.32821	0.63327	17.4014	0.02395	0.25013	1.34749	1.59762	0.16947	0.34176	0.51123	10.2255	1,618.15	1,628.38	1.12944	0.06432	0.16453	1,675.95
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.07045	1.01483	0.40014	4.22726	0.01006	0.00792	0.95025	0.95817	0.00728	0.24105	0.24833	10.2255	1,094.90	1,105.13	1.10876	0.04715	1.19959	1,148.10
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.19536	0.18521	0.07302	0.77148	0.00184	0.00145	0.17342	0.17487	0.00133	0.04399	0.04532	1.69294	181.274	182.967	0.18357	0.00781	0.19861	190.081

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	0.85221	0.78254	0.51304	5.71244	0.01460	0.01012	1.34749	1.35762	0.00946	0.34176	0.35122	—	1,487.84	1,487.84	0.06582	0.05537	3.66401	1,509.65
Area	0.54861	0.53787	0.00659	0.78286	0.00005	0.00139	—	0.00139	0.00105	—	0.00105	—	3.21924	3.21924	0.00014	0.00003	—	3.23085
Energy	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	49.4236	49.4236	0.03616	0.00438	—	51.6340
Water	—	—	—	—	—	—	—	—	—	—	—	0.52457	0.24599	0.77056	0.05397	0.00130	—	2.50712
Waste	—	—	—	—	—	—	—	—	—	—	—	9.70090	0.00000	9.70090	0.96957	0.00000	—	33.9401
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.06953	0.06953
User-Defined	0.15000	0.15000	0.07000	12.0200	0.01000	0.24000	—	0.24000	0.16000	—	0.16000	—	146.600	146.600	—	—	—	146.600

Total	1.55082	1.47041	0.58963	18.5153	0.02465	0.25151	1.34749	1.59901	0.17051	0.34176	0.51227	10.2255	1,687.33	1,697.56	1.12566	0.06108	3.73354	1,747.63
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.83982	0.76897	0.56327	5.38142	0.01395	0.01013	1.34749	1.35762	0.00947	0.34176	0.35123	—	1,421.88	1,421.88	0.06973	0.05864	0.09500	1,441.20
Area	0.40925	0.40925	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	49.4236	49.4236	0.03616	0.00438	—	51.6340
Water	—	—	—	—	—	—	—	—	—	—	—	0.52457	0.24599	0.77056	0.05397	0.00130	—	2.50712
Waste	—	—	—	—	—	—	—	—	—	—	—	9.70090	0.00000	9.70090	0.96957	0.00000	—	33.9401
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.06953	0.06953
User-Defined	0.15000	0.15000	0.07000	12.0200	0.01000	0.24000	—	0.24000	0.16000	—	0.16000	—	146.600	146.600	—	—	—	146.600
Total	1.39906	1.32821	0.63327	17.4014	0.02395	0.25013	1.34749	1.59762	0.16947	0.34176	0.51123	10.2255	1,618.15	1,628.38	1.12944	0.06432	0.16453	1,675.95
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.59248	0.54215	0.39689	3.84119	0.01004	0.00723	0.95025	0.95748	0.00676	0.24105	0.24781	—	1,022.75	1,022.75	0.04899	0.04145	1.13006	1,037.46
Area	0.47798	0.47268	0.00325	0.38607	0.00002	0.00069	—	0.00069	0.00052	—	0.00052	—	1.58757	1.58757	0.00007	0.00001	—	1.59329
Energy	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	49.4236	49.4236	0.03616	0.00438	—	51.6340
Water	—	—	—	—	—	—	—	—	—	—	—	0.52457	0.24599	0.77056	0.05397	0.00130	—	2.50712
Waste	—	—	—	—	—	—	—	—	—	—	—	9.70090	0.00000	9.70090	0.96957	0.00000	—	33.9401
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.06953	0.06953
User-Defined	—	—	—	—	—	—	—	—	—	—	—	—	20.8986	20.8986	—	—	—	20.8986
Total	1.07045	1.01483	0.40014	4.22726	0.01006	0.00792	0.95025	0.95817	0.00728	0.24105	0.24833	10.2255	1,094.90	1,105.13	1.10876	0.04715	1.19959	1,148.10
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.10813	0.09894	0.07243	0.70102	0.00183	0.00132	0.17342	0.17474	0.00123	0.04399	0.04523	—	169.328	169.328	0.00811	0.00686	0.18709	171.763
Area	0.08723	0.08626	0.00059	0.07046	< 0.000005	0.00013	—	0.00013	0.00009	—	0.00009	—	0.26284	0.26284	0.00001	< 0.000005	—	0.26379
Energy	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	8.18264	8.18264	0.00599	0.00073	—	8.54859
Water	—	—	—	—	—	—	—	—	—	—	—	0.08685	0.04073	0.12757	0.00894	0.00022	—	0.41508
Waste	—	—	—	—	—	—	—	—	—	—	—	1.60609	0.00000	1.60609	0.16052	0.00000	—	5.61918

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01151	0.01151
User-Defined	—	—	—	—	—	—	—	—	—	—	—	—	3.46000	3.46000	—	—	—	3.46000
Total	0.19536	0.18521	0.07302	0.77148	0.00184	0.00145	0.17342	0.17487	0.00133	0.04399	0.04532	1.69294	181.274	182.967	0.18357	0.00781	0.19861	190.081

3. Construction Emissions Details

3.1. Demolition (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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.73140	0.61181	5.60737	9.29380	0.01413	0.16517	—	0.16517	0.15196	—	0.15196	—	1,432.28	1,432.28	0.05810	0.01162	—	1,437.20
Demolition	—	—	—	—	—	—	0.27465	0.27465	—	0.04159	0.04159	—	—	—	—	—	—	—
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	0.05010	0.04190	0.38407	0.63656	0.00097	0.01131	—	0.01131	0.01041	—	0.01041	—	98.1015	98.1015	0.00398	0.00080	—	98.4382
Demolition	—	—	—	—	—	—	0.01881	0.01881	—	0.00285	0.00285	—	—	—	—	—	—	—

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	0.00914	0.00765	0.07009	0.11617	0.00018	0.00206	—	0.00206	0.00190	—	0.00190	—	16.2418	16.2418	0.00066	0.00013	—	16.2976
Demolition	—	—	—	—	—	—	0.00343	0.00343	—	0.00052	0.00052	—	—	—	—	—	—	—
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05685	0.05157	0.04621	0.54000	0.00000	0.00000	0.12686	0.12686	0.00000	0.02974	0.02974	—	129.450	129.450	0.00693	0.00528	0.01149	131.209
Vendor	0.00343	0.00155	0.06286	0.02909	0.00034	0.00067	0.01280	0.01347	0.00067	0.00354	0.00421	—	48.1170	48.1170	0.00187	0.00674	0.00279	50.1766
Hauling	0.02513	0.00739	0.45140	0.17141	0.00231	0.00661	0.09270	0.09931	0.00441	0.02538	0.02979	—	343.508	343.508	0.01753	0.05434	0.01762	360.158
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00387	0.00351	0.00314	0.03744	0.00000	0.00000	0.00858	0.00858	0.00000	0.00201	0.00201	—	8.94577	8.94577	0.00045	0.00034	0.01314	9.07127
Vendor	0.00024	0.00011	0.00427	0.00199	0.00002	0.00005	0.00087	0.00091	0.00005	0.00024	0.00029	—	3.29440	3.29440	0.00013	0.00046	0.00318	3.43846
Hauling	0.00174	0.00052	0.03093	0.01167	0.00016	0.00045	0.00629	0.00674	0.00030	0.00172	0.00202	—	23.5223	23.5223	0.00120	0.00371	0.02008	24.6793
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00071	0.00064	0.00057	0.00683	0.00000	0.00000	0.00157	0.00157	0.00000	0.00037	0.00037	—	1.48107	1.48107	0.00007	0.00006	0.00218	1.50185
Vendor	0.00004	0.00002	0.00078	0.00036	< 0.000005	0.00001	0.00016	0.00017	0.00001	0.00004	0.00005	—	0.54543	0.54543	0.00002	0.00008	0.00053	0.56928

Hauling	0.00032	0.00010	0.00564	0.00213	0.00003	0.00008	0.00115	0.00123	0.00006	0.00031	0.00037	—	3.89438	3.89438	0.00020	0.00062	0.00332	4.08595

3.2. Site Preparation (2027)

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.37724	0.31699	2.61593	5.68115	0.00830	0.10862	—	0.10862	0.09993	—	0.09993	—	898.932	898.932	0.03646	0.00729	—	902.017
Dust From Material Movemer	—	—	—	—	—	—	0.00018	0.00018	—	0.00003	0.00003	—	—	—	—	—	—	—
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	0.37724	0.31699	2.61593	5.68115	0.00830	0.10862	—	0.10862	0.09993	—	0.09993	—	898.932	898.932	0.03646	0.00729	—	902.017
Dust From Material Movemer	—	—	—	—	—	—	0.00018	0.00018	—	0.00003	0.00003	—	—	—	—	—	—	—
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	0.01550 t	0.01303	0.10750	0.23347	0.00034	0.00446	—	0.00446	0.00411	—	0.00411	—	36.9424	36.9424	0.00150	0.00030	—	37.0692
Dust From Material Movemer	—	—	—	—	—	—	0.00001	0.00001	—	< 0.000005	< 0.000005	—	—	—	—	—	—	—
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	0.00283	0.00238	0.01962	0.04261	0.00006	0.00081	—	0.00081	0.00075	—	0.00075	—	6.11624	6.11624	0.00025	0.00005	—	6.13723
Dust From Material Movemer	—	—	—	—	—	—	< 0.000005	< 0.000005	—	< 0.000005	< 0.000005	—	—	—	—	—	—	—
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00178	0.00084	0.03034	0.01432	0.00017	0.00034	0.00640	0.00674	0.00034	0.00177	0.00210	—	24.0424	24.0424	0.00092	0.00337	0.05364	25.1239
Hauling	0.00582	0.00177	0.09899	0.03845	0.00052	0.00150	0.02101	0.02251	0.00100	0.00575	0.00675	—	77.8295	77.8295	0.00397	0.01229	0.15364	81.7458
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	0.00171	0.00078	0.03143	0.01455	0.00017	0.00034	0.00640	0.00674	0.00034	0.00177	0.00210	—	24.0585	24.0585	0.00094	0.00337	0.00139	25.0883

Hauling	0.00570	0.00167	0.10232	0.03885	0.00052	0.00150	0.02101	0.02251	0.00100	0.00575	0.00675	—	77.8618	77.8618	0.00397	0.01232	0.00399	81.6358
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00116	0.00105	0.00094	0.01123	0.00000	0.00000	0.00257	0.00257	0.00000	0.00060	0.00060	—	2.68373	2.68373	0.00014	0.00010	0.00394	2.72138
Vendor	0.00007	0.00003	0.00128	0.00060	0.00001	0.00001	0.00026	0.00027	0.00001	0.00007	0.00009	—	0.98832	0.98832	0.00004	0.00014	0.00095	1.03154
Hauling	0.00024	0.00007	0.00421	0.00159	0.00002	0.00006	0.00086	0.00092	0.00004	0.00023	0.00028	—	3.19903	3.19903	0.00016	0.00051	0.00273	3.35639
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00021	0.00019	0.00017	0.00205	0.00000	0.00000	0.00047	0.00047	0.00000	0.00011	0.00011	—	0.44432	0.44432	0.00002	0.00002	0.00065	0.45056
Vendor	0.00001	0.00001	0.00023	0.00011	< 0.000005	< 0.000005	0.00005	0.00005	< 0.000005	0.00001	0.00002	—	0.16363	0.16363	0.00001	0.00002	0.00016	0.17078
Hauling	0.00004	0.00001	0.00077	0.00029	< 0.000005	0.00001	0.00016	0.00017	0.00001	0.00004	0.00005	—	0.52964	0.52964	0.00003	0.00008	0.00045	0.55569

3.3. 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.26070	1.05934	7.12471	11.0267	0.02173	0.31744	—	0.31744	0.29204	—	0.29204	—	2,353.29	2,353.29	0.09546	0.01909	—	2,361.37
Dust From Material Movemer	—	—	—	—	—	—	0.20680	0.20680	—	0.02233	0.02233	—	—	—	—	—	—	—
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	0.06908	0.05805	0.39040	0.60420	0.00119	0.01739	—	0.01739	0.01600	—	0.01600	—	128.947	128.947	0.00523	0.00105	—	129.390
Dust From Material Movemer	—	—	—	—	—	—	0.01133	0.01133	—	0.00122	0.00122	—	—	—	—	—	—	—
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	0.01261	0.01059	0.07125	0.11027	0.00022	0.00317	—	0.00317	0.00292	—	0.00292	—	21.3487	21.3487	0.00087	0.00017	—	21.4220
Dust From Material Movemer	—	—	—	—	—	—	0.00207	0.00207	—	0.00022	0.00022	—	—	—	—	—	—	—
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04737	0.04297	0.03851	0.45000	0.00000	0.00000	0.10572	0.10572	0.00000	0.02478	0.02478	—	107.875	107.875	0.00578	0.00440	0.00958	109.341
Vendor	0.00514	0.00233	0.09430	0.04364	0.00050	0.00101	0.01920	0.02021	0.00101	0.00530	0.00631	—	72.1755	72.1755	0.00281	0.01012	0.00418	75.2649

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	0.00258	0.00234	0.00209	0.02496	0.00000	0.00000	0.00572	0.00572	0.00000	0.00134	0.00134	—	5.96385	5.96385	0.00030	0.00023	0.00876	6.04751
Vendor	0.00029	0.00013	0.00513	0.00239	0.00003	0.00006	0.00104	0.00110	0.00006	0.00029	0.00034	—	3.95328	3.95328	0.00015	0.00055	0.00381	4.12615
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	0.00047	0.00043	0.00038	0.00455	0.00000	0.00000	0.00104	0.00104	0.00000	0.00024	0.00024	—	0.98738	0.98738	0.00005	0.00004	0.00145	1.00123
Vendor	0.00005	0.00002	0.00094	0.00044	0.00001	0.00001	0.00019	0.00020	0.00001	0.00005	0.00006	—	0.65451	0.65451	0.00003	0.00009	0.00063	0.68313
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. Building Construction (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	1.17621	0.98733	7.34926	10.0492	0.02644	0.26477	—	0.26477	0.24359	—	0.24359	—	2,829.29	2,829.29	0.11477	0.02295	—	2,839.00
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	1.17621	0.98733	7.34926	10.0492	0.02644	0.26477	—	0.26477	0.24359	—	0.24359	—	2,829.29	2,829.29	0.11477	0.02295	—	2,839.00

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	0.45115	0.37870	2.81889	3.85448	0.01014	0.10155	—	0.10155	0.09343	—	0.09343	—	1,085.21	1,085.21	0.04402	0.00880	—	1,088.93
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	0.08233	0.06911	0.51445	0.70344	0.00185	0.01853	—	0.01853	0.01705	—	0.01705	—	179.668	179.668	0.00729	0.00146	—	180.285
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	0.02832	0.02582	0.01847	0.29306	0.00000	0.00000	0.06394	0.06394	0.00000	0.01499	0.01499	—	67.8519	67.8519	0.00117	0.00250	0.20284	68.8274
Vendor	0.00525	0.00242	0.08496	0.04049	0.00050	0.00099	0.01888	0.01987	0.00099	0.00522	0.00621	—	69.1480	69.1480	0.00264	0.00995	0.14122	72.3200
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	0.02815	0.02549	0.02113	0.25652	0.00000	0.00000	0.06394	0.06394	0.00000	0.01499	0.01499	—	64.0855	64.0855	0.00133	0.00250	0.00525	64.8676
Vendor	0.00499	0.00229	0.08824	0.04166	0.00050	0.00099	0.01888	0.01987	0.00099	0.00522	0.00621	—	69.1984	69.1984	0.00264	0.00995	0.00366	72.2328
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	0.01067	0.00965	0.00804	0.09973	0.00000	0.00000	0.02421	0.02421	0.00000	0.00567	0.00567	—	24.8002	24.8002	0.00051	0.00096	0.03359	25.1318
Vendor	0.00197	0.00088	0.03357	0.01576	0.00019	0.00038	0.00716	0.00755	0.00038	0.00198	0.00236	—	26.5308	26.5308	0.00101	0.00382	0.02338	27.7166
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	0.00195	0.00176	0.00147	0.01820	0.00000	0.00000	0.00442	0.00442	0.00000	0.00103	0.00103	—	4.10596	4.10596	0.00008	0.00016	0.00556	4.16086
Vendor	0.00036	0.00016	0.00613	0.00288	0.00003	0.00007	0.00131	0.00138	0.00007	0.00036	0.00043	—	4.39247	4.39247	0.00017	0.00063	0.00387	4.58881
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. Paving (2028)

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-Road Equipment	0.17182	0.14302	1.20078	1.45914	0.00257	0.04727	—	0.04727	0.04349	—	0.04349	—	234.034	234.034	0.00949	0.00190	—	234.838
Paving	0.01534	0.01534	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.01412	0.01176	0.09869	0.11993	0.00021	0.00388	—	0.00388	0.00357	—	0.00357	—	19.2357	19.2357	0.00078	0.00016	—	19.3017
Paving	0.00126	0.00126	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00258	0.00215	0.01801	0.02189	0.00004	0.00071	—	0.00071	0.00065	—	0.00065	—	3.18469	3.18469	0.00013	0.00003	—	3.19562
Paving	0.00023	0.00023	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.01873	0.01708	0.01221	0.19382	0.00000	0.00000	0.04229	0.04229	0.00000	0.00991	0.00991	—	44.8756	44.8756	0.00077	0.00165	0.13415	45.5208
Vendor	0.00356	0.00164	0.05759	0.02745	0.00034	0.00067	0.01280	0.01347	0.00067	0.00354	0.00421	—	46.8768	46.8768	0.00179	0.00674	0.09574	49.0272
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	0.00151	0.00137	0.00114	0.01413	0.00000	0.00000	0.00343	0.00343	0.00000	0.00080	0.00080	—	3.51477	3.51477	0.00007	0.00014	0.00476	3.56176
Vendor	0.00029	0.00013	0.00488	0.00229	0.00003	0.00006	0.00104	0.00110	0.00006	0.00029	0.00034	—	3.85409	3.85409	0.00015	0.00055	0.00340	4.02636
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	0.00028	0.00025	0.00021	0.00258	0.00000	0.00000	0.00063	0.00063	0.00000	0.00015	0.00015	—	0.58191	0.58191	0.00001	0.00002	0.00079	0.58969
Vendor	0.00005	0.00002	0.00089	0.00042	0.00001	0.00001	0.00019	0.00020	0.00001	0.00005	0.00006	—	0.63809	0.63809	0.00002	0.00009	0.00056	0.66661
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. Architectural Coating (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	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
Architectural Coatings	1.71164	1.71164	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.01779	0.01470	0.11070	0.15320	0.00024	0.00210	—	0.00210	0.00194	—	0.00194	—	18.2900	18.2900	0.00074	0.00015	—	18.3528

Architectural Coatings	0.23447	0.23447	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00325	0.00268	0.02020	0.02796	0.00004	0.00038	—	0.00038	0.00035	—	0.00035	—	3.02812	3.02812	0.00012	0.00002	—	3.03851
Architectural Coatings	0.04279	0.04279	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00566	0.00516	0.00369	0.05861	0.00000	0.00000	0.01279	0.01279	0.00000	0.00300	0.00300	—	13.5704	13.5704	0.00023	0.00050	0.04057	13.7655
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00076	0.00069	0.00057	0.00712	0.00000	0.00000	0.00173	0.00173	0.00000	0.00041	0.00041	—	1.77144	1.77144	0.00004	0.00007	0.00240	1.79513
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	0.00010	0.00130	0.00000	0.00000	0.00032	0.00032	0.00000	0.00007	0.00007	—	0.29328	0.29328	0.00001	0.00001	0.00040	0.29720
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

3.7. Underground Infrastructure (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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.71356	0.59959	3.53213	6.38926	0.01519	0.13105	—	0.13105	0.12057	—	0.12057	—	1,644.13	1,644.13	0.06669	0.01334	—	1,649.77
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	0.11730	0.09856	0.58062	1.05029	0.00250	0.02154	—	0.02154	0.01982	—	0.01982	—	270.268	270.268	0.01096	0.00219	—	271.196
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 Equipm	0.02141	0.01799	0.10596	0.19168	0.00046	0.00393	—	0.00393	0.00362	—	0.00362	—	44.7460	44.7460	0.00182	0.00036	—	44.8995
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00454	0.00410	0.00342	0.04240	0.00000	0.00000	0.01029	0.01029	0.00000	0.00241	0.00241	—	10.5443	10.5443	0.00022	0.00041	0.01428	10.6853
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	0.00083	0.00075	0.00062	0.00774	0.00000	0.00000	0.00188	0.00188	0.00000	0.00044	0.00044	—	1.74573	1.74573	0.00004	0.00007	0.00236	1.76907
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

4.1. 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)	0.85221	0.78254	0.51304	5.71244	0.01460	0.01012	1.34749	1.35762	0.00946	0.34176	0.35122	—	1,487.84	1,487.84	0.06582	0.05537	3.66401	1,509.65
Parking Lot	0.00000	0.00000	0.00000	0.00000	0.00000	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	0.85221	0.78254	0.51304	5.71244	0.01460	0.01012	1.34749	1.35762	0.00946	0.34176	0.35122	—	1,487.84	1,487.84	0.06582	0.05537	3.66401	1,509.65
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Junior College (2yr)	0.83982	0.76897	0.56327	5.38142	0.01395	0.01013	1.34749	1.35762	0.00947	0.34176	0.35123	—	1,421.88	1,421.88	0.06973	0.05864	0.09500	1,441.20
Parking Lot	0.00000	0.00000	0.00000	0.00000	0.00000	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	0.83982	0.76897	0.56327	5.38142	0.01395	0.01013	1.34749	1.35762	0.00947	0.34176	0.35123	—	1,421.88	1,421.88	0.06973	0.05864	0.09500	1,441.20
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Junior College (2yr)	0.10813	0.09894	0.07243	0.70102	0.00183	0.00132	0.17342	0.17474	0.00123	0.04399	0.04523	—	169.328	169.328	0.00811	0.00686	0.18709	171.763
Parking Lot	0.00000	0.00000	0.00000	0.00000	0.00000	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	0.10813	0.09894	0.07243	0.70102	0.00183	0.00132	0.17342	0.17474	0.00123	0.04399	0.04523	—	169.328	169.328	0.00811	0.00686	0.18709	171.763

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)	—	—	—	—	—	—	—	—	—	—	—	—	49.4236	49.4236	0.03616	0.00438	—	51.6340
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	—	49.4236	49.4236	0.03616	0.00438	—	51.6340
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Junior College (2yr)	—	—	—	—	—	—	—	—	—	—	—	—	49.4236	49.4236	0.03616	0.00438	—	51.6340
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	—	49.4236	49.4236	0.03616	0.00438	—	51.6340
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Junior College (2yr)	—	—	—	—	—	—	—	—	—	—	—	—	8.18264	8.18264	0.00599	0.00073	—	8.54859
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	—	8.18264	8.18264	0.00599	0.00073	—	8.54859

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)	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Parking Lot	0.00000	0.00000	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	0.00000	0.00000	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Junior College (2yr)	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Parking Lot	0.00000	0.00000	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	0.00000	0.00000	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Junior College (2yr)	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Parking Lot	0.00000	0.00000	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	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000

4.3. 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consum Products	0.38580	0.38580	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.02345	0.02345	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.13936	0.12862	0.00659	0.78286	0.00005	0.00139	—	0.00139	0.00105	—	0.00105	—	3.21924	3.21924	0.00014	0.00003	—	3.23085
Total	0.54861	0.53787	0.00659	0.78286	0.00005	0.00139	—	0.00139	0.00105	—	0.00105	—	3.21924	3.21924	0.00014	0.00003	—	3.23085
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.38580	0.38580	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.02345	0.02345	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.40925	0.40925	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.07041	0.07041	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00428	0.00428	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.01254	0.01158	0.00059	0.07046	< 0.000005	0.00013	—	0.00013	0.00009	—	0.00009	—	0.26284	0.26284	0.00001	< 0.000005	—	0.26379
Total	0.08723	0.08626	0.00059	0.07046	< 0.000005	0.00013	—	0.00013	0.00009	—	0.00009	—	0.26284	0.26284	0.00001	< 0.000005	—	0.26379

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)	—	—	—	—	—	—	—	—	—	—	—	0.52457	0.24599	0.77056	0.05397	0.00130	—	2.50712
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	0.52457	0.24599	0.77056	0.05397	0.00130	—	2.50712
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Junior College (2yr)	—	—	—	—	—	—	—	—	—	—	—	0.52457	0.24599	0.77056	0.05397	0.00130	—	2.50712
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	0.52457	0.24599	0.77056	0.05397	0.00130	—	2.50712
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Junior College (2yr)	—	—	—	—	—	—	—	—	—	—	—	0.08685	0.04073	0.12757	0.00894	0.00022	—	0.41508
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	0.08685	0.04073	0.12757	0.00894	0.00022	—	0.41508

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)	—	—	—	—	—	—	—	—	—	—	—	9.70090	0.00000	9.70090	0.96957	0.00000	—	33.9401
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	9.70090	0.00000	9.70090	0.96957	0.00000	—	33.9401
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Junior College (2yr)	—	—	—	—	—	—	—	—	—	—	—	9.70090	0.00000	9.70090	0.96957	0.00000	—	33.9401
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	9.70090	0.00000	9.70090	0.96957	0.00000	—	33.9401
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Junior College (2yr)	—	—	—	—	—	—	—	—	—	—	—	1.60609	0.00000	1.60609	0.16052	0.00000	—	5.61918
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	1.60609	0.00000	1.60609	0.16052	0.00000	—	5.61918

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.06953	0.06953
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.06953	0.06953
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Junior College (2yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.06953	0.06953
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.06953	0.06953
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Junior College (2yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01151	0.01151
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01151	0.01151

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Test Engine	0.15000	0.15000	0.07000	12.0200	0.01000	0.24000	—	0.24000	0.16000	—	0.16000	—	146.600	146.600	—	—	—	146.600
Total	0.15000	0.15000	0.07000	12.0200	0.01000	0.24000	—	0.24000	0.16000	—	0.16000	—	146.600	146.600	—	—	—	146.600
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Test Engine	0.15000	0.15000	0.07000	12.0200	0.01000	0.24000	—	0.24000	0.16000	—	0.16000	—	146.600	146.600	—	—	—	146.600
Total	0.15000	0.15000	0.07000	12.0200	0.01000	0.24000	—	0.24000	0.16000	—	0.16000	—	146.600	146.600	—	—	—	146.600
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Test Engine	—	—	—	—	—	—	—	—	—	—	—	—	3.46000	3.46000	—	—	—	3.46000
Total	—	—	—	—	—	—	—	—	—	—	—	—	3.46000	3.46000	—	—	—	3.46000

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
Demolition	Demolition	10/21/2027	11/24/2027	5.00000	25.0000	—
Site Preparation	Site Preparation	9/30/2027	10/20/2027	5.00000	15.0000	—
Grading	Grading	11/25/2027	12/22/2027	5.00000	20.0000	—

Building Construction	Building Construction	1/3/2028	7/14/2028	5.00000	140.000	—
Paving	Paving	7/15/2028	8/25/2028	5.00000	30.0000	—
Architectural Coating	Architectural Coating	7/15/2028	9/22/2028	5.00000	50.0000	—
Underground Infrastructure	Trenching	1/3/2028	3/24/2028	5.00000	60.0000	—

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
Demolition	Concrete/Industrial Saws	Diesel	Average	1.000000	8.00000	33.0000	0.73000
Demolition	Skid Steer Loaders	Diesel	Average	1.000000	8.00000	71.0000	0.37000
Demolition	Excavators	Diesel	Average	1.000000	8.00000	36.0000	0.38000
Demolition	Rubber Tired Loaders	Diesel	Average	1.000000	8.00000	150.000	0.36000
Demolition	Forklifts	Diesel	Average	1.000000	8.00000	82.0000	0.20000
Demolition	Aerial Lifts	Diesel	Average	1.000000	8.00000	46.0000	0.31000
Site Preparation	Skid Steer Loaders	Diesel	Average	1.000000	8.00000	71.0000	0.37000
Site Preparation	Rubber Tired Loaders	Diesel	Average	1.000000	8.00000	150.000	0.36000
Site Preparation	Forklifts	Diesel	Average	1.000000	8.00000	82.0000	0.20000
Grading	Graders	Diesel	Average	1.000000	8.00000	148.000	0.41000
Grading	Excavators	Diesel	Average	1.000000	8.00000	36.0000	0.38000
Grading	Rollers	Diesel	Average	1.000000	8.00000	36.0000	0.38000
Grading	Rubber Tired Loaders	Diesel	Average	1.000000	8.00000	150.000	0.36000
Grading	Off-Highway Trucks	Diesel	Average	1.000000	6.00000	376.000	0.38000
Building Construction	Forklifts	Diesel	Average	2.00000	6.00000	82.0000	0.20000
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	1.000000	6.00000	84.0000	0.37000
Building Construction	Skid Steer Loaders	Diesel	Average	1.000000	8.00000	71.0000	0.37000

Building Construction	Pumps	Diesel	Average	1.000000	6.00000	11.0000	0.74000
Building Construction	Cranes	Diesel	Average	1.000000	6.00000	367.000	0.29000
Building Construction	Off-Highway Trucks	Diesel	Average	1.000000	8.00000	376.000	0.38000
Paving	Pumps	Diesel	Average	1.000000	8.00000	11.0000	0.74000
Paving	Forklifts	Diesel	Average	1.000000	8.00000	82.0000	0.20000
Architectural Coating	Air Compressors	Diesel	Average	1.000000	6.00000	37.0000	0.48000
Underground Infrastructure	Excavators	Diesel	Average	1.000000	8.00000	36.0000	0.38000
Underground Infrastructure	Rubber Tired Loaders	Diesel	Average	1.000000	8.00000	150.000	0.36000
Underground Infrastructure	Off-Highway Trucks	Diesel	Average	1.000000	6.00000	376.000	0.38000

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	Worker	15.0000	11.9700	LDA,LDT1,LDT2
Demolition	Vendor	2.00000	7.63000	HHDT,MHDT
Demolition	Hauling	5.00000	20.0000	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	Worker	7.50000	11.9700	LDA,LDT1,LDT2
Site Preparation	Vendor	1.000000	7.63000	HHDT,MHDT
Site Preparation	Hauling	1.13333	20.0000	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	Worker	12.5000	11.9700	LDA,LDT1,LDT2
Grading	Vendor	3.00000	7.63000	HHDT,MHDT
Grading	Hauling	0.00000	20.0000	HHDT
Grading	Onsite truck	—	—	HHDT

Building Construction	Worker	7.56000	11.9700	LDA,LDT1,LDT2
Building Construction	Vendor	2.95020	7.63000	HHDT,MHDT
Building Construction	Hauling	0.00000	20.0000	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	Worker	5.00000	11.9700	LDA,LDT1,LDT2
Paving	Vendor	2.00000	7.63000	HHDT,MHDT
Paving	Hauling	0.00000	20.0000	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	Worker	1.51200	11.9700	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	7.63000	HHDT,MHDT
Architectural Coating	Hauling	0.00000	20.0000	HHDT
Architectural Coating	Onsite truck	—	—	HHDT
Underground Infrastructure	Worker	7.50000	11.9700	LDA,LDT1,LDT2
Underground Infrastructure	Vendor	—	7.63000	HHDT,MHDT
Underground Infrastructure	Hauling	0.00000	20.0000	HHDT
Underground Infrastructure	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%

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)
Architectural Coating	0.00000	0.00000	27,000.0	9,000.00	459.000

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (Building Square Footage)	Acres Paved (acres)
Demolition	0.00000	0.00000	0.00000	10,800.0	0.00000
Site Preparation	—	130.000	0.00000	0.00000	0.00000
Grading	—	—	10.00000	0.00000	0.00000
Paving	0.00000	0.00000	0.00000	0.00000	0.17562

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
Paving	Junior College (2yr)	0.00000	0%
Paving	Parking Lot	0.17562	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	45.0990	0.03300	0.00400
2028	0.00000	45.0990	0.03300	0.00400

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)	222.000	0.00000	0.00000	57,878.6	1,908.10	0.00000	0.00000	497,470
Parking Lot	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
Parking Lot	Wood Fireplaces	0	0
Parking Lot	Gas Fireplaces	0	0
Parking Lot	Propane Fireplaces	0	0
Parking Lot	Electric Fireplaces	0	0
Parking Lot	No Fireplaces	0	0
Parking Lot	Conventional Wood Stoves	0	0
Parking Lot	Catalytic Wood Stoves	0	0
Parking Lot	Non-Catalytic Wood Stoves	0	0
Parking Lot	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	27,000.0	9,000.00	459.000

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)	400,000	45.0990	0.0330	0.0040	0.00000
Parking Lot	0.00000	45.0990	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)	273,750	24,000.0
Parking Lot	0.00000	0.00000

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Junior College (2yr)	18.0000	0.00000
Parking Lot	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
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

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

Equipment Type	Fuel Type
Test Engine	avgas

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.

		Unit
Temperature and Extreme Heat	8.91000	annual days of extreme heat
Extreme Precipitation	2.80000	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth

Wildfire	8.11000	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	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	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	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	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 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	42.5638
AQ-PM	33.4785
AQ-DPM	89.9938
Drinking Water	28.9871
Lead Risk Housing	8.29238
Pesticides	32.4138
Toxic Releases	33.2083
Traffic	78.7000
Effect Indicators	—
CleanUp Sites	95.3527

Groundwater	90.7189
Haz Waste Facilities/Generators	98.8882
Impaired Water Bodies	0.00000
Solid Waste	99.3127
Sensitive Population	—
Asthma	48.2677
Cardio-vascular	20.6381
Low Birth Weights	61.7141
Socioeconomic Factor Indicators	—
Education	26.9425
Housing	67.7186
Linguistic	48.7211
Poverty	18.9070
Unemployment	13.1832

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	65.78981137
Employed	68.92082638
Median HI	67.35531888
Education	—
Bachelor's or higher	77.67226999
High school enrollment	19.96663673
Preschool enrollment	67.90709611
Transportation	—
Auto Access	82.44578468

Active commuting	41.78108559
Social	—
2-parent households	53.53522392
Voting	63.04375722
Neighborhood	—
Alcohol availability	73.3478763
Park access	60.25920698
Retail density	96.62517644
Supermarket access	29.34684974
Tree canopy	11.66431413
Housing	—
Homeownership	46.58026434
Housing habitability	49.36481458
Low-inc homeowner severe housing cost burden	24.90696779
Low-inc renter severe housing cost burden	76.10676248
Uncrowded housing	56.30694213
Health Outcomes	—
Insured adults	63.35172591
Arthritis	81.7
Asthma ER Admissions	51.4
High Blood Pressure	90.0
Cancer (excluding skin)	49.7
Asthma	76.7
Coronary Heart Disease	83.6
Chronic Obstructive Pulmonary Disease	76.7
Diagnosed Diabetes	87.3
Life Expectancy at Birth	18.5
Cognitively Disabled	82.5

Physically Disabled	57.4
Heart Attack ER Admissions	87.0
Mental Health Not Good	67.2
Chronic Kidney Disease	85.5
Obesity	80.7
Pedestrian Injuries	99.6
Physical Health Not Good	84.3
Stroke	84.7
Health Risk Behaviors	—
Binge Drinking	10.6
Current Smoker	62.2
No Leisure Time for Physical Activity	71.9
Climate Change Exposures	—
Wildfire Risk	1.3
SLR Inundation Area	0.0
Children	7.3
Elderly	70.8
English Speaking	36.9
Foreign-born	50.7
Outdoor Workers	88.6
Climate Change Adaptive Capacity	—
Impervious Surface Cover	13.4
Traffic Density	86.9
Traffic Access	72.8
Other Indices	—
Hardship	26.3
Other Decision Support	—
2016 Voting	65.3

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	53.0000
Healthy Places Index Score for Project Location (b)	70.0000
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
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	Based on PD.
Construction: Construction Phases	Schedule provided by applicant
Construction: Off-Road Equipment	Equipment mix provided by applicant
Operations: Vehicle Data	LLG 2026
Operations: Energy Use	Estimated energy use provided by applicant.
Operations: Water and Waste Water	Estimated water usage provided by applicant.
Operations: Solid Waste	Solid waste estimate provided by project applicant.

8.3. Land Use

Model Parameter	Units	Default Value	New Value
Lot Area	acre	0.41322	0.88440
Landscape Area	sq. ft	—	3,800.00

8.4. Construction

8.4.1. Construction Phases

Phase Type	Phase Name	Model Parameter	Default Value	New Value
Demolition	Demolition	Start Date	8/1/2027	10/21/2027
Demolition	Demolition	End Date	8/29/2027	11/24/2027
Demolition	Demolition	Work Days per Phase	20.0000	25.0000
Site Preparation	Site Preparation	Start Date	8/30/2027	9/30/2027
Site Preparation	Site Preparation	End Date	9/1/2027	10/20/2027
Site Preparation	Site Preparation	Work Days per Phase	2.00000	15.0000
Grading	Grading	Start Date	9/2/2027	11/25/2027
Grading	Grading	End Date	9/7/2027	12/22/2027
Grading	Grading	Work Days per Phase	4.00000	20.0000
Building Construction	Building Construction	Start Date	9/8/2027	1/3/2028
Building Construction	Building Construction	End Date	6/14/2028	7/14/2028
Building Construction	Building Construction	Work Days per Phase	200.000	140.000
Paving	Paving	Start Date	6/15/2028	7/15/2028
Paving	Paving	End Date	6/29/2028	8/25/2028
Paving	Paving	Work Days per Phase	10.00000	30.0000
Architectural Coating	Architectural Coating	Start Date	6/30/2028	7/15/2028
Architectural Coating	Architectural Coating	End Date	7/14/2028	9/22/2028
Architectural Coating	Architectural Coating	Work Days per Phase	10.00000	50.0000

8.4.2. Off-Road Equipment

Phase Name	Equipment Type	Model Parameter	Default Value	New Value
Building Construction	Forklifts	Number per Day	1.000000	2.00000
Underground Infrastructure	Off-Highway Trucks	Hours Per Day	4.00000	6.00000

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	12.3333
Junior College (2yr)	Saturday Trip Rate	size/day	11.2300	0.00000
Junior College (2yr)	Sunday Trip Rate	size/day	1.21000	0.00000

8.5.3. Energy Usage

Land Use	Model Parameter	Units	Default Value	New Value
Junior College (2yr)	Electricity	kWh/yr	235,483	400,000
Junior College (2yr)	Electricity (Subject to Title 24)	kWh/yr	184,549	313,482
Junior College (2yr)	Electricity (Not Subject to Title 24)	kWh/yr	50,933.8	86,517.9
Junior College (2yr)	Natural Gas	kBTU/yr	1,117,704	0.00000
Junior College (2yr)	Natural Gas (Subject to Title 24)	kBTU/yr	1,020,765	0.00000
Junior College (2yr)	Natural Gas (Not Subject to Title 24)	kBTU/yr	96,939.5	0.00000
Parking Lot	Electricity	kWh/yr	6,701.40	0.00000
Parking Lot	Electricity (Subject to Title 24)	kWh/yr	6,701.40	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	882,883	273,750
Junior College (2yr)	Outdoor Water	gal/year	126,195	24,000.0

8.5.5. Solid Waste

Land Use	Model Parameter	Units	Default Value	New Value
Junior College (2yr)	Solid Waste Generation Rate	ton/1000sqft/yr	1.30000	1.000000

Appendix C

Biological Technical Report

HELIX Environmental Planning

San Diego Miramar College Aviation Instructional Center at Montgomery-Gibbs Executive Airport

Biological Technical Report

October 2026 | 01737.00004.005

Prepared for:

San Diego Community College District
3375 Camino Del Rio South, Suite 310
San Diego, CA 92108

Prepared by:

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

This page intentionally left blank

TABLE OF CONTENTS

Section **Page**

1.0 INTRODUCTION 1

1.1 Purpose of the Report 1
1.2 Project Location 1
1.3 Project Description 1
1.4 Environmental Setting 2
1.4.1 Land Use 2
1.4.2 Topography and Soils 3

2.0 METHODS 3

2.1 Literature Review 3
2.2 General Biological Surveys 3
2.3 Survey Limitations 4
2.4 Nomenclature 4

3.0 RESULTS 4

3.1 Vegetation Communities 4
3.2 Jurisdictional Resources 5
3.3 Plant Species 5
3.4 Animal Species Observed 6
3.5 Sensitive Biological Resources 6
3.5.1 Sensitive Vegetation Communities 6
3.5.2 Sensitive Plant Species 6
3.5.3 Sensitive Animal Species 7
3.5.4 Nesting Birds 9
3.6 Wildlife Corridors and Linkages 9

4.0 REGIONAL CONTEXT AND APPLICABLE REGULATIONS 10

4.1 Federal and State Regulations 10
4.1.1 Federal Government 10
4.1.2 State of California 11
4.2 Regional Conservation Plans 11
4.2.1 Multiple Species Conservation Program Subarea Plan 12
4.2.2 MSCP Management Directives 15
4.2.3 Vernal Pool Habitat Conservation Plan 17
4.2.4 VPHCP Avoidance and Minimization Measures 18
4.2.5 Environmentally Sensitive Lands 19

5.0 THRESHOLDS OF SIGNIFICANCE 20

TABLE OF CONTENTS (cont.)

Section **Page**

6.0 IMPACTS 21

6.1 Direct Impacts 21
6.1.1 Sensitive Plant Species 21
6.1.2 Sensitive Animal Species 22
6.1.3 Nesting Birds 23
6.1.4 Vegetation Communities and Federally Protected Wetlands 23
6.1.5 Wildlife Corridors and Linkages 23
6.1.6 Local Policies and Ordinances 24
6.1.7 Regional Conservation Planning 24
6.1.8 Invasive Plant Species 24
6.2 Indirect Impacts 24
6.3 Cumulative Impacts 24

7.0 MITIGATION PROGRAM FRAMEWORK 25

7.1 Mitigation Measures for Construction Impacts 25
7.1.1 Sensitive Species Impacts 25
7.1.2 Nesting Birds 29
7.2 Level of Significance After Mitigation 29

8.0 LIST OF PREPARERS 30

9.0 REFERENCES 31

LIST OF APPENDICES

A Plant Species Observed
B Animal Species Observed or Detected
C Sensitive Plant Species with Potential to Occur
D Sensitive Animal Species with Potential to Occur

TABLE OF CONTENTS (cont.)

LIST OF FIGURES

No.	Title	Follows Page
1	Regional Location	2
2	Project Vicinity (Aerial Photograph)	2
3	Project Vicinity (USGS Topography)	2
4	MSCP Regional Context and VPHCP Data	2
5	USFWS Critical Habitat	2
6	Proposed Site Plan	2
7	Vegetation and Sensitive Biological Resources	4
8	Jurisdictional Delineation Results	6
9	Vegetation and Sensitive Biological Resources/Impacts	20

LIST OF TABLES

No.	Title	Page
1	Biological Surveys	4
2	Existing Vegetation Communities and Land Cover Types Within the Study Area	5
3	Impacts To Vegetation and Land Cover Types	23

This page intentionally left blank

ACRONYMS AND ABBREVIATIONS

AIC	Aviation Instructional Center
AMSL	Above Mean Sea Level
APN	Assessor's Parcel Number
ASMD	Area Specific Management Directives
BLA	Boundary Line Adjustment
BMP	Best Management Practices
CFG Code	California Fish and Game Code
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
City	City of San Diego
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CRPR	California Rare Plant Rank
CSVR	Consultant Site Visit Record
CUP	Central Planning Unit
CWA	Clean Water Act
District	San Diego Community Collect District
ESA	Endangered Species Act
ESL	Environmentally Sensitive Lands
FAA	Federal Aviation Administration
FC	Federal Candidate for Listing
FESA	Federal Endangered Species Act
HELIX	HELIX Environmental Planning, Inc.
ITP	Incidental Take Permit
LUAG	Land Use Adjacency Guidelines
MBTA	Migratory Bird Treaty Act
MHPA	Multi-habitat Planning Area
MSCP	Multiple Species Conservation Program
NRCS	Natural Resources Conservation Service
RWQCB	Regional Water Quality Control Board

ACRONYMS AND ABBREVIATIONS (cont.)

SAP	Subarea Plan
SF	Square Foot
SR	State Route
SSC	Species of Special Concern
U.S.	United States
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
VPHCP	Vernal Pool Habitat Conservation Plan
WL	Watch List

1.0 INTRODUCTION

1.1 PURPOSE OF THE REPORT

The purpose of this report is to provide an analysis of potential impacts from the implementation of the proposed San Diego Miramar College Aviation Instructional Center at Montgomery-Gibbs Executive Airport Project (Miramar College AIC Project or project) to sensitive biological resources with respect to local, state, and federal policy and document the existing biological conditions within the project site. This report provides the biological resources technical documentation necessary for project review under the California Environmental Quality Act (CEQA) by describing the proposed project, evaluating potential impacts, and identifying mitigation measures.

1.2 PROJECT LOCATION

The proposed project site is located at 3873 Kearny Villa Road, City of San Diego (City), California (Figure 1, *Regional Location*). The project site is generally located east of Kearny Villa Road and State Route (SR) 163 and north of Aero Drive (Figure 2, *Project Vicinity [Aerial Photograph]*). The project site is owned by the City of San Diego Airports Division and has been leased to the San Diego Community College District (District). The project is approximately 1.1 acres and is currently comprised of the 6,300-square-foot (SF) Miramar Hangar, surface parking, and gravel and paved areas used for aircraft and engine testing by the San Diego Miramar College (Miramar College) Aviation Operations Program.

The study area, which includes the project site plus a 100-foot buffer as discussed further in Section 2.2 below, is located within the unsectioned Mission San Diego Land Grant, within Township 16 South, Range 3 West on the U.S. Geological Survey (USGS) 7.5' La Jolla 7.5-minute quadrangle map (Figure 3, *Project Vicinity [USGS Topography]*). The study area is not within the Multi-Habitat Planning Area (MHPA) of the City's Multiple Species Conservation Program (MSCP) Subarea Plan (SAP) nor does it contain areas conserved under the City's 2019 Revised Final Vernal Pool Habitat Conservation Plan (VPHCP; [Figure 4, *MSCP Regional Context and VPHCP Data*]). The study area is wholly within Assessor's Parcel Number (APN) 421-290-11. The study area is not located within lands federally designated as critical habitat (Figure 5, *USFWS Critical Habitat*).

1.3 PROJECT DESCRIPTION

The project would involve the demolition of the existing 6,300 SF Miramar Hangar and construction of an expanded and modernized instructional facility, referred to as the Miramar College AIC, and supporting facilities. The upgraded instructional facility would support the programs offered within the Aviation Operations Program at Miramar College, including the specific programs of Aircraft Maintenance, Pilot Training, and Air Traffic Control. The proposed Miramar College AIC would be approximately 18,000 SF and would be located in the same general location as the existing hangar in the northwestern portion of the project site. To accommodate this upgraded instructional facility and the needs of the Aviation Operations Program, the project would additionally involve the expansion of the existing 0.4-acre lease area to approximately 1.1 acres (Figure 6, *Proposed Site Plan*).

The expanded instructional facility would allow for an additional 15 class sessions per week to occur (three class sessions per day), for a total of 28 class sessions per week. Each class session would contain an average of 23 students. The new Miramar College AIC would be two stories with a maximum height

of 32 feet. Level 1 would include a lobby, a maintenance/hangar bay, two classrooms, offices, a custodial room, restrooms, and utility and storage rooms. In addition, trash enclosures, an air compressor, and a hazardous waste collection area would be located along the northern perimeter of level 1. Level 2 would include one classroom, four pilot debrief rooms, air traffic control tower and en route training facilities, a conference room, break room, and restrooms. The project would additionally include repaving of the existing open-air storage area and engine testing pad on the eastern portion of the project site and a parking area on the southern portion of the site. Access would continue to be provided by the existing Montgomery-Gibbs Executive Airport Gate 4, east of Kearny Villa Road.

The project would include the construction of connections to existing City-owned utility lines located in Kearny Villa Road to the west of the project site, including water and fire water. The project would involve the installation of a new sewer lateral to connect to an existing on-site sewer main located west of the proposed Miramar College AIC. In addition, the project would involve coordination with San Diego Gas and Electric for new underground electric power lines that would connect to a new transformer, which would be installed on the western side of the proposed building. The project would not involve natural gas connections. The project would include the installation of a storm drain along the perimeter of the proposed building which would connect to a modular wetland system and underground vault located near the southwestern corner of the building. In addition, a storm drain would be constructed along the central portion of the parking lot which would connect to a modular wetland system and underground vault located in the western portion of the parking lot. Consistent with the District Sustainability Levels framework, the proposed project would be designed to achieve the level of Certified/ Coast Live Oak (Sustainable Performance) and would include high-efficiency low-flow plumbing fixtures and water-conserving appliances. The project does not propose the installation of any landscaping on the site.

Construction is anticipated to begin in September 2027 and be completed in September 2028, with District courses resuming in the new facility in the Fall 2028 semester. The construction staging area would be located within the southern portion of the project site. During construction of the project, the District would continue aviation instruction at a temporary location that is yet to be determined.

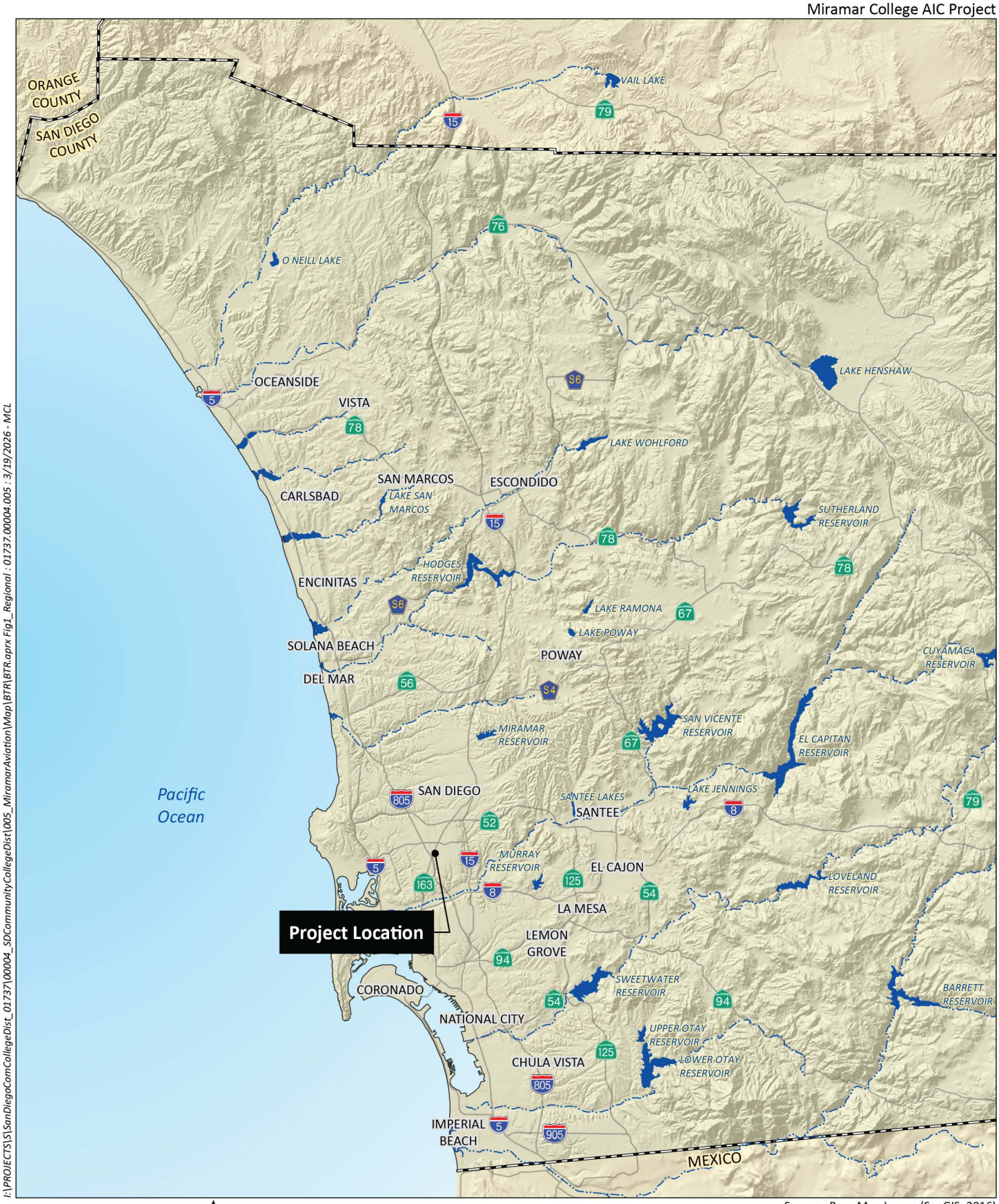
1.4 ENVIRONMENTAL SETTING

The study area is within the “Urban Area” of the City’s MSCP SAP but is outside of lands designated as MHPA. Scattered polygons of MHPA lands are located more than 500 feet north and east of the study area (Figure 4).

Vernal pools occurring on the Montgomery-Gibbs Executive Airport property are part of the VPHCP’s Central Planning Unit (CUP), which is located generally north of SR 94 and south of SR 52. In addition to the airport lands, the CUP also includes vernal pools on other smaller parcels (City 2019). The VPHCP does not show vernal pools as occurring on the project site.

1.4.1 Land Use

Land uses in the study area include the existing hangar, gravel and paved areas used for engine and aviation testing, and parking for staff and students. These facilities are adjacent to maintained grassland areas. Land uses surrounding the study area beyond the hangar and parking area include the Montgomery-Gibbs Executive Airport to the north and east, and dense urban development to the west and south, composed of roadways and commercial/residential development.



I:\PROJECTS\S\SanDiegoComCollegeDist_01737\00004_SDCommunityCollegeDist\005_MiramarAviation\Map\BTR\BTR.aprx Fig1_Regional : 01737.00004.005 : 3/19/2026 - MCL

0 8 Miles

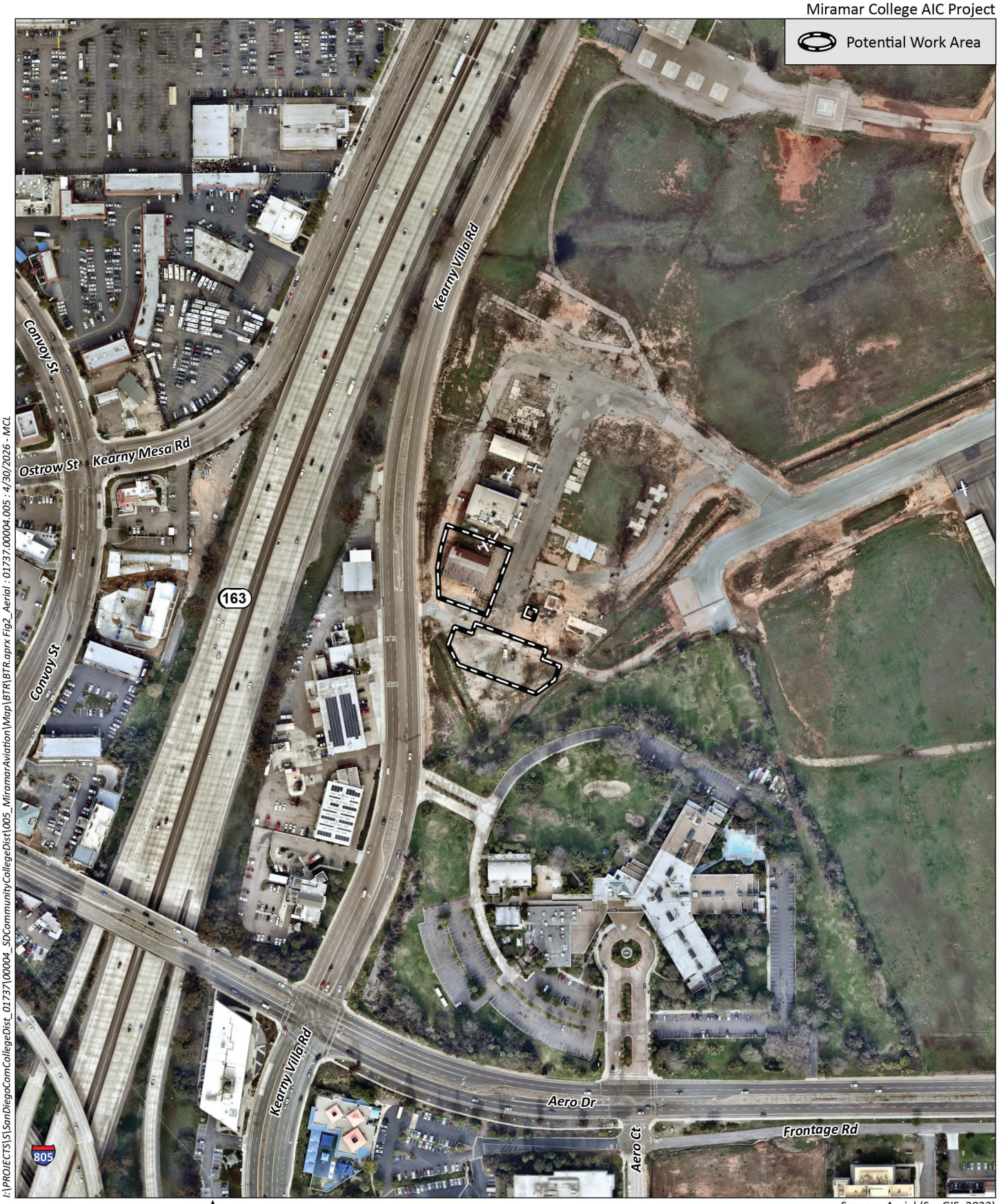
Source: Base Map Layers (SanGIS, 2016)

HELIX Environmental Planning

Regional Location

Figure 1

Miramar College AIC Project



I:\PROJECTS\S\SanDiegoComCollegeDist_01737\00004_SDCommunityCollegeDist\005_MiramarAviation\Map\BTR\BTR.aprx Fig2_Aerial : 01737.00004.005 : 4/30/2026 - MCL

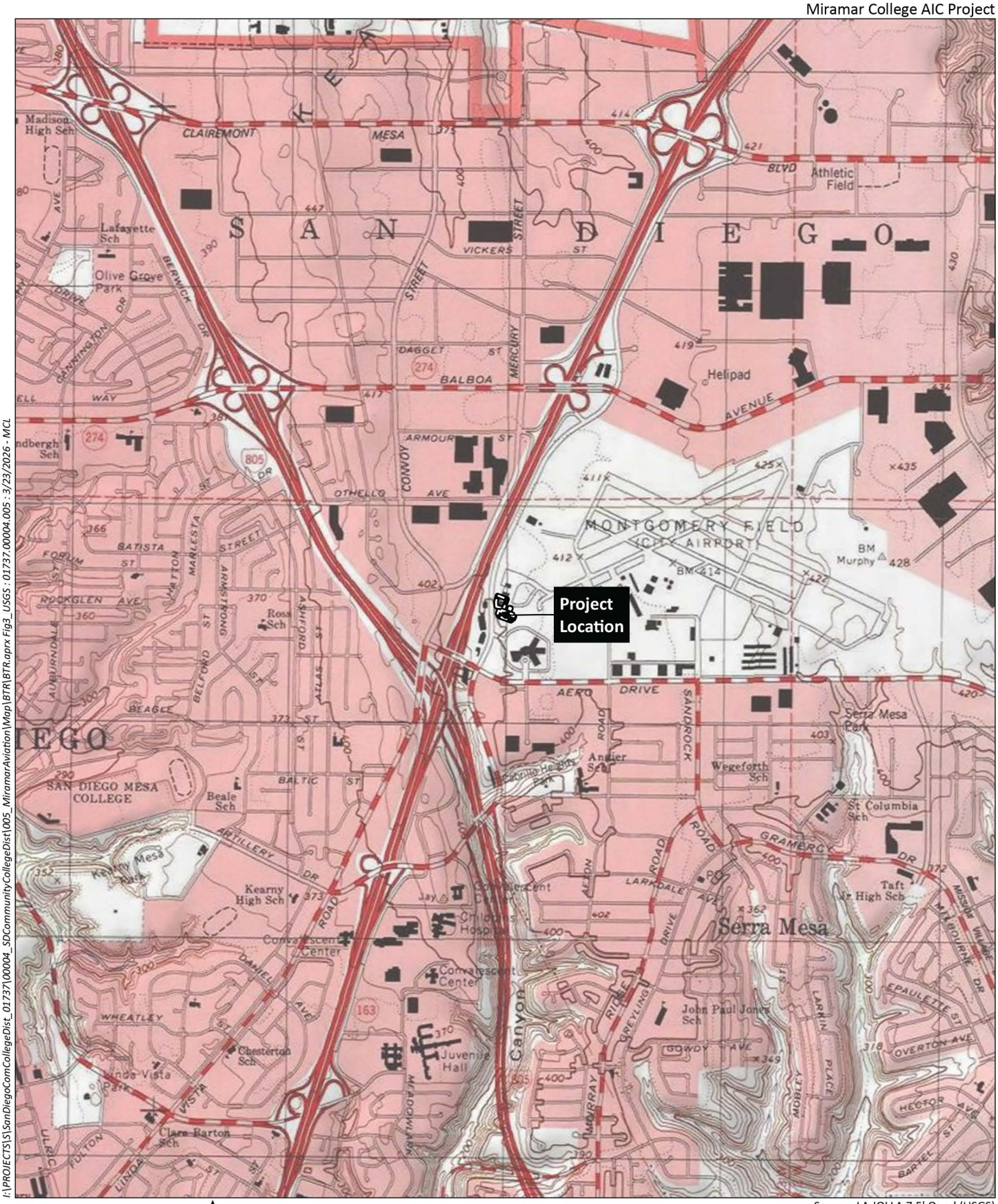
0 300 Feet

Source: Aerial (SanGIS, 2023)

HELIX Environmental Planning

Project Vicinity (Aerial Photograph)

Figure 2



HELIX Environmental Planning

Project Vicinity (USGS Topography)

Figure 3



I:\PROJECTS\S\SanDiegoComCollegeDist_01737\00004_SDCommunityCollegeDist\005_MiramarAviation\Map\BTR\BTR.aprx Fig4_RegContext : 01737.00004.005 : 4/30/2026 - MCL

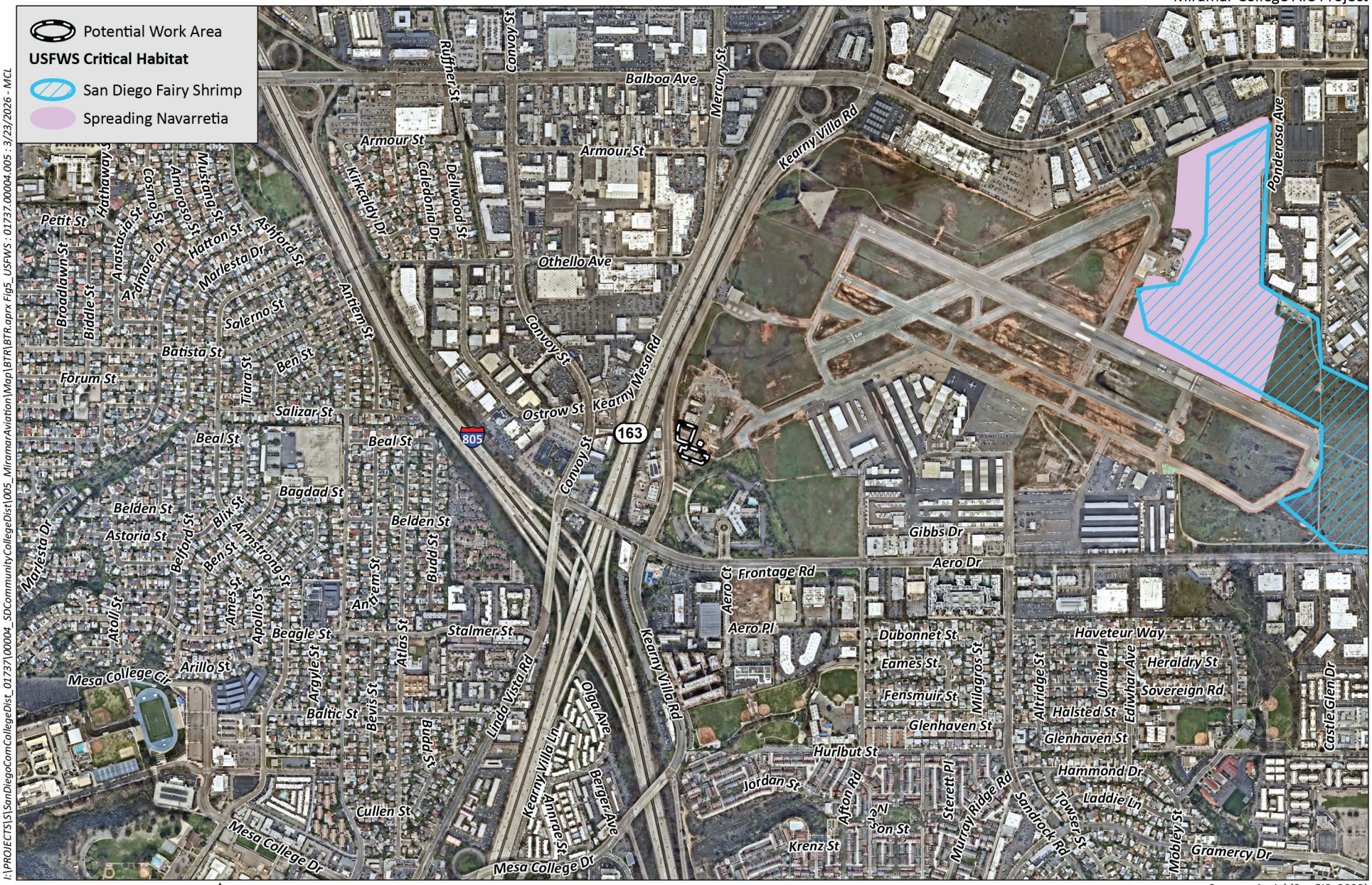
0 1,000 Feet

Source: Aerial (SanGIS, 2023)

HELIX Environmental Planning

MSCP Regional Context and VPHCP Data

Figure 4



0 1,250 Feet

Source: Aerial (SanGIS, 2023)

I:\PROJECTS\S\SanDiegoComCollegeDist_01737\00004_SDCommunityCollegeDist\005_MiramarAviation\Map\BTR\BTR.aprx Fig5_ USFWS : 01737.00004.005 : 3/23/2026 - MCL

HELIX Environmental Planning

USFWS Critical Habitat

Figure 5

Miramar College AIC Project



I:\PROJECTS\S\SanDiegoComCollegeDist_01737\00004_SDCommunityCollegeDist\005_MiramarAviation\Map\BTR\BTR.aprx Fig6_SitePlan : 01737.00004.005 : 5/6/2026 - MCL

0 100 Feet

Source: Aerial (SanGIS, 2023)

HELIX Environmental Planning

Proposed Site Plan

Figure 6

1.4.2 Topography and Soils

Topographically, the study area is generally flat, ranging from 400 feet above mean sea level (AMSL) at the north end to 405 feet AMSL at the southern end. The study area is mapped as supporting two soil types (USDA 2026): Chesterton-Urban land complex, two to nine percent slopes, and Redding gravelly loam, two to nine percent slopes. Per the official soils description (USDA 2026), soils in the Chesterton series consist of moderately well-drained, very slowly permeable soils on uplifted marine sediments and old terraces. Redding soils consist of moderately deep to duripan, well or moderately well-drained soils that formed in alluvium derived from mixed sources. Neither Chesterton nor Redding soils are classified as hydric by the NRCS, but the Redding series has the potential to contain unnamed ponded hydric soil inclusions in depressional landforms.

2.0 METHODS

2.1 LITERATURE REVIEW

Before conducting biological field surveys, HELIX conducted a search of sensitive species and habitats databases for information regarding sensitive species occurrences within two miles of the study area, including the California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDB; [CDFW] 2026a), U.S. Fish and Wildlife Service (USFWS) sensitive species database (USFWS 2026), and the California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants (CNPS 2026). Additional baseline biological resources information for the study area was reviewed and compiled from the City's VPHCP (City 2019). Soils information was obtained from the U.S. Department of Agriculture Web Soil Service (U.S. Department of Agriculture [USDA] Natural Resources Conservation Service [NRCS] 2026).

2.2 GENERAL BIOLOGICAL SURVEYS

HELIX conducted the general biological survey on February 27, 2026, to map vegetation communities, jurisdictional resources, including potential vernal pools; note the presence of sensitive species observed; and conduct habitat assessments for sensitive species (Table 1, *Biological Surveys*). A 4.6-acre study area was established for the biological surveys, which incorporates the 1.1-acre project impact footprint plus a 100-foot buffer.

Vegetation communities were mapped on an aerial photograph (1"=100' scale) with overlaid topography. A list of plant and animal species observed or detected within the project area was prepared. Plant species were identified in the field or later in the laboratory with the aid of botanical keys. Animals were identified in the field by direct visual observation with the aid of binoculars or indirectly by detection of calls, tracks, burrows, or scat.

Table 1
BIOLOGICAL SURVEYS

Survey Type	Date	Weather Conditions	Personnel[1]
General biological survey, vegetation mapping, jurisdictional resource mapping, vernal pool mapping	2/27/2026	0900, 75°F, wind 0-2 mph; 0% clouds 1130, 82°F, wind 0-2 mph, 0% clouds	Stacy Nigro Mandy Mathews

[1] All HELIX biologists unless otherwise noted.

2.3 SURVEY LIMITATIONS

The lists of species identified in this document are not necessarily comprehensive accounts of all species that utilize the study area, as species that are nocturnal, secretive, or seasonally restricted may not have been observed. Those species that are of special status and have the potential to occur in the study area, however, are still addressed in this report.

2.4 NOMENCLATURE

Nomenclature used in this report follows the conventions used in the City's Biology Guidelines (City 2018) and the MSCP (City 1997a). Nomenclature generally comes from Holland (1986) and Oberbauer (2008) for vegetation; Jepson eFlora (2026) or Rebman and Simpson (2014) for plants; the American Ornithological Society (AOS 2026) for birds; Bradley et al. (2014) for mammals; and the Society for the Study of Amphibians and Reptiles (Nicholson 2025) for reptiles and amphibians. Sensitive plant species status follows the CNPS (2026), and sensitive animal species status follows the CDFW (2026b-c).

3.0 RESULTS

This section describes the existing biological resources within the study area, including vegetation communities; general flora and fauna; and rare, threatened, endangered, endemic, sensitive, MSCP-covered species, VPHCP-covered species, as well as potentially jurisdictional resources. Lists of plant and animal species observed or detected during biological surveys conducted by HELIX Environmental Planning, Inc. (HELIX) are provided in Appendix A, *Plant Species Observed,* and Appendix B, *Animal Species Observed*. The potential for MSCP Narrow Endemic and sensitive plant and animal species to occur in the study area is analyzed in Appendix C, *Sensitive Plant Species with Potential to Occur*, and Appendix D, *Sensitive Animal Species with Potential to Occur*, respectively. Sensitive species occurring or with high or moderate potential to occur in the study area are discussed in detail in Section 3.5 of this report.

3.1 VEGETATION COMMUNITIES

A total of two vegetation communities (including land cover types) were recorded within the study area, incorporating approximately 4.6 acres (Table 2, *Existing Vegetation Communities and Land Cover Types Within the Study Area*; Figure 7, *Vegetation and Sensitive Biological Resources*). They consist of two upland habitat/land cover types (disturbed habitat and developed), which are discussed in detail below.



I:\PROJECTS\S\SanDiegoComCollegeDist_01737\00004_SDCommunityCollegeDist\005_MiramarAviation\Map\BTR\BTR.aprx Fig7_Veg : 01737.00004.005 : 3/23/2026 - MCL

Source: Aerial (SanGIS, 2023)

HELIX Environmental Planning

Vegetation and Sensitive Biological Resources

Figure 7

Table 2
EXISTING VEGETATION COMMUNITIES AND LAND COVER TYPES WITHIN THE STUDY AREA

Vegetation Community or Land Cover Type[1]	MSCP Tier	Acreage[2, 3]
Disturbed Habitat (11000)	--	1.1
Developed (12000)	--	3.5
	TOTAL	**4.6**

[1] Vegetation community codes are from Oberbauer (2008).
[2] Totals reflect rounding (0.1 for non-sensitive uplands).
[3] All portions of the study area are located outside of the MHPA.

Disturbed Habitat

Disturbed habitat 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. This habitat, totaling 1.1 acres, covers most of the study area. Characteristic species present include big heron's bill (*Erodium botrys*), coastal heron's bill (*Erodium cicutarium*), crete weed (*Hedypnois cretica*), and tocalote (*Centaurea melitensis*).

Developed

Developed land is where permanent structures, pavement, and/or gravel are present, which prevents the growth of vegetation, or where landscaping is clearly tended and maintained. Developed portions of the study area consist of the existing hangar, access road, engine and aviation testing area, and parking area, together occupying a total of 3.5 acres of the study area.

3.2 JURISDICTIONAL RESOURCES

The project site does not contain any potentially jurisdictional resources. Two upland-cut, stormwater swales occur in the southern portion of the study area, outside of the work area (Figure 8, *Jurisdictional Delineation Results*). These maintained features were created to collect stormwater runoff from developed portions of the airport and are fully contained within the airport lands, with no off-site outfall, and were considered non-jurisdictional features. Two road ruts that have the potential to inundate for a period long enough to support fairy shrimp species occur in the southeastern portion of the study area; however, these road ruts lack any vegetation and would not be considered vernal pools. A formal jurisdictional delineation was not conducted for the project, as all potentially jurisdictional resources are outside of the impact footprint. Only the USACE, RWQCB, and CDFW can make a final determination of jurisdictional boundaries.

3.3 PLANT SPECIES

A total of 23 plant species were observed during the 2026 biological survey of the project area. Of these, three are native species, and 20 species are non-native species (Appendix A).

3.4 ANIMAL SPECIES OBSERVED

Animal species within the study area were detected by direct observation, calls, scat, tracks, and sign. A total of 20 animal species were detected during the 2026 surveys conducted for the project (Appendix B).

3.5 SENSITIVE BIOLOGICAL RESOURCES

According to the City Municipal Code (Chapter 11, Article 3, Division 1) and Appendix I of the City's Biology Guidelines (City 2018), sensitive biological resources refer to upland and/or wetland areas that meet any one of the following criteria:

(a) Lands that have been included in the MHPA as identified in the City's MSCP SAP and VPHCP;

(b) Wetlands (as defined by Municipal Code Section 113.0103);

(c) Lands outside of the MHPA that contain Tier I, Tier II, Tier IIIA, or Tier IIIB habitats;

(d) Lands supporting species or subspecies listed as rare, endangered, or threatened;

(e) Lands containing habitats with narrow endemic or vernal pool species as listed in the City's Biology Guidelines (City 2018); and

(f) Lands containing habitats of Covered Species as listed in the City's Biology Guidelines (City 2018).

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. No sensitive vegetation communities were identified in the study area.

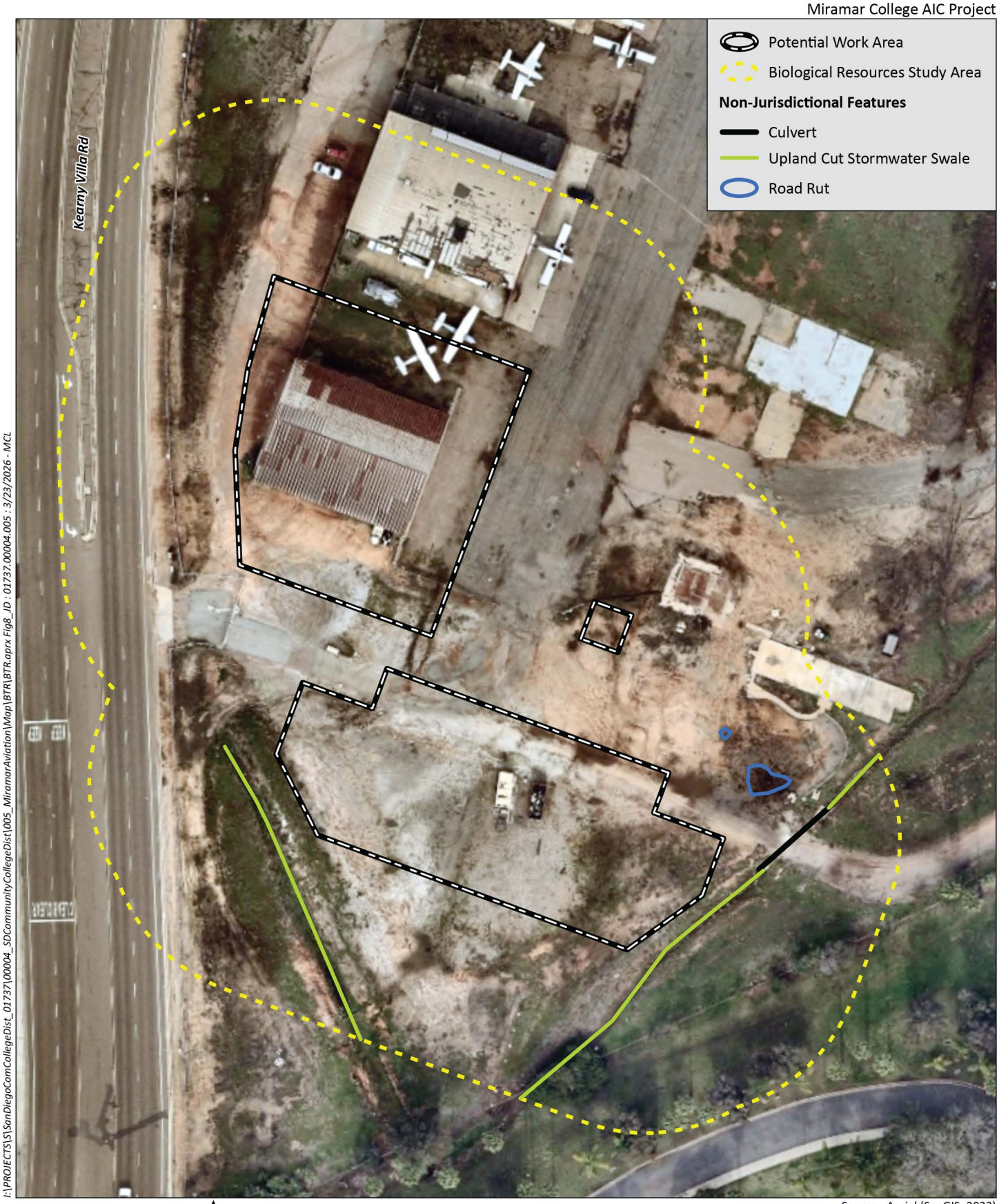
3.5.2 Sensitive Plant Species

Sensitive plant species are those that are considered federal, state, or CNPS rare, threatened, or endangered; MSCP or VPHCP Covered Species; or MSCP Narrow Endemic species (Appendix C). More specifically, if a species is designated with any of the following statuses (a-c below), it is considered sensitive per the City Municipal Code (Chapter 11, Article 3, Division 1):

(a) A species or subspecies is listed as rare, endangered, or threatened under Section 670.2 or 670.5, Title 14, California Code of Regulations, or the federal Endangered Species Act, Title 50, Code of Federal Regulations, Section 17.11 or 17.12, or candidate species under the California Code of Regulations;

(b) A species is a Narrow Endemic as listed in the Biology Guidelines in the Land Development Manual (City 2018); and/or

(c) A species is an MSCP Covered Species or VPHCP Covered Species as listed in the Biology Guidelines in the Land Development Manual (City 2018).



HELIX Environmental Planning

Jurisdictional Delineation Results

Figure 8

A plant species is also considered sensitive if it is included in the CNPS Inventory of Rare and Endangered Plants with an assigned California Rare Plant Rank (CRPR) of 2 or lower (CNPS 2018), although species with lower CRPR ranks (i.e., CRPR 3 and 4 species) also may be considered sensitive species by local jurisdictions; however, no CRPR 3 or 4 species are specifically identified as sensitive species in the City's Biology Guidelines, MSCP SAP, or VPHCP. According to the CNPS, CRPR 1 and 2 species meet the state CEQA Guidelines definition for Rare or Endangered and, therefore, must be considered in project CEQA analysis. While CRPR 3 and 4 species do not have this requirement, CNPS recommends that they be disclosed.

Sensitive plant status is often based on one or more of three distributional attributes: geographic range, habitat specificity, and/or population size. A species that exhibits a small or restricted geographic range (such as those endemic to the region) is geographically rare. A species may be abundant but occur only in very specific habitats. Lastly, a species may be widespread but exists naturally in small populations.

Federally or State-Listed Plant Species

No federally and state-listed plant species have been recorded within the study area, and none have a high or moderate potential to occur within the study area (Appendix C).

Other Sensitive Plant Species

No other sensitive plant species were determined to have high or moderate potential to occur in the study area (Appendix C).

3.5.3 Sensitive Animal Species

Sensitive wildlife species are those that are considered federal or state threatened or endangered; MSCP Covered Species; or MSCP Narrow Endemic species (Appendix D). More specifically, if a species is designated with any of the following statuses (a-c below), it is considered sensitive per the City Municipal Code (Chapter 11, Article 3, Division 1):

(a) A species or subspecies is listed as endangered or threatened under Section 670.2 or 670.5, Title 14, California Code of Regulations, or the federal Endangered Species Act, Title 50, Code of Federal Regulations, Section 17.11 or 17.12, or candidate species under the California Code of Regulations;

(b) A species is a Narrow Endemic as listed in the Biology Guidelines in the Land Development Manual (City 2018); and/or

(c) A species is an MSCP Covered Species or VPHCP Covered Species as listed in the Biology Guidelines in the Land Development Manual (City 2018).

A species is also considered sensitive if it is included on the CDFW's Special Animals List (CDFW 2024b) as a candidate for federal or state listing, state Species of Special Concern (SSC), state Watch List (WL) species, state Fully Protected species, or federal Bird of Conservation Concern (Appendix D). Generally, the principal reason an individual taxon (species or subspecies) is considered sensitive is the documented or perceived decline or limitations of its population size or geographical extent and/or distribution, resulting in most cases from habitat loss.

In addition, active nests of most bird species, regardless of sensitivity status, are protected by the federal MBTA and CFG Code. The project is required to adhere to the MBTA and CFG Code statutes regarding the protection of avian nesting.

A total of one sensitive animal species was documented in the study area during 2026 biological surveys, and an additional two have high or moderate potential to occur in the study area based on a compilation of the results of HELIX's project surveys, and searches of the USFWS listed species database and CNDDB (Appendix D).

Federally or State-Listed Animal Species

No federally or state-listed or federal or state candidate animal species were detected on-site during project surveys. One federally listed endangered species, San Diego fairy shrimp, and one species proposed for federal listing as threatened, western spadefoot (*Spea hammondii*), have moderate potential to occur within the study area. One state candidate animal species, burrowing owl (*Athene cunicularia*), has moderate potential to occur within the study area during winter. Additional information is provided below.

San Diego Fairy Shrimp (*Branchinecta sandiegonensis*)
Status: FE/--; VPHCP Covered
Distribution: San Diego County and extreme northern Baja California, Mexico.
Habitat: Seasonally astatic pools that 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.
Presence: This species is known from surveys conducted on Montgomery-Gibbs Executive Airport lands to the north and east of the study area. Although dry at the time of the general biological survey conducted in February 2026, depressional road rut features were observed within the eastern part of the study area that could support prolonged inundation and therefore support this species. However, these depressional road rut features are outside of the proposed impact boundary.

Western Spadefoot (*Spea hammondii*)
Status: FC/--; CDFW Species of Special Concern (SSC)
Distribution: West of the Sierra Nevada at elevations below 4,500 feet from Shasta County south to San Diego County.
Habitat: Terrestrial species that inhabits 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.
Presence: This species has been reported within one mile of the study area as recently as 2025 and is capable of moving into the study area while searching for mates or dispersing as juveniles. Swales in the study area could also potentially support breeding habitat for this species. Lands within the proposed impact boundary have been subject to repeated compaction and are generally not suitable for aestivation, nor do these lands support potential breeding habitat for the species.

Burrowing Owl (*Athene cunicularia*)
Status: --/Candidate for Listing, Bird of Conservation Concern (BCC); SC (nesting sites and some wintering sites); SSC; City MSCP Covered
Distribution: In San Diego County, occurs in a few scattered sites
Habitat: Grassland or open scrub habitats.

Presence: This species has been reported within one mile of the study area as recently as winter of 2022, but has a low potential to occur within the study area. Although the study area does not comprise suitable habitat for this species and they are not expected to breed within the study area, there is a moderate potential for wintering individuals to periodically use the site while foraging.

Other Sensitive Animal Species

One other sensitive animal species was documented in the study area during the general biological survey conducted in February 2026: Belding's orange-throated whiptail (*Aspidoscelis hyperythrus beldingi*). Additional information on this species is provided below.

Belding's Orange-throated Whiptail (*Aspidoscelis hyperythrus beldingi*)
Status: --/WL
Distribution: Observed year-round, scattered throughout San Diego County
Habitat: Coastal strands, arid grasslands, and sandy desert floors
Presence: Two individuals were observed within a swale in the southwest part of the study area during the general biological survey conducted in February 2026.

Apart from the species listed above, no other species were determined to have moderate or high potential to occur in the study area (Appendix D).

3.5.4 Nesting Birds

The project site contains suitable nesting habitat for several bird species, including raptors, protected under the Migratory Bird Treaty Act (MBTA) and CFG Code.

3.6 WILDLIFE CORRIDORS AND LINKAGES

Wildlife corridors and linkages are linear spaces of undeveloped native habitats that connect both large and small natural open spaces and provide opportunities for wildlife movement on a local and regional scale. Wildlife corridors contribute to the sustainability of populations by providing access to larger areas of suitable habitat for dispersal, foraging, and mating. Linkages between wildlife corridors connect isolated blocks of habitat and allow movement or dispersal over a large scale and the mixing of genes between populations (i.e., gene pool diversity).

The study area is located outside of areas mapped as MHPA under the City's SAP and VPHCP. The nearest MHPA is located approximately 525 feet northeast of the study area on the airport property. The study area contains a combination of disturbed habitat and developed land that is surrounded by adjacent development and does not provide adequate cover to function as a wildlife corridor or linkage.

The study area has been subject to continual disturbance since the airport was established, and as a result, supports a predominance of non-native plant species. No specific regional movement corridors have been identified within the study area or the larger airport property, although the undeveloped airport lands are used by a variety of native wildlife, including small to medium-sized mammals (e.g., coyotes), birds, and other wildlife. Lands surrounding the project site have been mostly developed for commercial uses or roads.

4.0 REGIONAL CONTEXT AND APPLICABLE REGULATIONS

The project is governed by several federal, state, and local policies and regulations, and such regulatory acts and plans that apply to the project are further discussed below.

4.1 FEDERAL AND STATE REGULATIONS

4.1.1 Federal Government

Federal Endangered Species Act

Administered by the USFWS, the Federal Endangered Species Act (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 impact 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, federal agencies must consult with the USFWS to ensure that any action they authorize, fund, or carry out is not likely to result in the destruction or adverse modification of the critical habitat.

Sections 7 and 10(a) of the FESA regulate actions that could impact endangered or threatened species. Section 7 generally describes a process of federal interagency consultation and issuance of a biological opinion and incidental take statement when federal actions may adversely affect listed species. Section 10(a) generally describes a process for the preparation of a Habitat Conservation Plan and issuance of an Incidental Take Permit (ITP). Pursuant to Section 10(a), the City was issued a take permit for its adopted MSCP SAP and VPHCP. Actions consistent with the adopted SAP and VPHCP have authorized take authority for covered species.

Migratory Bird Treaty Act

All migratory bird species that are native to the United States or its territories are protected under the federal Migratory Bird Treaty Act (MBTA), as amended under the Migratory Bird Treaty Reform Act of 2004 (H.R. 4114). The MBTA is generally protective of migratory birds but does not actually stipulate the type of protection required. In common practice, the MBTA is used to place restrictions on the disturbance of active bird nests during the nesting season.

Clean Water Act

The Federal Clean Water Act (CWA) is legislation (33 U.S. Code §1251 et seq.) that regulates water quality standards and impacts (fills and discharges) to surface waters, including wetlands. The CWA is administered by the U.S. Army Corps of Engineers (USACE) and the Regional Water Quality Control Board (RWQCB) under the 404 and 401 programs, respectively. Impacts to areas regulated by the CWA require a USACE 404 permit and a 401 Certification from the RWQCB.

4.1.2 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. Adverse environmental impacts are typically mitigated because of the environmental review process in accordance with existing laws and regulations.

California Endangered Species Act

The California Endangered Species Act (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 official listing 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 CESA (CFG Code Section 2080.1[a]). For state-only listed species, Section 2081 of the CFG Code authorizes the CDFW to issue an Incidental Take Permit for state-listed threatened and endangered species if specific criteria are met. The City was issued a take permit for their adopted MSCP SAP pursuant to Section 2081. Actions consistent with the adopted SAP and VPHCP have authorized take authority for covered species.

California Fish and Game Code

The California Fish and Game Code (CFG Code) provides specific protection and listing for several types of biological resources. 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 would not be disturbed, subject to approval by CDFW and/or USFWS.

4.2 REGIONAL CONSERVATION PLANS

The City reviews projects within its jurisdiction for conformance with the MSCP SAP and VPHCP guidelines and policies. Guidelines and policies applicable to the proposed project are described below

(Section 4.2.1 addresses MSCP SAP, and Section 4.2.2 addresses VPHCP). Environmentally sensitive lands are discussed in Section 4.2.3.

4.2.1 Multiple Species Conservation Program Subarea Plan

The MSCP is a long-term regional conservation plan established to protect sensitive species and habitats within San Diego County. The MSCP is separated into local SAPs that are implemented independently of each other. The entire study area is within the City of San Diego SAP. The City's MSCP SAP (1997a) was prepared pursuant to the outline developed by USFWS and CDFW to meet the requirements of the State Natural Communities Conservation Planning Act of 1992. Adopted by the City in March 1997, the SAP forms the basis for the MSCP Implementing Agreement, which is the contract between the City, USFWS, and CDFW (City 1997b). The Implementing Agreement ensures implementation of the SAP and thereby allows the City to issue "take" permits under the federal and state ESAs to address impacts at the local level. Under the FESA, an ITP is required when non-federal activities would result in "take" of a threatened or endangered species. A habitat conservation plan, such as the City's MSCP SAP, must accompany an application for a federal ITP. In July 1997, the USFWS, CDFW, and City entered into the 50-year MSCP Implementing Agreement, wherein the City received its FESA Section 10(a) ITP (City 1997b).

The City's MSCP SAP covers the entire 206,124 acres in the City. The SAP identifies lands designated as MHPA, which is a "hard-line" preserve developed by the City in cooperation with the wildlife agencies, developers, property owners, and various environmental groups. Within the MHPA, biological core resource areas and corridors targeted for conservation are identified and discussed, in which development restrictions may occur (City 1997a).

Pursuant to the MSCP permit issued pursuant to Section 10(a), the City has incidental "take" authority over 85 rare, threatened, and endangered species, including regionally sensitive species that it aims to conserve (i.e., "MSCP Covered Species). "MSCP Covered" refers to species that are covered by the City's federal and state ITPs and considered to be adequately protected within the City's Preserve, the MHPA. Special "Conditions of Coverage" apply to MSCP Covered Species that would be potentially impacted by projects, including modifying project design to avoid impacts to Covered Species in the MHPA where feasible. Additionally, projects must adhere to MSCP SAP requirements, including those for Boundary Line Adjustments (BLAs; MSCP Section 1.1.1); Compatible Land Uses, General Planning Policies/Design Guidelines, and MHPA Land Use Adjacency Guidelines (LUAGs; MSCP Sections 1.4.1-1.4.3), as well as general and specific management policies where applicable. Additional state and federal policies, regulations, and permits may also be required for wetlands and species not covered or fully covered under the MSCP.

4.2.1.1 Multi-Habitat Planning Area

The MHPA is the area within which the permanent MSCP preserve is to be assembled and managed for its biological resources. Input from responsible agencies and other interested participants resulted in the adoption of the City's MHPA in 1997. The City's MHPA areas are defined by "hard-line" limits, "with limited development permitted based on the development area allowance of the OR-1-2 zone [open space residential zone]" (City 1997a) and MSCP SAP requirements.

The MHPA consists of public and private lands, much of which has been conserved. Conserved lands include lands that have been set aside for mitigation or purchased for conservation. These lands may be owned by the City (i.e., dedicated lands) or other agencies, may have conservation easements, or may

have other restrictions (per the City's ESL regulations) that protect the overall quality of the resources and prohibit development.

In general, a maximum of 25 percent encroachment into the MHPA is allowed for development. If 25 percent of a site is outside the MHPA, development could be restricted to this area. In addition, development is required to be in the least sensitive area feasible. Should more than 25 percent encroachment be desired, an MHPA BLA may be proposed. The City's MSCP SAP states that adjustments to the MHPA boundary line are permitted without the need to amend the City's SAP, provided the boundary adjustment results in an area of equivalent or higher biological value. To meet this standard, the area(s) proposed for addition to the MHPA must meet the six functional equivalency criteria set forth in Section 5.4.2 of the Final MSCP Plan (County of San Diego [County] 1998). All MHPA BLAs require approval by the Wildlife Agencies and approval from a City discretionary hearing body.

For parcels located outside the MHPA, "there is no limit on the encroachment into sensitive biological resources, with the exception of wetlands, and listed non-covered species' habitat (which are regulated by state and federal agencies) and narrow endemic species." However, "impacts to sensitive biological resources must be assessed and mitigation, where necessary, must be provided in conformance" with the City's ESL Ordinance as implemented through compliance with the City's Biology Guidelines (City 2018).

The MSCP includes management priorities to be undertaken by the City as part of its MSCP implementation requirements. Those actions, identified as Priority 1, are required to be implemented by the City as a condition of the MSCP ITP to ensure that MSCP Covered Species are adequately protected. The actions identified as Priority 2 may be undertaken by the City as a resources permit.

4.2.1.2 MHPA Adjacency Guidelines

The City's MSCP SAP addresses indirect impacts to preserve areas from adjacent development in Section 1.4.3, LUAGs (City 1997). The LUAGs provide requirements for land uses adjacent to the habitat preserve to minimize indirect impacts from drainage, toxins, lighting, noise, barriers, invasive species, brush management, and grading to the sensitive resources contained therein. Projects that are within or adjacent to the MHPA must demonstrate compliance with the LUAGs.

While the project site is located more than 500 feet from the MHPA, the project's compliance with the City's LUAGs is summarized below for informational purposes:

Drainage

- *All new and proposed parking lots and developed areas in and adjacent to the preserve must not drain directly into the MHPA.*

  The proposed project would occur within the existing development and disturbed areas. Runoff from developed areas would be directed away from the MHPA.

- *All developed and paved areas must prevent the release of toxins, chemicals, petroleum products, exotic plant materials, and other elements that might degrade or harm the natural environment or ecosystem processes within the MHPA.*

Best Management Practices (BMPs) would be implemented during project construction to control runoff, erosion, and contaminants, as necessary, to prevent the release of toxins, chemicals, petroleum products, exotic plant materials, and other elements that might be contained within stormwater. The BMP program would meet applicable requirements of the State Water Resources Control Board and the City's Municipal Code and Storm Water Standards Manual (City 2018b). The project proposes no landscaping, thereby preventing the introduction of new sources of exotics at the project site.

Toxins

- *Land uses, such as recreation and agriculture, that use chemicals or generate by-products such as manure, that are potentially toxic or impactive to wildlife, sensitive species, habitat, or water quality need to incorporate measures to reduce impacts caused by the application and/or drainage of such materials into the MHPA.*

  The proposed project does not involve agriculture or creation of recreational areas, such as playing fields or any other uses, that would introduce toxins, chemicals, or by-products into the MHPA.

Lighting

- *Lighting of all developed adjacent areas should be directed away from the MHPA. Where necessary, development should provide adequate shielding with non-invasive plant materials (preferably native), berming, and/or other methods to protect the MHPA and sensitive species from night lighting.*

  Project lighting would be shielded and directed away from the MHPA/VPHCP Hardline area to protect resources in the MHPA from artificial night lighting. Additionally, hardscaping and native vegetation comprised of lemonade berry (*Rhus integrifolia*), or similar taller native shrub species, would be installed at the edge of the parking lot to prevent car headlights from shining toward the MHPA/VPHCP Hardline area.

Noise

- *Uses in or adjacent to the MHPA should be designed to minimize noise impacts. Berms or walls should be constructed adjacent to commercial areas, recreational areas, and any other use that may introduce noises that could impact or interfere with wildlife use of the MHPA.*

  The project site is characterized by existing development that is bordered by a heavily trafficked highway (SR-163). The existing ambient noise from regular vehicle traffic is constant and relatively high from these uses. The proposed project would retain similar vehicular use as compared to the existing use.

- *Excessively noisy uses or activities adjacent to breeding areas must incorporate noise reduction measures and be curtailed during the breeding season of sensitive species.*

  No sensitive species have a moderate or high potential to occur within the study area; therefore, no noise attenuation measures are required. Further, the proposed project does not propose a change in the existing institutional land uses currently ongoing at the site.

Barriers

- *New development adjacent to the MHPA may be required to provide barriers (e.g., non-invasive vegetation, rocks/boulders, fences, walls, and/or signage) along the MHPA boundaries to direct public access to appropriate locations and reduce domestic animal predation.*

  The project does not propose new development within or immediately adjacent to the MHPA/VPHCP Hardline area; therefore, no barriers would be required.

Invasive Plant Species

- *No invasive non-native plant species shall be introduced into areas adjacent to the MHPA.*

  BMPs during construction would include measures to avoid the introduction of invasive plants into construction areas by equipment. As described in Section 1.3, *Project Description*, no landscaping is proposed as part of the project, due to the airport environment.

Brush Management

- *New residential development located adjacent to and topographically above the MHPA (e.g., along canyon edges) must be set back from slope edges to incorporate Zone 1 brush management areas on the development pad and outside of the MHPA. Zones 2 and 3 will be combined into one zone (Zone 2) and may be located in the MHPA upon granting of an easement to the City (or other acceptable agency) except where narrow wildlife corridors require it to be located outside of the MHPA.*

  As the project and immediate surrounding area are situated entirely within developed land and disturbed habitat, the project does not propose brush management zones.

Grading/Land Development

- *Manufactured slopes associated with site development shall be included within the development footprint for projects within or adjacent to the MHPA.*

  The project does not propose the construction of manufactured slopes.

4.2.2 MSCP Management Directives

4.2.2.1 General Management Directives

The proposed project has considered the general MSCP management directives (MSCP SAP Section 1.5.2) in the overall design and has incorporated components as applicable. The only potentially applicable directive is mitigation, as summarized below.

- *Mitigation – Consistent with general management directives, biological mitigation required for the project will be performed in accordance with the City's ESL Ordinance and Biology Guidelines.*

The proposed project would conform to the above directive by ensuring that any biological mitigation is conducted in accordance with the City's Biology Guidelines.

4.2.2.2 Area Specific Management Directives

The study area occurs within Urban Habitat Lands, from the MSCP SAP (Section 1.5.7), which does not contain Area Specific Management Directives (ASMDs).

4.2.2.3 Area Specific Management Directives for MSCP Covered Species

This section presents the MSCP ASMDs for the two MSCP Covered Species detected or with high to moderate potential to occur in the study area (San Diego fairy shrimp and Belding's orange-throated whiptail). Each of these species is listed below, along with the ASMDs and the project's consistency for each species. The ASMDs are presented in italics, which would be made conditions of the Site Development Permit, if required, and must be placed on construction plans as part of the Environmental Requirements along with CEQA Mitigation Monitoring and Reporting Programs, as applicable.

San Diego Fairy Shrimp: *Area specific management directives must include specific measures to protect against detrimental edge effects to this species.*

No direct impacts are expected to occur to San Diego fairy shrimp, as the project would not impact the shallow depressional features mapped within the study area; however, the study area has the potential to support additional areas that may pond sufficiently to support San Diego fairy shrimp that were not apparent during the February 2026 biological survey. Implementation of Mitigation Measure BIO-1 would complete fairy shrimp surveys to determine the presence or absence of San Diego fairy shrimp. Additionally, dust control and implementation of standard construction BMPs, including temporary fencing with silt barriers, as outlined in Mitigation Measure BIO-2, would further prevent potential indirect impacts to this species, and biological monitoring during construction would help ensure the avoidance of edge effects.

Burrowing Owl: *During the environmental analysis of proposed projects, burrowing owl surveys (using appropriate protocols) must be conducted in suitable habitat to determine if this species is present and the location of active burrows. If burrowing owls are detected, the following mitigation measures must be implemented: within the MHPA, impacts must be avoided; outside of the MHPA, impacts to the species must be avoided to the maximum extent practicable; any impacted individuals must be relocated out of the impact area using passive or active methodologies approved by the wildlife agencies; mitigation for impacts to occupied habitat (at the Subarea Plan specified ratio) must be through the conservation of occupied burrowing owl habitat or conservation of lands appropriate for restoration, management and enhancement of burrowing owl nesting and foraging requirements.*

Management plans/directives must include: enhancement of known, historical and potential burrowing owl habitat; and management for ground squirrels (the primary excavator of burrowing owl burrows). Enhancement measures may include creation of artificial burrows and vegetation management to enhance foraging habitat. Management plans must also include: monitoring of burrowing owl nest sites to determine use and nesting success; predator control; establishing a 300 foot wide impact avoidance area (within the preserve) around occupied burrows.

Eight known burrowing owl locations occur within major amendment areas of the South County Segment of the County Subarea Plan and the conservation of occupied burrowing owl habitat must be one of the primary factors preserve design during the permit amendment process.

Suitable breeding habitat for burrowing owl does not occur within the study area; however, wintering individuals may periodically use the survey area for foraging. Implementation of Mitigation Measure BIO-5 would complete pre-construction surveys to determine the presence or absence of burrowing owl. Biological monitoring, as outlined in Mitigation Measure BIO-3, would help ensure that the species is not affected by construction activities.

Belding's Orange-throated Whiptail: *Area specific management directives must include specific measures to protect against detrimental edge effects to this species.*

Implementation of the project could impact disturbed habitat that is used by Belding's orange-throated whiptail for foraging. Dust control and implementation of standard construction BMPs, including temporary fencing with silt barriers, as outlined in Mitigation Measure BIO-2, would further prevent potential indirect impacts to this species, and biological monitoring during construction would help ensure the avoidance of edge effects.

4.2.3 Vernal Pool Habitat Conservation Plan

The City's VPHCP is a habitat conservation plan focusing on vernal pools and seven associated threatened and endangered species that do not have federal take coverage under the MSCP SAP. The City and the USFWS entered into a Planning Agreement to develop a habitat conservation plan for vernal pool habitats and species in October 2009, and the final VPHCP was completed in October 2017; a revised final VPHCP was completed in October 2019. The plan provides coverage for the following seven species (five plant and two crustacean): San Diego button-celery (*Eryngium aristulatum* var. *parishii*), Otay Mesa mint (*Pogogyne nudiuscula*), San Diego mesa mint (*Pogogyne abramsii*), spreading navarretia (*Navarretia fossalis*), California Orcutt grass (*Orcuttia californica*), San Diego fairy shrimp (*Branchinecta sandiegonensis*), and Riverside fairy shrimp (*Streptocephalus woottoni*). The City has state coverage of these seven species under the MSCP SAP; however, no federal coverage was provided for these species.

The VPHCP expands the MHPA established in the MSCP SAP and conserves additional lands containing vernal pools and vernal pool species. The VPHCP provides long-term conservation and management for vernal pool species and was written to comply with the requirements of the FESA Section 10(a)(1)(B), as well as being designed to meet the requirements under CFG Code Section 2800 for listed and non-listed species conserved under a Natural Community Conservation Plan. The VPHCP provides methods to help ensure minimization and mitigation are adequate for the covered species and is intended to meet all standard requirements of the USFWS to issue permits for incidental take of threatened and endangered plant and animal species.

The goals of the VPHCP are:

1. Provide for the conservation and management of covered species addressed by the VPHCP (covered species).

2. Preserve vernal pool resources through conservation partnerships between federal, state, and local agencies, and private development partnerships.

3. Allow for appropriate and compatible economic growth and development that is consistent with applicable laws.

4. Provide a basis for permits necessary for lawful incidental take of vernal pool covered species.

5. Provide a comprehensive means to coordinate and standardize mitigation and compensation requirements of FESA, CESA, CEQA, the California Natural Community Conservation Planning Act of 1991, and the National Environmental Policy Act within the VPHCP Area.

6. Provide a more efficient project review process that results in greater conservation values than project-by-project, species-by-species review.

7. Provide clear expectations and regulatory predictability for persons carrying out covered activities within the VPHCP Plan Area.

Implementation of habitat-based and species-specific objectives to achieve the above goals is outlined in Chapter 5 of the VPHCP. The VPHCP expires in 2047.

As discussed in Section 4.2.7 of the VPHCP, federal aviation regulations require that the airport be maintained and operated in a manner that promotes the health, safety, and welfare of airport users and the surrounding communities. As part of this mandate, the airport has required these operations and standard activities that have the potential to impact covered species and/or vernal pool habitat. Table 4-7 of the VPHCP identifies these covered airport activities.

4.2.4 VPHCP Avoidance and Minimization Measures

The City's VPHCP includes measures to avoid or minimize impacts to conserved vernal pools adjacent to development in Section 5.2.1, *Avoidance and Minimization Measures*. These measures provide requirements for land uses adjacent to the habitat preserve (VPHCP Hardline and MHPA) to minimize indirect impacts to the VPHCP covered species contained therein. The discussion below addresses the project's compliance with the VPHCP's general avoidance and minimization measures:

- *Measure 1 – Development adjacent to the MHPA shall slope away from avoided pools.*

  The proposed development is set back more than 500 feet from the MHPA, and no mapped vernal pools occur adjacent to the study area. The project would not direct runoff into the MHPA.

- *Measure 2 – Temporary fencing with silt fencing shall be required.*

  The project's construction limits would be demarcated with construction or silt fencing to ensure that all impacts remain within the proposed footprint.

- *Measure 3 – Impacts from fugitive dust would be avoided and minimized through watering and other appropriate measures.*

  Impacts from fugitive dust during construction grading shall be avoided and minimized through routine watering with a watering truck or other appropriate measures that are standard construction practices.

  Measure 4 – A qualified biologist shall be on site during project construction activities to help ensure compliance with all mitigation measures identified in the CEQA environmental document. The biologist shall be knowledgeable of vernal pool species biology and ecology and will perform the duties detailed in Section 5.2.1 of the VPHCP.

A Qualified Biologist knowledgeable of vernal pool species biology and ecology would monitor construction and oversee compliance with all mitigation measures identified in the CEQA environmental document. Construction activities would not occur adjacent to the VPHCP Hardline area, but the Qualified Biologist would verify that construction activities do not exceed the authorized work limits and that good housekeeping is adhered to during construction. The Qualified Biologist should have the authority to halt construction activities and would report any non-compliance to the City.

- *Measure 5 – All activities, vehicles, equipment, and construction materials shall be strictly limited to the fenced project footprint and the project shall be kept clean of trash and debris.*

  Construction activities, staging areas, and equipment shall be limited to the fenced project limits. A Qualified Biologist would monitor construction activities and project compliance with all mitigation measures, including removal of trash and debris.

- *Measure 6 – Equipment maintenance, staging, and disposal of fuel, oil coolant shall occur outside of wetlands, and within designated areas in the fenced project impact limits only.*

  Designated equipment staging/maintenance/fueling/ etc., shall be demarcated on the final construction plans. Additionally, a Qualified Biologist would monitor project compliance regarding equipment.

- *Measure 7 – Grading activities immediately adjacent to vernal pools shall be timed to avoid wet weather to minimize potential impacts (e.g., siltation) to the vernal pools*.

  The project avoids the VPHCP Hardline area; construction activities would not occur adjacent to vernal pools or associated vernal pool watersheds. Nevertheless, the project shall implement a BMP program during construction to control runoff, erosion, and contaminants, as necessary. BMPs, including silt fencing, would be installed to prevent the spread of silt from the construction areas into adjacent vernal pools. Additionally, a Qualified Biologist would monitor construction activities and ensure project compliance with all mitigation measures.

- *Measure 8 – Topsoil shall be salvaged from impacted pools supporting listed fairy shrimp and be consistent with approved restoration plan requirements.*

  No vernal pools would be impacted by the proposed project; therefore, no mitigation or vernal pool habitat restoration is required or proposed by the project.

- *Measure 9 – Permanent protective fencing shall be installed along any interface with developed and preserved areas. Fencing shall be shown on the development plans. Signage for the biological conservation easement area shall be posted and maintained at conspicuous locations.*

  As the proposed project does not occur immediately adjacent to the VPHCP Hardline preserve, no permanent fencing or signage is proposed.

4.2.5 Environmentally Sensitive Lands

Environmentally Sensitive Lands (ESL) include sensitive biological resources, steep hillsides, coastal beaches, sensitive coastal bluffs, and 100-year floodplains. Mitigation requirements for sensitive

biological resources follow the requirements of the City's Biology Guidelines (2018) as outlined in the City's Municipal Code ESL Regulations (Chapter 14, Article 3, Division 1). Impacts to biological resources within and outside the MHPA must comply with the ESL Regulations, which also serve as standards for the determination of biological impacts and mitigation under the CEQA in the City.

The purpose of the ESL Regulations is to, "protect, preserve and, where damaged, restore the ESL of San Diego and the viability of the species supported by those lands." The regulations applicable to the project and discussed in this report require that development avoid impacts to certain sensitive biological resources as much as possible, including but not limited to MHPA lands; wetlands and vernal pools in naturally occurring complexes; federal and state-listed, non-MSCP Covered Species; and MSCP Narrow Endemic species. Furthermore, the ESL Regulations state that wetlands impacts should be avoided, and unavoidable impacts should be minimized to the maximum extent practicable. Where impacts are unavoidable, deviation findings must be made in accordance with Section 143.0150 of the City Municipal Code. In addition to protecting wetlands, the ESL Regulations require that a buffer be maintained around wetlands, as appropriate, to protect wetland-associated functions and values.

The City's Land Development Code (§113.0101) defines wetlands as areas that are characterized by any of the following conditions:

1. All areas persistently or periodically containing naturally occurring wetland vegetation communities characteristically dominated by hydrophytic vegetation, including but not limited to, salt marsh, brackish marsh, freshwater marsh, riparian forest, oak riparian forest, riparian woodlands, riparian scrub, and vernal pools;

2. Areas that have hydric soils or wetland hydrology and lack naturally occurring wetland vegetation communities because human activities have removed the historic wetland vegetation, or catastrophic or recurring natural events or processes have acted to preclude the establishment of wetland vegetation, as in the case of salt pannes and mudflats;

3. Areas lacking wetland vegetation communities, hydric soils, and wetland hydrology due to non-permitted filling of previously existing wetlands;

4. Areas mapped as wetlands on Map No. C-713, as shown in Chapter 13, Article 2, Division 6 (Sensitive Coastal Overlay Zone).

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 the implementation of the project would result in any of the following:

1. A substantial adverse impact, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in the MSCP, VPHCP, or other local or regional plans, policies, or regulations, or by the CDFW or USFWS.

2. A substantial adverse impact on any Tier I, Tier II, Tier IIIA, or Tier IIIB Habitats as identified in the City's Biology Guidelines of the Land Development manual or other sensitive natural community



I:\PROJECTS\S\SanDiegoComCollegeDist_01737\00004_SDCommunityCollegeDist\005_MiramarAviation\Map\BTR\BTR.aprx Fig9_Veg_Imps : 01737.00004.005 : 3/23/2026 - MCL

0 75 Feet

Source: Aerial (SanGIS, 2023)

HELIX Environmental Planning

Vegetation and Sensitive Biological Resources/Impacts

Figure 9

identified in local or regional plans, policies, regulations, or considered sensitive by CDFW or USFWS.

3. A substantial adverse impact on wetlands (including, but not limited to, marsh, vernal pool, riparian, etc.) through direct removal, filling, hydrological interruption, or other means.

4. Interfering substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, including linkages identified in the MSCP Plan, VPHCP, or impeding the use of native wildlife nursery sites.

5. A conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan, either within the MSCP or VPHCP plan area or in the surrounding region.

6. Introducing a land use within an area adjacent to the MHPA that would result in adverse edge effects.

7. A conflict with any local policies or ordinances protecting biological resources.

8. An introduction of invasive species of plants into a natural open space area.

6.0 IMPACTS

This section presents an analysis of anticipated impacts to biological resources associated with the proposed project. Cumulative impacts are also addressed. Proposed project development occurs entirely within developed and disturbed habitats (Figure 6). Due to the lack of existing resources on-site, resource agency (USACE, RWQCB, CDFW) permitting is not expected to 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

Permanent impacts were analyzed and quantified by overlaying the proposed boundaries of the project onto the baseline biological resources maps. All impacts are permanent; no temporary impacts would occur. Indirect impacts are addressed in Section 6.2 of this report.

6.1.1 Sensitive Plant Species

No sensitive plant species have been documented to occur within the study area, and no sensitive plant species have a high or moderate potential to occur within the impact area; therefore, the project would not result in direct impacts to any sensitive plant species.

6.1.2 Sensitive Animal Species

Sensitive Animal Species Observed

The project would result in direct permanent impacts to 0.9 acre of disturbed habitat, which is currently occupied by Belding's orange-throated whiptail. Potential impacts to Belding's orange-throated whiptail are discussed below.

Belding's Orange-throated Whiptail

Belding's orange-throated whiptail is a CDFW watch list species. Implementation of the project could impact habitat in use by Belding's orange-throated whiptail for foraging and breeding. Impacts to this species would be less than significant, as sufficient habitat to support the species would remain within the study area and surrounding lands, with higher quality habitat occurring off-site to the east of the proposed project that would not be impacted by implementation, and this species is highly mobile and capable of moving to other areas.

Sensitive Animal Species Not Observed but with Moderate Potential to Occur

Three additional sensitive animal species that were not observed during the general biological survey have moderate potential to occur within the study area: San Diego fairy shrimp, western spadefoot, and burrowing owl. Potential impacts to these species are discussed below.

San Diego Fairy Shrimp

San Diego fairy shrimp is a federally endangered and VPHCP-covered species. Implementation of the project could impact depressional features where San Diego fairy shrimp may persist within the study area. Direct impacts to San Diego fairy shrimp would be considered significant under Significance Threshold 1.

No direct impacts are expected to occur to San Diego fairy shrimp, as the project would not impact the depressional features mapped within the study area; however, the study area has the potential to support additional areas that may pond sufficiently to support San Diego fairy shrimp that were not apparent during the February 2026 biological survey. Implementation of Mitigation Measure BIO-1 would complete fairy shrimp surveys to determine the presence or absence of San Diego fairy shrimp. Additionally, dust control and implementation of standard construction BMPs, including temporary fencing with silt barriers, as outlined in Mitigation Measure BIO-3, would further prevent potential indirect impacts to this species, and biological monitoring during construction would help ensure the avoidance of edge effects.

Western Spadefoot

Western spadefoot is a federally proposed threatened species and a CDFW species of special concern. Implementation of the project could impact the foraging habitat for western spadefoot. Direct impacts to western spadefoot would be considered significant under Significance Threshold 1.

Burrowing Owl

Burrowing owl is a state candidate endangered species, a USFWS BCC, and a CDFW SSC.

The project is not situated in typically suitable habitat for the species, and the potential for burrowing owl to breed within the study area is low; however, there is moderate potential for wintering burrowing owls to periodically forage within the study area. This is a potentially significant direct impact. Mitigation Measure BIO-5 requires pre-construction burrowing owl surveys to determine the presence or absence of burrowing owl. If present, biological monitoring as outlined in Mitigation Measure BIO-3 would help ensure that the species is not affected by construction activities.

6.1.3 Nesting Birds

Implementation of the project has the potential to impact nesting birds, as some species nest in developed areas. 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

Of the 4.6 acres within the study area, approximately 1.1 acres would be directly impacted by the implementation of the project. These impacts, which occur outside of the MHPA, are all considered permanent impacts. No impacts to wetlands or sensitive uplands would occur (Table 3, *Impacts to Vegetation and Land Cover Types;* Figure 9, *Vegetation and Sensitive Biological Resources/Impacts*).

Table 3
IMPACTS TO VEGETATION AND LAND COVER TYPES (acres)[1]

Vegetation Community or Land Cover Type[2]	Tier	Baseline (Existing) Acreage	Impacts Outside the MHPA[3]	Total Impacts
Non-Sensitive Upland				
Disturbed Habitat (11000)	--	1.1	0.9	0.9
Developed (12000)	--	3.5	0.2	0.2
Non-Sensitive Upland Subtotal		***4.6***	***1.1***	***1.1***
TOTAL		**4.6**	**1.1**	**1.1**

[1] Totals reflect rounding.
[2] Codes refer to Oberbauer 2008.
[3] Permanent and temporary

No sensitive vegetation communities or federally protected wetlands occur within the study area; thus, no impacts are expected as a result of project implementation. No significant impact would occur under Significance Thresholds 2 or 3.

6.1.5 Wildlife Corridors and Linkages

As discussed previously, there are no regionally identified wildlife corridors or habitat linkages in the study area. The project would entirely avoid impacts within the MHPA and would not create any barriers to wildlife movement within the MHPA or result in impacts to wildlife connectivity between the study area and other nearby areas. No impact would occur to wildlife corridors or linkages, and no impact would occur under Significance Threshold 4.

6.1.6 Local Policies and Ordinances

Regarding Significance Thresholds 5 and 7, the District is subject to its own District Standards and Guidelines policies. No local policy or ordinance conflicts are expected to arise with the implementation of the project, and no significant impact would occur under Significance Thresholds 5 or 7.

6.1.7 Regional Conservation Planning

Regarding Significance Threshold 6, the project does not propose development that would directly or indirectly affect the biological resources occurring on MHPA lands, and no impacts to the City's MSCP program would occur from the implementation of the project. Furthermore, the project does not propose a change in the existing institutional land use. Similarly, the project occurs outside of the VPHCP area; thus, no significant regional conservation planning impact would occur under Significance Threshold 6.

6.1.8 Invasive Plant Species

Project implementation would not result in the introduction of invasive plant species into natural open space areas. The project site is currently dominated by non-native plant species and is not adjacent to natural open space areas. Further, the project does not propose any landscaping and would therefore not use invasive species. No impact would occur under Significance Threshold 8.

6.2 INDIRECT IMPACTS

Indirect impacts can be short-term or long-term and include areas and activities adjacent to a project (i.e., edge effects). Examples of short-term indirect impacts include construction-related noises, dust, increased human presence, and hydrology modifications. Long-term indirect impacts primarily result from anthropogenic disturbances by humans, such as noise, lighting, domesticated animals, spread of non-native ornamental and weedy plant species, and urban runoff (including potentially toxic or hazardous chemicals).

Implementation of the project would not result in indirect impacts to biological resources in the MHPA, which is greater than 500 feet distant from project activities.

The project would not result in substantial changes in lighting or human access in comparison to the baseline condition, since the study area is within and adjacent to existing developed areas that are already subject to these effects.

Implementation of standard construction BMPs for erosion and sediment control (e.g., preservation of existing vegetation, mulching, hydroseeding, soil binding, silt fencing, fiber rolls, gravel bag berms, sweeping, sandbag barriers, storm drain inlet protection), conformance with state Construction General Permit requirements, and preparation of Storm Water Quality Management Plans, as applicable, would address potential indirect impacts resulting from dust, hydrology modifications, and stormwater runoff.

6.3 CUMULATIVE IMPACTS

Adverse cumulative impacts are not expected from the implementation of the project. Projects that adhere to the MSCP SAP are not expected to have significant cumulative impacts to resources regulated

and covered by the MSCP SAP. Impacts from the implementation of the project are limited to developed land and disturbed habitat and are located entirely outside of the MHPA. The project would implement mitigation measures to reduce potential impacts to sensitive animal species to a level below significance. As such, no cumulative impacts to biological resources would occur from the implementation of the project.

7.0 MITIGATION PROGRAM FRAMEWORK

Included in this section are measures to minimize and mitigate impacts to sensitive species.

7.1 MITIGATION MEASURES FOR CONSTRUCTION IMPACTS

The following mitigation measures shall be implemented to reduce potential impacts from the implementation of the project to below the level of significance.

7.1.1 Sensitive Species Impacts

The following species-specific mitigation shall be implemented to reduce potential impacts to levels below significance.

San Diego Fairy Shrimp

Mitigation Measure BIO-1: Ponding Checks and Fairy Shrimp Survey. A USFWS-permitted fairy shrimp biologist shall conduct ponding checks after rain events with a minimum of 0.5 inch of rainfall within the study area in the winter/spring before construction, and conduct a USFWS protocol fairy shrimp survey in the two depressional features and any other features in the study area that inundate and hold water for one week following a rain event. Results of protocol fairy shrimp surveys shall be submitted to the District and USFWS. If ponding surveys indicate that potential depressional features suitable for fairy shrimp are absent from the work area, then fairy shrimp surveys will not be required. If listed fairy shrimp are found within the proposed impact area, USFWS authorization would be required prior to impacting this species. Indirect impacts to listed fairy shrimp outside the work area would be addressed with resource protection in Mitigation Measure BIO-2 and construction monitoring in Mitigation Measure BIO-3.

Mitigation Measure BIO-2: Resource Protection. Before construction activities commence, a Qualified Biologist, as defined in the City Biology Guidelines (2018), shall supervise the placement of orange construction fencing or equivalent along the limits of disturbance adjacent to sensitive biological habitats. This effort shall include delineating buffers to protect the sensitive biological resources (e.g., habitats/flora and fauna species) that shall be monitored during construction, consistent with mitigation measure BIO-3.

Mitigation Measure BIO-3: Construction Monitoring. All construction, including site preparation, demolition, grading, and staging areas, shall be restricted to the approved work area, and construction access will use established, previously disturbed areas. A biological monitor shall monitor construction activities as determined needed by the Qualified Biologist to ensure that construction activities do not encroach into biologically sensitive areas delineated in mitigation measure BIO-2, and that the work plan has been amended to accommodate any sensitive species subsequently discovered. The biological

monitor will also document Best Management Practices (BMPs), including temporary construction fencing as outlined in Mitigation Measure BIO-2, and dust control.

Western Spadefoot

Mitigation Measure BIO-4: Western Spadefoot Avoidance. If construction cannot be conducted outside of the western spadefoot breeding season of October 1 to April 30, a Qualified Biologist as defined in the City Biology Guidelines (2018) shall conduct a three-day/three-night pre-construction western spadefoot survey within 30 days before the start of construction. For the remainder of the western spadefoot breeding season, a Qualified Biologist shall conduct a daytime and a nighttime check for western spadefoot following each rain event of at least one inch within 24 hours. Results of any western spadefoot surveys shall be submitted to the District. If western spadefoot adults, eggs, tadpoles, or juveniles are observed during the pre-construction survey or subsequent visits, then work shall be halted until western spadefoot are confirmed absent or until the District implements avoidance buffers and other measures, such as toad exclusion fencing and relocation, as determined by the Qualified Biologist.

Burrowing Owl

Mitigation Measure BIO-5: Burrowing Owl Pre-Construction Surveys. A Qualified Biologist as defined in the City Biology Guidelines (2018) shall conduct pre-construction surveys for burrowing owl in suitable burrowing owl habitat within 500 feet of the project impact area where an adverse direct or indirect impact could occur to the species as a result of construction activities, as determined by the Qualified Biologist. The pre-construction surveys shall include at least two surveys conducted at least seven days apart, with the first survey occurring no more than 14 days prior to initiating construction activities that might result in a direct or indirect impact to burrowing owl, and the second survey occurring no more than 48 hours prior to initiating construction activities that might result in a direct or indirect impact to burrowing owl. The surveys shall be conducted using the methods described in protocols accepted by CDFW (the qualified biologist shall contact CDFW for up-to-date guidance). If no burrowing owls or occupied burrows are detected during the pre-construction surveys, construction activities shall be allowed to proceed with no additional measures required. If burrowing owls and/or occupied burrowing owl burrows are detected during the pre-construction surveys, then the following additional measures shall be implemented.

a. If burrowing owls and/or occupied burrowing owl burrows are detected during the pre-construction surveys, the results of the survey, including a Burrow Complex Map, shall be summarized in a survey report and submitted to the District and CDFW prior to initiating construction activities within 500 feet of burrowing owl locations and/or occupied burrowing owl burrows. The Burrow Complex Map shall show the locations of all burrowing owl sightings, burrowing owl burrow complex(es), and atypical burrows (i.e., culverts, buckled concrete, etc.), and shall label if the sightings were identified as potential burrows, occupied burrows, satellite burrows, areas of concentrated burrows, and/or burrowing owl sign. If a lapse in construction activities occurs for 14 days or longer within 500 feet of burrowing owl sightings or occupied burrows, the project proponent shall contact the CDFW to determine if updated pre-construction surveys and an updated Burrow Complex Map are required prior to reinitiating construction activities with the potential to disturb burrowing owls;

b. Construction activities with the potential to result in direct or indirect adverse impacts on burrowing owls shall be avoided within approximately 500 feet of burrowing owls and/or occupied burrowing owl burrows at any time of the year to the extent feasible;

c. If construction activities with the potential to result in direct or indirect adverse impacts on burrowing owl cannot be avoided within 500 feet of burrowing owls and/or occupied burrows while burrowing owls are present at any time of the year, the following avoidance measures shall be implemented:

    i. During the burrowing owl breeding season (February 1 to August 31), an avoidance buffer of approximately 500 feet shall be established around all active burrowing owl nesting, roosting, and satellite burrows or the entire burrow complex. The avoidance buffer shall be delineated using stakes, flags, and/or rope or cord. The method of marking the buffer shall be adjusted if corvids, raptors, or other predators are observed perching on marking materials. The avoidance buffer shall be delineated with different materials from those used to delineate the limits of work. All materials used for delineation of the buffer shall be removed and properly disposed of following completion of construction activities or when burrowing owls are no longer present and/or using the burrow(s). The distance of the avoidance buffer may be reduced where natural (hills, trees) or artificial (buildings, walls) barriers separate the location of construction activities from the active burrowing owl burrows. The final distance of the avoidance buffer shall be at the discretion of a qualified biologist.

    ii. During the burrowing owl non-breeding season (September 1 to January 31), an avoidance buffer of approximately 150 feet shall be established around all active burrowing owl wintering or roosting burrows or the entire burrow complex. The buffer shall be delineated using stakes, flags, and/or rope or cord. The method of marking the avoidance buffer shall be adjusted if corvids, raptors, or other predators are observed perching on marking materials. The avoidance buffer shall be delineated with different materials from those used to delineate the limits of work. All materials used for delineation of the buffer shall be removed and properly disposed of following completion of construction activities or when burrowing owls are no longer present and/or using the burrow(s). The distance of the avoidance buffer may be reduced where natural (hills, trees) or artificial (buildings, walls) barriers separate the location of construction activities from the active burrowing owl burrows. The final distance of the avoidance buffer shall be at the discretion of a qualified biologist.

d. If occupied and/or potentially suitable burrowing owl burrows occur within the direct impact area(s) and cannot be avoided by construction activities, the following measures shall be implemented:

    i. Construction activities shall avoid direct physical impacts to active burrowing owl nesting, roosting, and satellite burrows or the entire burrow complex during the burrowing owl breeding season (February 1 to August 31), or until a qualified biologist determines that nesting activities have ceased (i.e., nestlings have fully

fledged, are feeding independently and are no longer dependent on the nesting burrow).

ii. Burrowing owl exclusion and excavation of suitable burrowing owl burrows present within the direct impact area(s) may be conducted with approval of the CDFW once the burrow or burrow complex has been determined to be inactive, during the burrowing owl non-breeding season (September 1 to January 31), or if conducted during the burrowing owl breeding season (February 1 to August 31), only after the nestlings have fully fledged, are feeding independently, and are no longer dependent on the nesting burrow. Methods of burrow exclusion and excavation shall be determined in consultation with CDFW and may include such methods as: burrow monitoring to confirm status; burrow inspection through the use of camera scoping, trail camera, or alternative methods approved by CDFW; installation of one-way doors at the entrance of burrows to allow burrowing owl and other wildlife to vacate the burrows unharmed; or collapsing of vacated burrows.

If direct or indirect adverse impacts cannot be avoided during the review period for burrowing owl as a candidate state endangered species or if burrowing owl is listed as a state endangered species, then the project proponent shall implement the additional measures below in compliance with the California Endangered Species Act. If the candidate state endangered listing is removed for the burrowing owl and the species does not become listed as a state endangered species, then the additional measures below for the California Endangered Species Act compliance would no longer be required.

e. Prior to the initiation of construction activities that could result in direct or indirect adverse impacts on burrowing owl, the project proponent shall consult with CDFW in accordance with the California Endangered Species Act. If take of burrowing owl is expected, no construction activities with the potential to result in direct or indirect adverse impacts on burrowing owl shall occur until CDFW has authorized such take through an ITP, as applicable. The project proponent shall implement any required avoidance, minimization, and mitigation measures prescribed in the ITP, as applicable, beyond what is being proposed under this CEQA analysis to reduce the impact to less than significant.

f. Prior to the initiation of construction activities that could result in direct physical impacts to active burrowing owl burrows and nest sites (i.e., destruction of burrows determined to be occupied by wintering, roosting, or nesting burrowing owl), a qualified biologist approved by CDFW shall be retained to help facilitate avoidance and minimization actions during project construction to ensure that burrowing owls are not harmed. The qualified biologist, in coordination with CDFW, shall assist with the implementation of measures to prevent direct take of burrowing owl individuals during construction. The CDFW-approved measures for ensuring the burrows do not support an active nest and individual owls are not entrapped within burrows that occur within the approved construction work areas shall include, at a minimum: burrow monitoring to confirm nesting status; burrow inspection through the use of camera scoping, trail camera, or alternative methods approved by CDFW; installation of one-way doors at the entrance of burrows to allow

burrowing owl and other wildlife to vacate the burrows unharmed; collapsing of vacated burrows; inspection, removal, and/or concealment of pipes, debris/rock piles, and other areas that could attract burrowing owl onto the approved construction work areas; monitoring construction activities; and weekly reporting to CDFW.

Other Sensitive Animals

None of the other sensitive animal species known to occur or with moderate or high potential to occur within the project require avoidance or mitigation measures due to lack of anticipated impacts, their low sensitivity, and/or their ability to move out of the impact area.

7.1.2 Nesting Birds

Implementation of the following mitigation measure would reduce potential impacts to nesting birds protected by the MBTA to less than significant:

Mitigation Measure BIO-6: Nesting Birds Surveys. If grubbing, trimming, or clearing activities must occur within the general avian breeding season (February 15 through August 31), a Qualified Biologist shall perform a pre-construction nesting bird survey no more than seven days before the commencement of vegetation clearing or grubbing to determine if active bird nests are present in the affected areas. Results of the nesting bird survey(s) shall be submitted to the District. Should an active 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 (including nest building or other breeding/nesting behavior) within the proposed impact area, clearing, grubbing, grading, and tree removal shall be allowed to proceed.

7.2 LEVEL OF SIGNIFICANCE AFTER MITIGATION

The project would not result in significant impacts under Significance Thresholds 2, 3, 4, 5, 6, 7, or 8 found in Section 5.0. As detailed above, project implementation could result in potentially significant impacts under Significance Threshold 1. With the implementation of the mitigation measures for significant impacts to sensitive biological resources outlined in this section, impacts from the implementation of the project would be less than significant.

8.0 LIST OF PREPARERS

The following people contributed to the preparation of this report:

Sean Bohac	Certificate in GIS, San Diego Mesa College, 2003 B.S., Biology, The Evergreen State College, 1998
Mandy Mathews*	B.S., Wildlife and Fisheries Management, Frostburg State University, 2008
Linda Garcia	M.A., English, National University, San Diego, 2012 B.A., Literatures in English, University of California, San Diego, 2003
Stacy Nigro**	B.S., Forest Resources and Conservation, Emphasis in Wildlife Ecology, University of Florida, 1994
Yara Fisher, AICP***	M.A., Biology, Miami University, Oxford, Ohio, 2022 B.S., Political Science, University of California, San Diego, 1995

*Primary Author
**Contributing Author
***Project Manager

9.0 REFERENCES

American Ornithological Society (AOS). 2026. AOS Checklist of North and Middle American Birds (online checklist). Retrieved from: https://checklist.americanornithology.org/taxa/.

Bradley, R.D., Ammerman, L.K., Baker, R.J., Bradley, L.C., Cook, J.A., Dowler, R.D. Jones, C., Schmidly, D.J, Stangi, F.B., Van De Bussche, R.A., Wursig, B. (2014). Revised checklist of North American mammals north of Mexico. Museum of Texas Tech University Occasional Papers. 327:1-27.

California Department of Fish and Wildlife. 2026a. California Natural Diversity Data Base. RareFind 5.

2026b. State and Federally Listed Endangered & Threatened Animals of California. Available at: https://www.wildlife.ca.gov/Data/CNDDB/Plants-and-Animals. April.

2026c. Special Animals List. Available at: https://www.wildlife.ca.gov/Data/CNDDB/Plants-and-Animals. April. California Invasive Plant Council. 2026. California Invasive Plant Inventory Database. Available at: http://www.cal-ipc.org/paf/.

California Native Plant Society. 2026. Inventory of Rare and Endangered Plants (online edition, v-9.5). Available at: http://www.rareplants.cnps.org.

Holland, R.F. 1986. Preliminary descriptions of the terrestrial natural communities of California. State of California, The Resources Agency, 156 pp.

Jepson Flora Project (eds.) 2026. *Jepson eFlora*. Retrieved from: http://ucjeps.berkeley.edu/eflora/.

Nicholson, Kirsten E. (Editor). 2025. Scientific and Standard English Names of Amphibians and Reptiles of North America North of Mexico, with Comments Regarding Confidence in Our Understanding, 9th Edition. Society for the Study of Amphibians and Reptiles, Lawrence, Kansas. 87 pp. Retrieved from https://cnah.org/SSARnames.aspx.

Oberbauer, T. 2008. Terrestrial Vegetation Communities in San Diego County Based on Holland's Descriptions. Revised from 1996 and 2005. July.

Rebman, J.P. and M.G. Simpson. 2014. Checklist of the Vascular Plants of San Diego County. 5th Edition. San Diego Natural History Museum, San Diego, California. 132 pp.

San Diego, City of. 2022. California Environmental Quality Act Significance Determination Thresholds. City of San Diego. Planning Department.

2019. Revised Final Vernal Pool Habitat Conservation Plan. Prepared by City of San Diego. October.

2018. City of San Diego Municipal Code, Land Development Code, Biology Guidelines. Amended. February 1 by Resolution No. R-311507.

San Diego, City of. (cont.)
1997a. Multiple Species Conservation Program. City of San Diego MSCP Subarea Plan. March.

1997b. Implementing Agreement by and between USFWS, CDFW, and City of San Diego. To Establish a Multiple Species Conservation Program "MSCP" for the Conservation of Threatened, Endangered, and other Species in the Vicinity of San Diego, California. July.

San Diego, County of. 1998. Final Multiple Species Conservation Program. MSCP Plan August.

U.S. Department of Agriculture (USDA). 2026. Web Soil Survey. Natural Resources Conservation Service (NRCS). Available at: https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm. Accessed: September 2024.

U.S. Fish and Wildlife Service (USFWS). 2026. Occurrence Information for Multiple Species within Jurisdiction of the Carlsbad Fish and Wildlife Office. Carlsbad Fish and Wildlife Office. Available at: https://www.fws.gov/office/carlsbad-fish-and-wildlife. April.

Appendix A

Plant Species Observed

Family	Scientific Name*	Common Name	Habitat[1]
Dicots			
Asteraceae	*Centaurea melitensis**	tocalote	DH
	Deinandra fasciculata	clustered tarweed	DH
	*Dittrichia graveolens**	stinkwort	DH
	*Gazania linearis**	gazania	DH
	*Hedypnois cretica**	crete weed	DH
	Heterotheca grandiflora	telegraph weed	DH
Chenopodiaceae	*Salsola tragus**	Russian thistle	DH
Euphorbiaceae	*Euphorbia maculata**	spotted spurge	DH
Fabaceae	*Acacia longifolia**	golden wattle	DH
	Lupinus bicolor	lupine	DH
	*Melilotus indicus**	annual yellow sweetclover	DH
Geraniaceae	*Erodium botrys**	big heron's bill	DH
	*Erodium cicutarium**	coastal heron's bill	DH
Plumbaginaceae	*Limonium sinuatum**	statice	DH
Sapindaceae	*Cupaniopsis anacardioides**	carrotwood	DH
Monocots			
Arecaceae	*Washingtonia robusta***	Mexican fan palm	DH
Poaceae	*Avena* sp.*	wild oat	DH
	*Bromus diandrus**	ripgut brome	DH
	Bromus madritensis ssp. *rubens**	red brome	DH
	*Cortaderia selloum***	pampas grass	DH
	*Hordeum murinum**	foxtail barley	DH
	*Lamarckia aurea**	goldentop	DH
	*Pennisetum setaceum**	fountaingrass	DH

***** Non-native

[1] DH=Disturbed habitat

Appendix B

Animal Species Observed or Detected

Taxon		Scientific Name†	Common Name
Order	**Family**		
INVERTEBRATES			
Hymenoptera	Apidae	*Apis mellifera*	western honey bee
VERTEBRATES			
Reptiles			
Squamata	Teiidae	*Aspidoscelis hyperythrus beldingi*†	Belding's orange-throated whiptail
Birds			
Accipitriformes	Accipitridae	*Buteo jamaicensis*	red-tailed hawk
Apodiformes	Trochilidae	*Calypte anna*	Anna's hummingbird
Charadriiformes	Charadriidae	*Charadrius vociferus*	killdeer
Columbiformes	Columbidae	*Streptopelia decaocto*	Eurasian collared-dove
Passeriformes	Aegithalidae	*Psaltriparus minimus*	bushtit
	Corvidae	*Corvus brachyrhynchos*	American crow
		Corvus corax	common raven
	Estrildidae	*Lonchura punctulate*	scaly-breasted munia
	Fringillidae	*Haemorhous mexicanus*	house finch
	Icteridae	*Icterus cucullatus*	hooded oriole
	Mimidae	*Mimus polyglottos*	northern mockingbird
	Passerellidae	*Melospiza melodia*	song sparrow
	Sturnidae	*Sturnus vulgaris*	European starling
	Troglodytidae	*Troglodytes aedon*	northern house wren
	Tyrannidae	*Tyrannus vociferans*	Cassin's kingbird
	Zosteropidae	*Zosterops simplex*	Swinhoe's white-eye
Mammals			
Carnivora	Canidae	*Canis latrans*	coyote
Rodentia	Geomyidae	*Thomomys bottae*	Botta's pocket gopher

† Sensitive

Appendix C

Sensitive Plant Species with Potential to Occur

Scientific Name	Common Name	Status[1]	Habitat Associations	Potential to Occur[2]
Bloomeria clevelandii	San Diego goldenstar	--/-- CRPR 1B.1 MSCP Covered	Perennial bulbiferous herb. Occurs in valley grasslands and coastal scrub, particularly near mima mound topography or in the vicinity of vernal pools, on clay soils. Found in Riverside and San Diego counties. Flowering period: April to May. Elevation: 160 to 1,525 feet (50 to 465 meters).	**Low**. Although this species has been reported in the vicinity of the study area, the study area does not support habitat suitable for this species.
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 and San Diego counties. Flowering period: May to July. Elevation: 98 to 5,550 feet (30 to 1,692 meters).	**Low**. Although this species has been recently reported on the Montgomery-Gibbs Executive Airport property, the study area does not support habitat suitable for 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**. Although this species has been reported within one mile of the study area, this conspicuous shrub would have been apparent at the time of the February 2026 general biological survey.
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 reported within one mile of the study area, this conspicuous shrub would have been apparent at the time of the February 2026 general biological survey.

Scientific Name	Common Name	Status[1]	Habitat Associations	Potential to Occur[2]
Navarretia fossalis	Spreading navarretia	FT/-- CRPR 1B.1	Annual herb. Occurs in vernal pools, vernal swales, roadside depressions, playas, marshes and swamps, and chenopod scrub. Population size is strongly correlated with rainfall. Depth of pool appears to be a significant factor as this species is rarely found in shallow pools. Found in the Mojave Desert, desert mountains, Channel Islands, and the Transverse and Peninsular Ranges. Flowering period: April to June. Elevation: 98 to 4,265 feet (30 to 1,300 meters).	**Low**. Although this species has been reported within one mile of the study area, the study area only supports shallow road ruts that entirely lack vegetation and are subject to repeated disturbance from maintenance activities and vehicles. Suitable habitat is not present in the study area.
Pogogyne abramsii	San Diego mesa mint	FE/SE CRPR 1B.1 MSCP Covered	Annual herb. Occurs within vernal pools of San Diego County. Flowering period: March to July. Elevation: 295 and 665 feet (90 to 200 meters).	**Low**. Although this species has been reported within one mile of the study area, the study area only supports shallow road ruts that entirely lack vegetation and are subject to repeated disturbance from maintenance activities and vehicles. Suitable habitat is not present in 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 this species has been reported within one mile of the study area, the reports are historic (1959, 1967, and 1968) and no recent observations have been reported in the study area vicinity. Furthermore, suitable habitat (coastal scrub or chaparral) is not present in the study area.

Scientific Name	Common Name	Status[1]	Habitat Associations	Potential to Occur[2]
Stylocline citroleum	Oil neststraw	--/-- CRPR 1B.2	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).	**Low**. Although this species has been reported within one mile of the study area, the report is historic (1883) and no recent observations have been reported in the study area vicinity. Suitable soils and habitat types for this species are not present in the study area.

[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)/County of San Diego (County) Multiple Species Conservation Plan (MSCP) Subarea Plan; VPHCP Covered Species: Covered Species under the City Vernal Pool Habitat Conservation Plan (VPHCP); 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 D

Sensitive Animal Species with 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.	**Low.** The site lacks suitable floral resources for this species to use for nectar and is subject to regular maintenance and disturbance. The closest record of this species is approximately 3.5 miles east of the study area.
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.	**Moderate.** This species has been recorded in several locations in the vicinity of the study area, primarily to the north and east. Although dry at the time of the general biological survey, shallow depressions/road ruts were observed in the study area that have potential to support this species.
Streptocephalus woottoni	Riverside Fairy Shrimp	FE/-- MSCP Covered NE VPHCP Covered City VP Species	In California, occurs from Los Angeles County south to coastal San Diego County, and east to western Riverside County. Found in deep seasonal vernal pools, ephemeral ponds, stock ponds, and other human-modified depressions at least 30 centimeters deep. Associated with grasslands, which may be interspersed through chaparral or coastal sage scrub vegetation.	**Not Expected.** This species has not been recorded in the study area vicinity, and depressions/road ruts that occur within the study area do not appear to be deep enough to inundate for the period required for this species to complete its life cycle.

Scientific Name	Common Name[1]	Status	Habitat Associations	Potential to Occur[2]
VERTEBRATES				
Amphibians				
Spea hammondii	Western Spadefoot Toad	FC/-- 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.	**Moderate.** This species has been reported within one mile of the study area as recently as 2025 and is capable of moving into the study area while searching for mates or dispersing as juveniles.
Reptiles				
Arizona elegans occidentalis	California Glossy Snake	--/-- SSC	Occurs along the coastal regions of California from San Francisco south to San Diego County; though it is absent along the central coast. Inhabits arid scrub, rocky washes, grasslands, and chaparral. Prefers open areas and areas with soils loose enough for easy burrowing.	**Not Expected.** Although this species was reported on the Montgomery-Gibbs Executive Airport property, the report was from a voucher that was collected in 1926. There are no recent reports of this species in the vicinity of 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.	**Present.** This species was observed on-site during the February 2026 general biological survey.

Scientific Name	Common Name[1]	Status	Habitat Associations	Potential to Occur[2]
Birds				
Athene cunicularia hypugaea	Western Burrowing Owl	--/SC BCC, SSC MSCP Covered	In California, found from central California east to the Mojave Desert and south to coastal San Diego County. Primarily a grassland species that prefers areas with level to gentle topography and well-drained soils. Also occupies agricultural areas, vacant lots, and pastures. Requires underground burrows for nesting and roosting that are typically dug by other species such as the California ground squirrel (*Otospermophilus beecheyi*). Will also utilize natural rock cavities, debris piles, culverts, and pipes for nesting and roosting.	**Low.** A total of two burrows of suitable size were observed within the study area outside of the impact footprint; however, neither burrow had sign of use by this species (i.e., whitewash, pellets, feathers). The study area is within an area heavily used by vehicles and appears to be subject to regular maintenance such as mowing, and other ongoing disturbance. Suitable grassland habitat is not present in the study area.
Circus cyaneus	Northern Harrier	--/-- SSC MSCP Covered	Occurs as a year-round resident in California, breeding throughout most of the state at elevations below 9,000 feet, though generally absent from the eastern desert regions. Breeding populations in southern California occurring from Ventura County to San Diego County are highly fragmented with many local populations extirpated, mostly likely a result of habitat loss and degradation. Inhabits open areas including wetlands, marshes, marshy meadows, grasslands, riparian woodlands, desert scrub, and pastures and agricultural areas. Nests on the ground in wetlands and uplands within patches of dense, often tall, vegetation in undisturbed areas.	**Low.** Although extensive grasslands occur north and east of the study area, the study area does not support grassland habitat where this species would nest. This species may hunt along the edge of the study area.

Scientific Name	Common Name[1]	Status	Habitat Associations	Potential to Occur[2]
Elanus leucurus	White-tailed Kite	--/-- FP	Year-round resident of California residing along the coasts and valleys west of the Sierra Nevada foothills and southeast deserts; has also been documented breeding in arid regions east of the Sierra Nevada and within Imperial County. Inhabits low elevation grasslands, wetlands, oak woodlands, open woodlands, and is often associated with agricultural areas. Breeds in riparian areas adjacent to open spaces, nesting in isolated trees or relatively large stands.	**Low.** Although extensive grasslands occur north and east of the study area, the study area does not support grassland habitat where this species would nest. This species may hunt along the edge of the study area.
Eremophila alpestris actia	California Horned Lark	--/-- WL	In California, occurs along the Coast Ranges of from San Joaquin Valley south to the U.S./Mexico border. Inhabits a wide variety of open habitats with low, sparse vegetation where trees and large shrubs are generally absent. Suitable habitats include grasslands along the coast, deserts within the inland regions, shrub habitat at higher elevations, and agricultural areas.	**Low.** The study area is adjacent to large areas of grassland where vegetation is low and sparse. However, the study area appears to be subject to regular maintenance and mowing, which would preclude this species from nesting within the study area.
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.	**Not Expected.** Although this species has been reported within one mile of the study area, the study area lacks suitable coastal sage scrub habitat to support this species.

Scientific Name	Common Name[1]	Status	Habitat Associations	Potential to Occur[2]
Mammals				
Choeronycteris mexicana	Mexican Long-tongued Bat	--/-- SSC	Found in southern California from Ventura County south to San Diego County. Occurs in arid habitats below 7,900 feet. Suitable habitats include grasslands, scrub, mixed forest, and canyons in mountain ranges rising from the desert. Primarily found in urban and suburban areas in San Diego County. Roosts in caves and mines, and artificial structures such as garages, office buildings, under porches, and warehouses.	**Low.** Although suitable habitat and roosting locations occur within the study area, this species has not been reported in the study area vicinity. The closest record of this species to the study area is in Bonita, approximately 12 miles south-southeast of the study area.

[1] Listing codes are as follows: FE = Federally Endangered; FT = Federally 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 Wait-Listed

MSCP Covered Species: Covered Species under City of San Diego (City)/County of San Diego Multiple Species Conservation Plan (MSCP) Subarea Plan; VPHCP Covered Species: Covered Species under the City's Vernal Pool Habitat Conservation Plan (VPHCP); 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 D1

Historical Resources Technical Report

Historical Resource Technical Report

Montgomery-Gibbs Executive Airport
Building 6, Building 7 & Building 8
3873 Kearny Villa Road
San Diego, CA 92123

FINAL REPORT

Prepared for:

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

Submitted to:

City of San Diego

Prepared by:

IS ARCHITECTURE
JONE R. STIEGLER, FAIA

5645 La Jolla Boulevard
La Jolla, CA 92037
(858) 456-8555
Christopher Usler, Historic Preservation Specialist (2019)
Peter Kempson, Historic Preservation Specialist (2025)

June 2025

Table of Contents

List of Figures ii
Executive Summary iv
1 Introduction 1
1.1 Project Description 1
1.2 Report Organization 2
1.3 Project Area 2
1.4 Project Personnel 5
2 Project Setting 6
2.1 Physical Project Setting 6
2.2 Project Area and Vicinity 7
2.3 Historic Context 13
3 Methods and Results 25
3.1 Archival Research 25
3.2 Field Survey 25
3.3 Description of Surveyed Resources 25
3.3.1 Site – 3873 Kearny Villa Road 26
3.3.2 Building 6 30
3.3.3 Building 7 36
3.3.4 Building 8 43
4 Eligibility Evaluations 48
4.1 Significance 48
4.1.1 National Register of Historic Places 48
4.1.2 California Register of Historic Resources 51
4.1.3 San Diego Register of Historical Resources 52
4.2 Integrity 55
4.3 Eligibility Conclusion 58
5 Findings and Conclusions 60
5.1 Impact Findings 60
5.1.1 Direct Impacts 60
5.1.2 Indirect Impacts 62
5.1.3 Cumulative Impacts 62
5.2 Mitigation Measures 62
5.3 Conclusions 64
6 Bibliography 65

Appendices

A. Building Development Information
B. Ownership and Occupant Information
C. Maps
D. DPR Forms
E. Preparer's Qualifications

List of Figures

Figure 1: Project Area/Area of Potential Effect. *Google Maps, 2019.* 3
Figure 2: The three hangars evaluated in this report. *Google Maps, 2019.* 3
Figure 3: Proposed Airport Plan. HELIX Environmental Planning. 4
Figure 4: The location of Montgomery-Gibbs Executive Airport in Kearny Mesa. *Google Maps, 2019* 6
Figure 5: Regional Map showing the location of Project Area. *Google Maps, 2019.* 7
Figure 6: The recently expanded Montgomery Field in 1952. Kearny Mesa had remained completely undeveloped at this time due to zoning issues. The early development of the Serra Mesa community can be seen south of the airport. *USDA.* 9
Figure 7: Montgomery Airport, the industrial development of Kearny Mesa, and the residential development of surrounding communities in 1964. *USDA.* 10
Figure 8: Montgomery Field, Kearny Mesa, and surrounding communities in 1972. *USGS.* 11
Figure 9: Montgomery Field, Kearny Mesa, and surrounding communities in 1989. *USDA.* 12
Figure 10: 1941 aerial looking northeast at Gibbs Field and the Inland Highway, which was redeveloped as U.S. 395 (now SR-163). *Original photo courtesy of Buzz Gibbs, Gibbs Flying Service.* 14
Figure 11: Gibbs Field, March 1947. *San Diego History Center, UT84_22856.2* 15
Figure 12: Montgomery Field and surrounding area on October 10, 1950. *San Diego History Center, #80.7044 Airport - Montgomery Field 10-10-50.* 16
Figure 13: Proposed development south of Montgomery Field. Buildings 6, 7, and 8 appear in the foreground. "Council May Act on Expansion Today," *San Diego Union*, February 1, 1951. 17
Figure 14: Map showing location of Montgomery Field and Miramar NAS, as well the 12,000 foot radius in which the Navy denied residential development. Image taken from "Kearny Mesa Land Sought By Navy," *San Diego Union,* January 20, 1956. 18
Figure 15: Approach and Turning Zones Around Montgomery Field dictated development within the surrounding area. Image taken from "All Weather Field Called Vital Need," *San Diego Union*, July 11, 1953. 19
Figure 16: Gibbs Flying Service relocated to the newly graded, central, part of the airport around 1956. Newly built T-type hangars are visible in the background. *San Diego History Center, 2002-15, Box 2, Folder 1 Kearny Mesa.* 20
Figure 17: Montgomery Field and Kearny Mesa in 1960. *San Diego History Center, 92_18835-2095 Montgomery Field - General Dynamics - aerial - 1960* 21
Figure 18: Aerial photo c.1960, looking southeast at Convair/General Dynamics and other industrial development. Montgomery Field appears on the right-hand side of the photo. *San Diego History Center, 1998_63-19.* 22
Figure 19: Montgomery Field in 1984. *San Diego History Center, 1998_047.702 Montgomery Field Aero Drive and Kearny Villa Road Intersection at lower left; Brouwer Collection.* 24
Figure 20: 1959 aerial of site, looking west. 27
Figure 21: Approximate boundaries for the site surveyed for this report. 27
Figure 22: Site Photo Survey Key Plan. Google Maps, 2019. 28
Figure 23: Looking NW from NE corner of Building 6 towards Kearny Villa Road and SR-163. 28
Figure 24: Looking S from NE corner of Building 6 towards the wide, asphalt paved taxiway. 29

Figure 25: Looking S from NW corner of Building 6 and the asphalt paved access road. 29
Figure 26: Looking E from the wide, asphalt paved taxiway, towards the runways and center of the airport. 30
Figure 27: Detail of 1947 photo looking NE. *San Diego History Center, UT84_22856.2.* 31
Figure 28: 1956 photo looking SW. *San Diego History Center, 2002-15, Box 2, Folder 1 Kearny Mesa.* 32
Figure 29: 1956 photo looking SE. *San Diego History Center, 2002-15, Box 2, Folder 1 Kearny Mesa.* 32
Figure 30: 1959 photo showing rear elevation of Building 6. *David J. Gauthier Memorial Collection, No.7644, November 1959. 1000aircraftphotos.com.* 33
Figure 31: Building 6 Photo Survey Key Plan. *Google Maps, 2019.* 33
Figure 32: Three-quarter view showing the north and west elevations. 34
Figure 33: Three-quarter view showing the east and north elevations. 34
Figure 34: Three-quarter view showing the west and south elevations. 35
Figure 35: Three-quarter view showing the west and south elevations. 35
Figure 36: March 1947 photo looking NE. *San Diego History Center, UT84_22856.2* 37
Figure 37: 1947 photo, looking SW. Original photo courtesy of Buzz Gibbs, *Gibbs Flying Service.* 37
Figure 38: Photo, looking west, in 1947. Original photo courtesy of Buzz Gibbs, *Gibbs Flying Service.* 38
Figure 39: Photo, looking NW, in 1947. Original photo courtesy of Buzz Gibbs, *Gibbs Flying Service.* 38
Figure 40: 1956 photo looking SW. *San Diego History Center, 2002-15, Box 2, Folder 1 Kearny Mesa.* 39
Figure 41: 1956 photo looking SE. *San Diego History Center, 2002-15, Box 2, Folder 1 Kearny Mesa.* 39
Figure 42: 1960 aerial looking NW. *San Diego History Center, 92_18835-2095* 40
Figure 43: Building 7 Photo Survey Key Plan. *Google Maps, 2019.* 40
Figure 44: Three-quarter view showing Building 7 east and north elevations. 41
Figure 45: Building 7, South elevation. 41
Figure 46: Building 7 South elevation showing an early patch to the original stucco. 42
Figure 47: Three-quarter view of Building 7 east and south elevations. 42
Figure 48: Building 7 North elevation with shed roof addition. 43
Figure 49: 1959 aerial looking East. Original photo provided by Buzz Gibbs, *Gibbs Flying Service.* 44
Figure 50: 1960 aerial, looking NE. *San Diego History Center, 1960 - 92_18835-2095* 44
Figure 51: Building 8 Photo Survey Key Plan. *Google Maps, 2019.* 45
Figure 52: Photo of the east elevation of Building 8. 45
Figure 53: Three-quarter view of the south and west elevations of Building 8. 46
Figure 54: Three-quarter view showing the east and north elevations of Building 8. 46
Figure 55: Building 8 North elevation. 47

Executive Summary

IS Architecture (ISA) was retained as a subconsultant to HELIX Environmental Planning, Inc. (HELIX) to complete a Historical Resource Technical Report (HRTR) for Building 6, Building 7, and Building 8 at the Montgomery-Gibbs Executive Airport in support of the Montgomery-Gibbs Executive Airport Master Plan Update and its Programmatic Environmental Impact Report (PEIR).

The purpose of this report is to evaluate the impacts of the revised Master Plan Proposed project scope to Building 6, Building 7, and Building 8 will constitute a significant impact to historical resources under the California Environmental Quality Act (CEQA). This determination is achieved through the evaluation of historical resources under the City of San Diego, California Register of Historical Resources, and National Register of Historic Places designation criteria, as well as an evaluation of integrity.

Only the eligible Building 6, Building 7, and Building 8 are being evaluated for the impact of the Montgomery-Gibbs Executive Airport Master Plan Update. This report does not evaluate the larger proposed Montgomery-Gibbs Executive Airport Master Plan and its impact on any other historical resources currently identified or structure that will be 45 years or older at the time of specific work items during the Master Plan. Any other buildings, such as the Airport Terminal, located within the Larger APE for the Montgomery-Gibbs Executive Airport Master Plan APR and their evaluation are not part of the scope of this report.

The study concludes that Building 6, Building 7, and Building 8 are eligible for individual listing in the National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR) and the San Diego Register of Historical Resources (SDRHR). The study concludes that Building 6 is significant under Criterion C/3/C and Building 6, Building 7, and Building 8 are all significant under Criterion A/1/A. As such, Building 6, Building 7, and Building 8 are considered historical resources under CEQA. This study concludes that the preservation project scope of Building 6, Building 7, and Building 8, as resources in their own right will have a less than significant impact with mitigation per the CEQA guidelines. Per the CEQA guidelines, the mitigation measures will be conducted in a manner consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties.

1 Introduction

1.1 Project Description

In 2017, the City of San Diego began developing an Airport Master Plan to present the community and airport's vision for a 20-year strategic development plan. According to the Notice of Preparation (NOP) dated February 7, 2019:

> *The Project would involve both landside and airside components. The landside components include a hangar site within the westernmost portion of the airport. The Airport Master Plan identifies up to 92 new hangars, as well as space for 48 new tie-down areas. Some of the smaller hangars would be designed to meet a demand for luxury hangars. Implementation of several of the larger 75,000 square-foot (sf) hangars would require modification of the hotel leasehold. Also within the westernmost area are the three existing structures which will be evaluated as part of the PEIR for their historic potential. A 6,000-sf expansion to the existing terminal building is proposed (due to a deficit of space), along with other improvements such as a public viewing area (outside the fence line), aircraft wash racks, and a self-service fueling facility (fuel island). As denoted by the green hatch on Attachment 2, there are several areas of the airport that are subject to private leases which are not a part of the Project. In addition, the expansion of the San Diego Fire Department station within airport property is a separate City of San Diego project that is not a part of the Project to be analyzed in the PEIR.*[1]

The 2019 NOP proposed Project recommended the evaluation of Building 6, Building 7, and Building 8 (Figure 2). As shown in Figure 3, the Proposed Airport Plan associated with the Master Plan Update avoids impacts to Building 6, Building 7, and Building 8.

The March 2025 update to the PEIR states the Hangar Sites project scope as:

> ***3.4.2.2 Hangar Sites***
> *The AMP includes construction of up to 92 new hangars, as well as space for 48 new tie-down areas, within the westernmost portion of the airport, as shown in Figure 3-1. Some of the smaller hangars would be designed to meet a demand for luxury hangars. Implementation of several of the larger 75,000 SF hangars would require encroachment into the hotel leasehold.*
>
> *Within the westernmost area of the Airport are three existing hangars: Buildings 6, 7, and 8. These hangars have been evaluated for their historic potential and have been determined to be eligible for listing in the San Diego Register of Historic Resources,*

[1] City of San Diego, *Public Notice of Preparation of a Program Environmental Impact Report And Scoping Meeting*, City of San Diego Planning Department, February 7, 2019.

> *the California Register of Historical Resources (CRHR), and the National Register of Historic Places (NRHP). These hangars would be retained in their current state as part of the AMP. Any maintenance, repairs, or stabilization to the historic hangars, while currently unplanned, would comply with the U.S. Secretary of the Interior's Standards for the Treatment of Historic Properties.*[2]

Project scope activities concerning Building 6, Building 7, and Building 8 are noted to consist only of "currently unplanned" maintenance, repairs, or stabilization. Therefore, for the purposes of this HRTR, IS Architecture has been tasked with evaluating Building 6, Building 7, and Building 8 for their historic potential and the current PEIR scope. Because details regarding scope, design, and any construction activities are not available at the programmatic level and not possible for unplanned work, this analysis is made with the assumption that the project scope and work would comply with the Secretary of the Interior's Standards as applicable as stated in the PEIR. This report does not evaluate the larger proposed Montgomery-Gibbs Executive Airport Master Plan and its impact on any other historical resources currently identified or structure that will be 45 years or older at the time of specific work items during the Master Plan.

1.2 Report Organization

This report follows the City of San Diego's standard HRTR narrative format and guidelines. Chapter 1 introduces the project description, area, and personnel. Chapter 2 discusses the project's immediate physical setting, as well as the project area vicinity and larger historic context. Chapter 3 includes an explanation of the methodology, and the results of archival and field surveys. It also includes a description of Building 6, Building 7, Building 8, and their site. Chapter 4 contains evaluations of the built resources for eligibility for listing on the NRHP, the CRHR, and the SDRHR. Chapter 5 includes the report's findings on eligibility, identifies impacts and mitigation measures, and provides an overall conclusion. A bibliography, appendices, and DPR forms follow.

1.3 Project Area / Area of Potential Effect

The project area, or area of potential effect (APE), encompasses the entirety of the Montgomery-Gibbs Executive Airport (Figure 1). The Montgomery-Gibbs Executive Airport is located within the Kearny Mesa Community Plan Area of the City of San Diego. It is situated north of Aero Drive, east of SR-163, south of Balboa Avenue, and west of Ruffin Road. Buildings 6, 7, and 8 are located adjacent to Kearny Villa Road near the southwest corner of the project area.

[2] Montgomery-Gibbs Executive Airport Master Plan PEIR December 2024, pg. 3-12

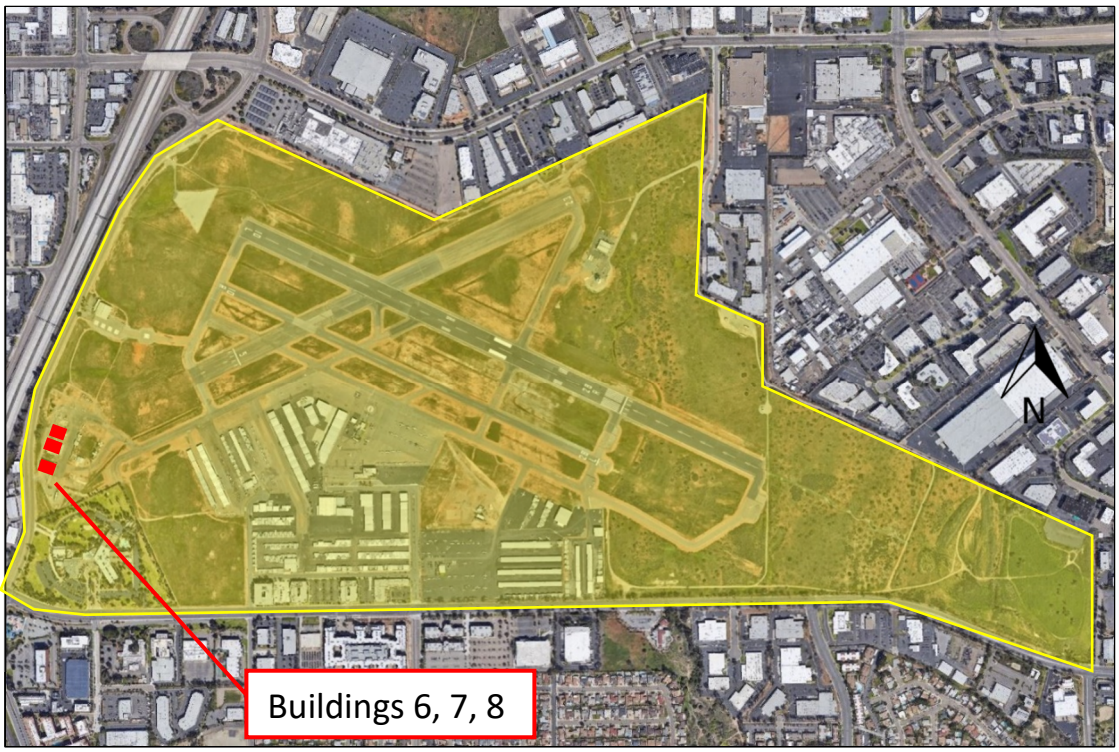


Figure 1: Project Area/Area of Potential Effect. *Google Maps, 2019.*

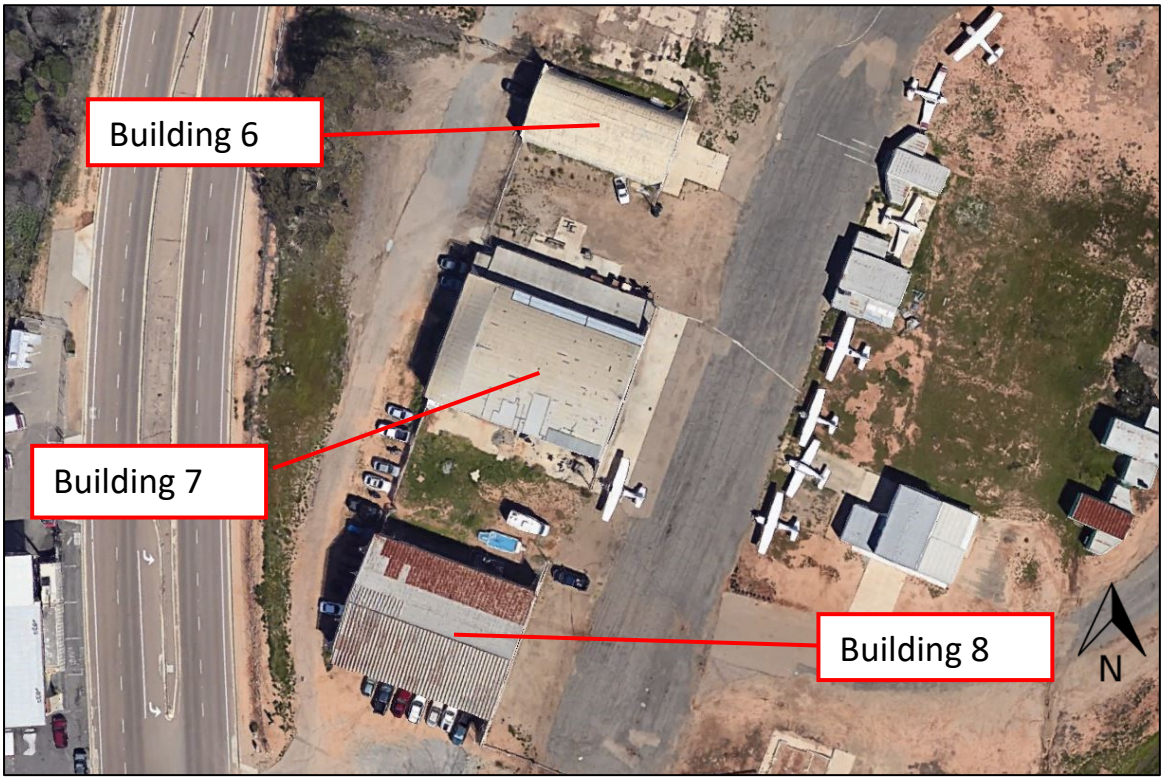


Figure 2: The three hangars evaluated in this report. *Google Maps, 2019.*

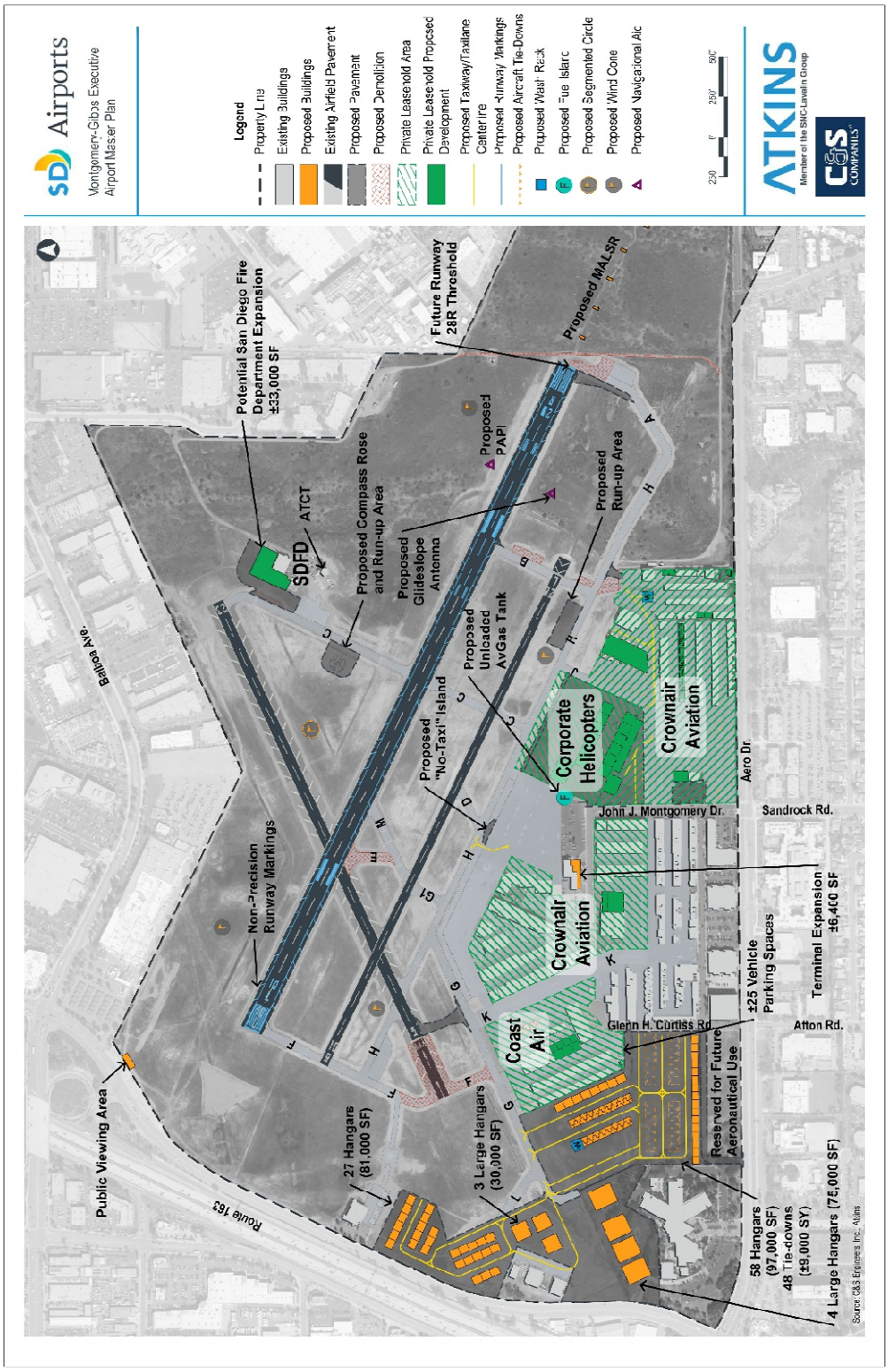


Figure 3: Proposed Airport Plan. HELIX Environmental Planning.

1.4 Project Personnel

IS Architecture Historic Preservation Specialist Christopher Usler authored this report in 2019. IS Architecture Historic Preservation Specialist Peter Kempson was the Project Manager and primary author of the report in 2024 and 2025. Mr. Usler conducted a site visit field survey and a photographic survey, conducted archival research on the project area, completed the appropriate California Department of Parks and Recreation Series 523 (DPR) forms, and evaluated the project area for national, state, and local historic register eligibility. IS Architecture Historic Preservation Program Manager Rebecca McManus and Principal Architect Ione Stiegler, FAIA, reviewed and edited the report for accuracy. Peter Kempson updated this report per the 2024 and 2025 PEIR revisions and evaluated the impact of the Montgomery-Gibbs Executive Airport Master Plan Update PEIR. IS Architecture Principal Architect Ione Stiegler, FAIA, reviewed and edited the updated report for accuracy.

2 Project Setting

2.1 Physical Project Setting

The physical project setting of the Montgomery-Gibbs Executive Airport is composed of developed and undeveloped areas. The developed portion features heavily paved areas with aviation-related buildings, structures, and equipment. The developed areas include three paved runways connected by paved taxiways and access roads. Besides the control tower, the buildings are typically one-story in height and include hangars, administration buildings, maintenance garages, and sheds. Other multi-story buildings appear along Aero Drive. Structures and objects within the project area support different aviation activities, including radio towers, lighting rigs, and other equipment. Undeveloped portions of the project area feature areas of maintained, non-native grasses, coastal sage scrub, and natural habitats that support vernal pools.

The project area is set within the community of Kearny Mesa in the City of San Diego (Figure 4). It is situated east of Interstate 163 and Kearny Villa Road and northeast of the intersection of SR-163 and I-805. Surrounding the project area to the north, east, and west is a mix of industrial, commercial, and office development along Balboa Avenue and Ruffin Road. A mix of industrial, commercial, and residential developments belonging to the community of Serra Mesa abut the project area south of Aero Drive.

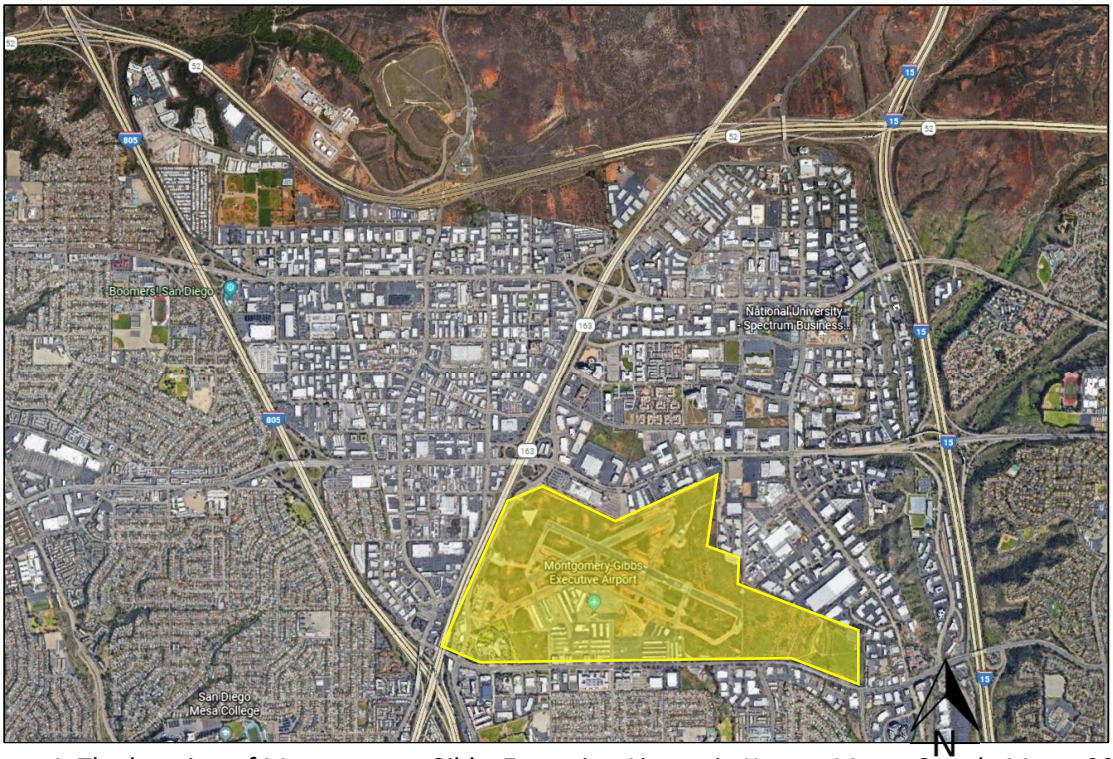


Figure 4: The location of Montgomery-Gibbs Executive Airport in Kearny Mesa. *Google Maps, 2019*

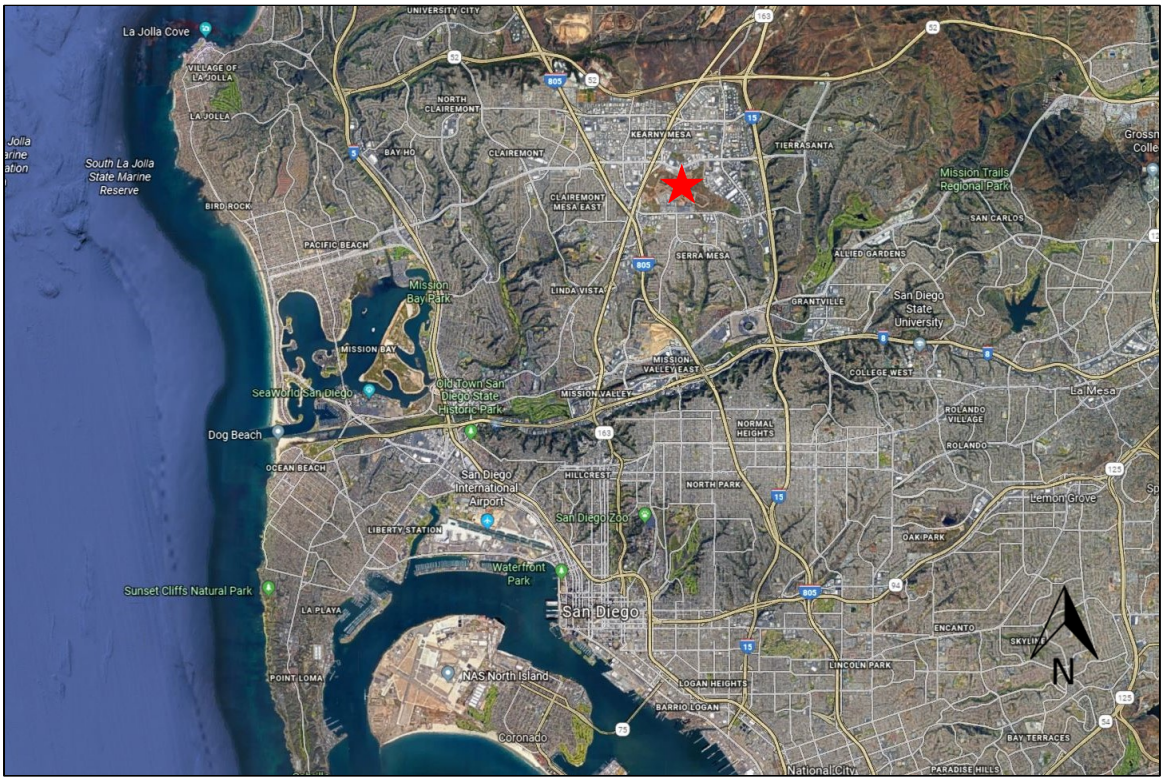


Figure 5: Regional Map showing the location of Project Area. *Google Maps, 2019.*

2.2 Project Area and Vicinity

The Montgomery-Gibbs Executive Airport, originally known as Gibbs Field, was opened by William "Bill" Gibbs, Jr. in 1937. During this time, the project area and surrounding vicinity, later known as the Kearny Mesa community, was completely undeveloped land covered in sagebrush and other chaparral vegetation. After clearing the previously undeveloped land for two dirt runways, Gibbs Field served as an airfield for a small group of private aviators and a training ground for flight schools.

In 1940, the airport was leased to Ryan Aeronautical Co., who expanded and upgraded the field as a training ground for its flight school.[3] Civilian aviation was prohibited after the start of World War II and Bill Gibbs was forced to relocate his operation to Arizona.[4] Gibbs returned to his airport after the war and, between 1947 and 1950, constructed the three hangars known as Buildings 6, 7, and 8. It was also in 1947 that the City of San Diego acquired the airport from Gibbs, who was granted a lease to continue operating his business on-site.[5] Shortly thereafter, Gibbs Field was annexed by the City, and a large expansion project was undertaken to update the airport.[6] This undertaking included the re-centering of the airport, paving the runways, and the erection of new buildings and hangars. New infrastructure improvements

[3] "S.D. Air Corps Training School Doubles Classes," *San Diego Union*, July 15, 1940.
[4] Donald H. Harrison, "San Diego's historic placed: Montgomery Field as recalled by aviation pioneer Bill Gibbs," *sdjewishworld.com,* June 22, 2010. https://sdjewishworld.wordpress.com/2010/06/22/san-diegos-historic-places-montgomery-field-as-recalled-by-aviation-pioneer-bill-gibbs/0/
[5] "City in Control of Gibbs Airport," *San Diego Union*, October 16, 1947.
[6] "City Will Annex Airport To Avoid County Tax," *San Diego Union*, April 15, 1948.

surrounding the airport around the same time included the development of U.S. 395 and the Cabrillo Freeway (both now making up SR-163) and other roads like Aero Drive, West Aero Way and East Aero Way (now Glenn H. Curtiss Road and John J. Montgomery Drive, respectively).

The airport was renamed Montgomery Field in 1950 following the city's redevelopment. Although the city had initially intended the airport to serve as its only private flying field, by the mid- 1950s Montgomery Field was seriously being considered as the city's major airport of the future.[7] The Navy opposed this plan due to the close proximity of Montgomery Field and Miramar Naval Air Station (NAS) and it was no longer being considered by 1960.[8] However, an airport upgrade was deemed necessary, and a master plan recommending further development was approved in the mid-1960s. As a result of this, a modern control tower was built in 1965.[9] Further construction of administration buildings and large scale paving including the runways, taxiways, and new spaces for aircraft and automobile parking, followed shortly thereafter.[10] Private aviation continued to grow in popularity during the 1970s, and Montgomery Field became one of the busiest airports in the nation.[11] Much-needed improvements and system updates occurred in the late-1970s, including the installation of a modern instrument landing system.[12]

The airport's expansion, combined with the infrastructure improvements in the surrounding area in the late 1940s and early 1950s, led to Kearny Mesa being recognized as a prime location for future industrial development. Businesses were specifically attracted to the area because of the proximity of the airport.[13] Tensions between the city's residential and industrial needs, however, delayed any substantial development in the area until the mid-1950s. By then, the area that would become the community of Kearny Mesa was predominantly zoned for light-industrial due to the use and height restrictions that existed around Montgomery Field and Miramar NAS. This further enticed major aircraft, aeronautical, and defense-related companies to the area. Some of the major companies to relocate to Kearny Mesa during the 1950s included Ryan Aeronautical Co., Consolidated Aircraft Corp., General Dynamics, and Rohr Aircraft Corp. Other, more diversified, companies included Cubic Corp, a large electronics research company.

The residential development that was forced outside of the airfield safety zones surrounded Kearny Mesa to the south and east. As shown in a 1964 aerial photograph, these areas, which comprised the communities of Serra Mesa and Clairemont, had been nearly built out by that time. Industrial development followed suit, and by 1969 most of the available industrial land in Kearny Mesa was

[7] "New Plans for S.D.," *San Diego Union*, February 9, 1947; "Is Montgomery A Practical Airport Site?," *San Diego Union*, March 10, 1957.
[8] E.G. Martin, "Montgomery Field Plan Vetoed By Navy: Potential Interference with Miramar Cited," *San Diego Union,* December 15, 1960.
[9] "Dedication Set At Field Today," *San Diego Union*, July 31, 1965.
[10] "Dynamite Blast Sparks Airport Tower Rights," *San Diego Union* July 19, 1964; "Rights Planned At Montgomery Airfield Tower," *San Diego Union* July 15, 1965.
[11] Ken Hudson, "Montgomery Field Has Biggest Increase: San Diego's Skies Buzzing With Aircraft Activity," *San Diego Union*, May 21, 1978.
[12] "FAA Will Upgrade 3 Area Airports," *San Diego Union*, August 8, 1979
[13] "Grove Says 9 New Industries Interested in Locating Here," *San Diego Union*, March 4, 1951.

occupied.[14] While industrial development never fully ended, the declining availability of large tracts in the area had caused it to slow in the late 1960s. However, the availability of smaller parcels resulted in explosive commercial, retail, and office development in the 1970s and 1980s. As is shown in the aerial photograph (Figure 9), the entire community of Kearny Mesa had been effectively built out by 1989.



Figure 6: The recently expanded Montgomery Field in 1952. Kearny Mesa had remained completely undeveloped at this time due to zoning issues. The early development of the Serra Mesa community can be seen south of the airport. *USDA.*

[14] "EDC Attracts Firms to San Diego Area," San Diego Union, January 1, 1969.



Figure 7: Montgomery Airport, the industrial development of Kearny Mesa, and the residential development of surrounding communities in 1964. *USDA.*

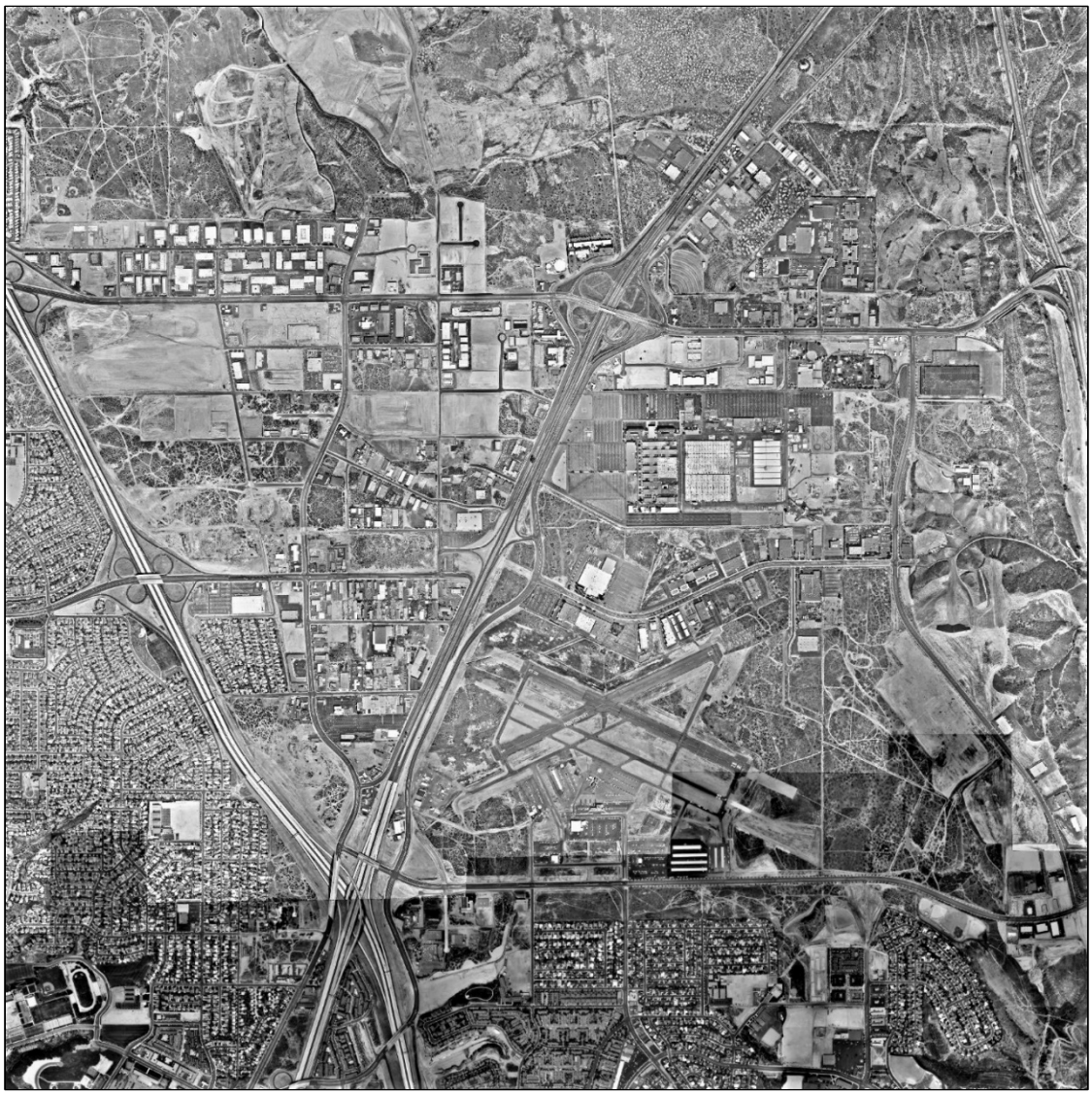


Figure 8: Montgomery Field, Kearny Mesa, and surrounding communities in 1972. *USGS.*



Figure 9: Montgomery Field, Kearny Mesa, and surrounding communities in 1989. *USDA.*

2.3 Historical Context

Prior to settlement, the community now known as Kearny Mesa was part of a large area solely occupied by the native Kumeyaay people. After the arrival of the Spanish explorers, the area was claimed by Spain for the Mission San Diego de Alcalá. After the Mission was secularized following Mexican independence in 1822, the land was parceled out as part of a massive tract known as Rancho Ex-Mission San Diego. By the end of the 19th century, the mesa north of Mission Valley had become known as the Linda Vista mesa and a few small farming settlements had developed around present-day University City and Miramar. In 1891, a large swath of Ex-Mission land, which would come to include a major portion of the Montgomery-Gibbs Executive Airport, was surveyed, subdivided, as parceled out as part of the New Riverside subdivision (see appendix C.3, pg. 85). These parcels were sold to speculators but due to the complete lack of water, roads, and other improvements, the lots remained undeveloped.

The most significant development to occur on the mesa land by the turn of the 20th century was the creation of the Inland Highway. This road, which ran from San Diego's Old Town, across present-day Kearny Mesa, to the Old Poway Road and on to Los Angeles, was improved from what was likely an old trail from the Ex-Mission era.[15] The land on the Linda Vista mesa remained otherwise untouched until 1917 when the outbreak of World War I resulted in the explosive development of Camp Kearny near present-day Marine Corps Air Station (MCAS) Miramar. Camp Kearny was a large, completely self-sustaining military installation that brought improvements to the Ex-Mission lands for the first time. Although the war's end in 1918 effectively halted any further inland development, the camp's influence was such that the entire mesa became commonly known as the Kearny mesa by the early 1920s.

The Kearny Mesa's first residential subdivision, named "Chesterton," was developed by O.W. Cotton in 1927 and was located around the present-day community of Linda Vista. This development was only made possible, however, due to advancements in the city's water development and the creation of the Sixth Street Extension, which provided a through boulevard from the Kearny Mesa to downtown San Diego. Despite the early improvements the military brought to the north, and those brought to the south by the city, the general lack of roadways, water, and other improvements in the heart of the Kearny Mesa continued to make expanding development further inland impossible.

The inability to develop the land likely played a major role in its relative affordability. Looking for cheap land that would not flood, Bill Gibbs acquired 25 acres of land in the New Riverside subdivision on the Kearny Mesa in 1937 with the dream of establishing his own aviation field and business.[16] During that time, the closest development to the north was Camp Kearny, which by then had been renamed Camp Holcomb. The Chesterton subdivision was located a few miles southwest. Grantville, one of San Diego's oldest communities, existed some miles southeast across Murphy Canyon Road. Other than the Inland Highway, no prior development is known to have existed in the immediately surrounding area. Therefore, the creation of Gibbs Field in 1937 was not only among the first developments to occur on the mesa north of Mission Valley, but it was also the first known development in the area now known as the community of Kearny Mesa.

[15] "Highway 395," *City of Poway, California*, https://poway.org/188/Highway-395. Accessed April 12, 2019.
[16] Harrison, 2010.



Figure 10: 1941 aerial looking northeast at Gibbs Field and the Inland Highway, which was redeveloped as U.S. 395 (now SR-163). *Original photo courtesy of Buzz Gibbs, Gibbs Flying Service.*

In 1940, Gibbs Field was leased to the Ryan School of Aeronautics who used the airfield for its Army Air Corps pilot training program.[17] To better support its operation and to accommodate its growing enrollment, Ryan expanded the runways and likely added small ancillary buildings and barracks for the cadets in training.[18] As civilian aviation so close to the coast was banned following the onset of World War II, Bill Gibbs relocated to Tucson, Arizona, where he continued work as a flight instructor.[19] With Gibbs in Arizona, the United States military took control of Gibbs Field and used the airport as a training ground for bombing exercises and simulated battles.[20]

Bill Gibbs returned to the airport shortly after the end of the war in 1945 and continued to provide flying lessons and other aviation-related services.[21] Sometime in 1946 or early 1947, Gibbs acquired Building 6 and Building 7, which were likely sold as surplus buildings no longer needed by the Navy following the war. Although no direct evidence exists, it is believed that Building 7 was originally a women's gymnasium located on Coronado's NAS North Island, and that after being acquired, it was dismantled, ferried across

[17] "S.D. Air Corps Training School Doubles Classes," 1940.
[18] "Ryan's Classes Show 500% Gain," *San Diego Union*, August 5, 1940.
[19] Harrison, 2010.
[20] "House Navy Group Members See Amphibious Force Act," *San Diego Union*, May 26, 1942.
[21] Harrison, 2010.

the bay, and shipped to Gibbs Field where it was reassembled.[22] A historic photograph from early March 1947 (Figure 11) shows that the reassembly of Building 6 was nearly completed by that time and that Building 7 was just getting underway.[23] Although Building 8 does not appear in this photograph, another photograph from 1950 (Figure 12) proves that it was built sometime between 1947 and 1950. Building 8, which is said to have been custom built by hand, was likely built from surplus materials acquired from the military.[24] As is evidenced by the historic photos, a few ancillary buildings and trailers had also surrounded the three hangars at the time.



Figure 11: Gibbs Field, March 1947. *San Diego History Center, UT84_22856.2*

In October 1947, the City of San Diego purchased the airport from Bill Gibbs with plans to make it the City's only private flying field.[25] As part of the deal, Bill Gibbs was granted a lease on 15 acres of the field to continue operating his aviation business.[26] Almost immediately after acquiring the airport, the City began work on a major expansion and improvement project, which included moving ten former Navy

[22] This information was provided during an interview with Buzz Gibbs of Gibbs Flying Service.
[23] The original negative from SDHC only lists the year, 1947, as the date. However, the same photograph was used for an article in the *San Diego Union* on March 9, 1947. See: "Flying for Fun," *San Diego Union*, March 9, 1947.
[24] This information was provided during an interview with Buzz Gibbs of Gibbs Flying Service.
[25] "New Plans for S.D.," 1947.
[26] "City in Control of Gibbs Airport," 1947.

buildings from Balboa Park to the center of the airport; grading the field; extending, surfacing, and lighting the runways; paving new taxiways and parking areas; updating telephone lines; installing water and sewer lines; and creating a new access road to the recently developed U.S. 395.[27] The new runway improvements were completed and officially approved in 1949.[28]



Figure 12: Montgomery Field and surrounding area on October 10, 1950. *San Diego History Center, #80.7044 Airport - Montgomery Field 10-10-50.*

That same year, an ordinance was passed dedicating the public land required for new airport access roads: Aero Drive, East Aero Way (now John J. Montgomery Drive), and West Aero Way (now Glenn H. Curtiss Road).[29] As is shown in Figure 12, and supported in a bid notice from January 22, 1950, an early section of present-day Kearny Villa Road connecting Aero Drive to the Inland Highway was developed in 1950, as well.[30] Capping off all of this major development was Resolution No. 97985, passed by the City Council in May of 1950, which officially renamed the airport to Montgomery Field.[31]

[27] "C.A.A. Grants $20,547 To Aid Gibbs Airport," *San Diego Union,* March 16, 1948; "City to Open Airport Bids," *San Diego Union*, June 13, 1948; "Gibbs Airport Sale to City Near Conclusion," *San Diego Union,* August 3, 1947; "Gibbs Airport Area Annexing Urged," *San Diego Union*, September 24, 1947.
[28] "Officials Look Over Gibbs Field Maps," *San Diego Union*, August 9, 1949.
[29] "Ordinance No. 4015," *San Diego Union*, April 7, 1949.
[30] "Notice Inviting Bids," *San Diego Union*, January 22, 1950.
[31] "Resolution No. 97985," *San Diego Union*, May 25, 1950.

Following the City's airport acquisition, Bill Gibbs continued to lease out Buildings 6 and 7 to various aviation-related businesses like Pacific Airmotive Corp. and Crownair Aviation. As his own business grew, Gibbs moved closer to the center of the airport and began to rent out spaces for aircraft in newly built T-type hangars (Figure 16).[32] As the airport attracted more aviation-related activities and businesses, so too did the surrounding area. One of the earliest examples was reported one month after the City's acquisition of the airport by the *San Diego Union,* which detailed the relocation plan of the Stinson Aircraft Tool & Engineering Corp. to a large plant just off U.S. 395 on Clairemont Mesa Road in Kearny Mesa.[33]

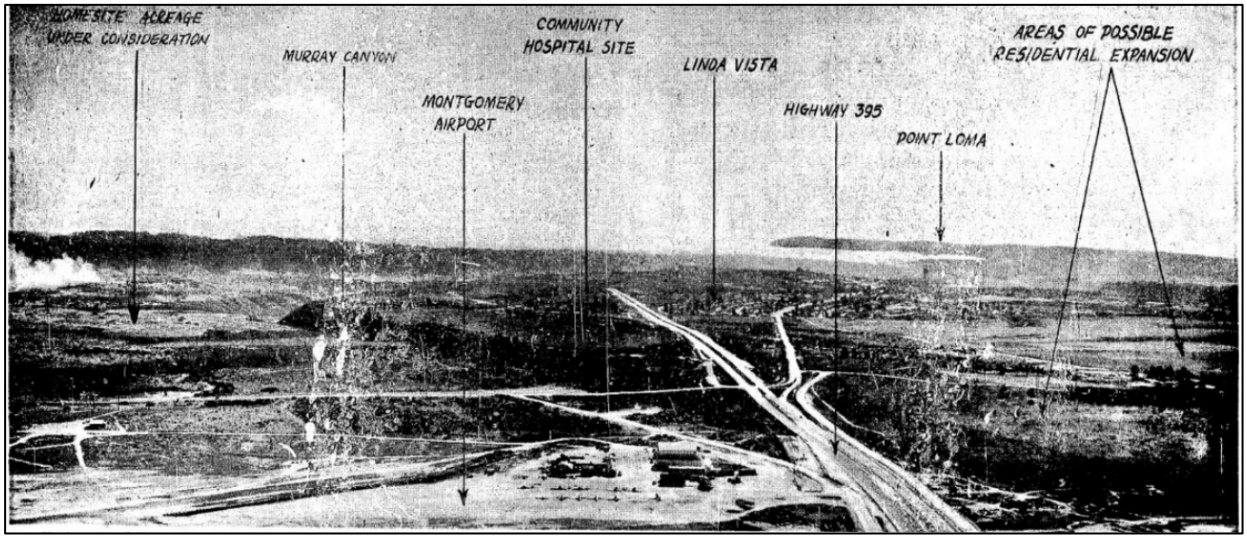


Figure 13: Proposed development south of Montgomery Field. Buildings 6, 7, and 8 appear in the foreground. "Council May Act on Expansion Today," *San Diego Union*, February 1, 1951.

With the newly developed Linda Vista housing project on the southern end of the mesa and Miramar NAS to the north, the Navy's presence was also growing stronger. In reaction to the growth of both the Navy and the aerospace industry, the City began to forecast a major housing boom in the Kearny Mesa area around 1951.[34] In response to the proposed residential development, the Navy made it clear that it favored agricultural, recreational and light industrial zoning around Miramar NAS, and stated that no residences were to be built within a 12,000 foot, or 2.3 mile, radius of the installation's runway.[35] Large areas of Kearny Mesa land outside of the Navy's 12,000 foot radius, which had already been zoned for residential use, were also called to be recategorized as temporary holding zones while the zoning issue was debated. The reason stated by the *San Diego Union* was that "although outside the Miramar circle, the recently annexed land is opposite the city's Montgomery Field."[36]

[32] Harrison, 2010.
[33] "Stinson Aircraft Plans Expansion," *San Diego Union*, November 10, 1947.
[34] "Council May Act On Expansion Today," *San Diego Union,* February 1, 1951.
[35] "Owners Will Confer On Mesa Zoning," *San Diego Union*, December 17, 1953.
[36] "Council Delays Kearny Mesa Zoning Case," *San Diego Union*, December 16, 1953.

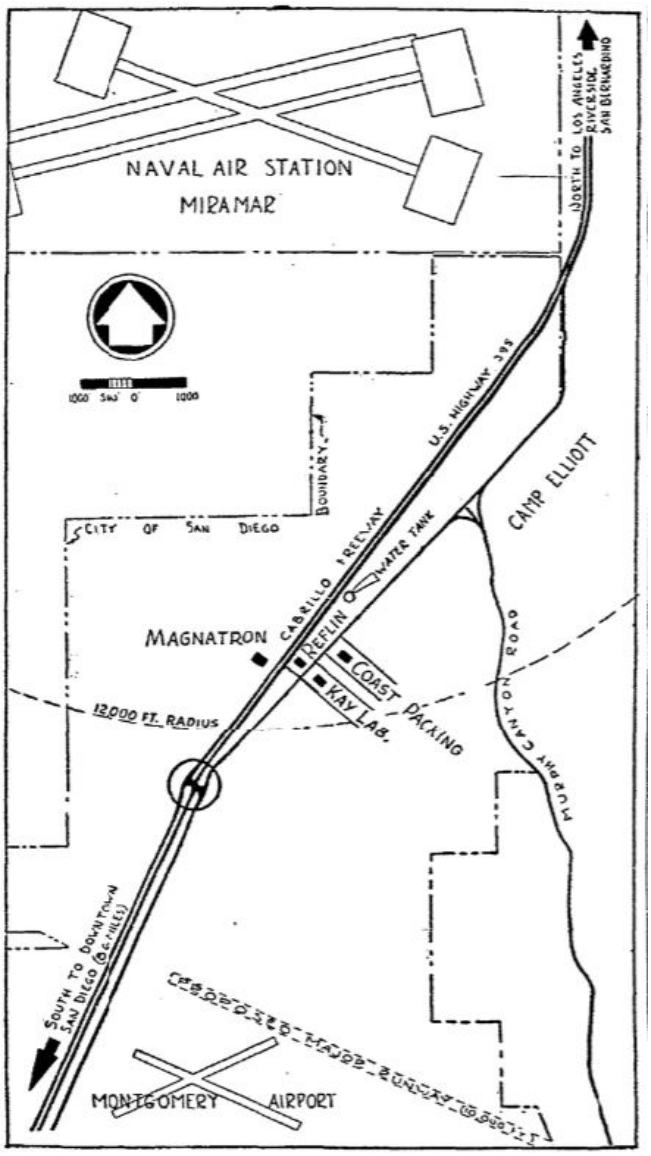
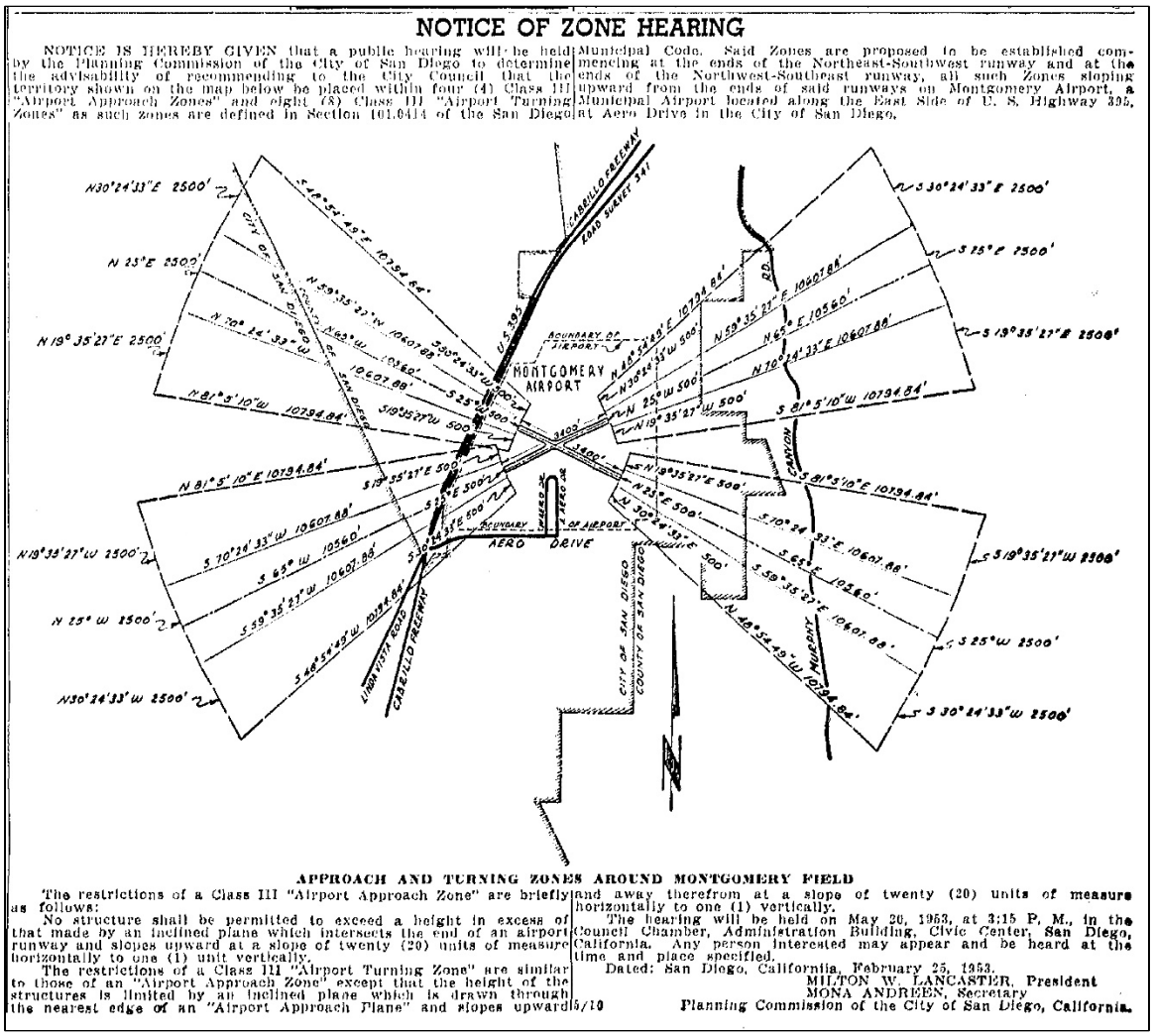


Figure 14: Map showing location of Montgomery Field and Miramar NAS, as well the 12,000 foot radius in which the Navy denied residential development. Image taken from "Kearny Mesa Land Sought By Navy," *San Diego Union,* January 20, 1956.



NOTICE OF ZONE HEARING

NOTICE IS HEREBY GIVEN that a public hearing will be held by the Planning Commission of the City of San Diego to determine the advisability of recommending to the City Council that the territory shown on the map below be placed within four (4) Class III "Airport Approach Zones" and eight (8) Class III "Airport Turning Zones" as such zones are defined in Section 101.0414 of the San Diego Municipal Code. Said Zones are proposed to be established commencing at the ends of the Northeast-Southwest runway and at the ends of the Northwest-Southeast runway, all such Zones sloping upward from the ends of said runways on Montgomery Airport, a Municipal Airport located along the East Side of U. S. Highway 395, at Aero Drive in the City of San Diego.

APPROACH AND TURNING ZONES AROUND MONTGOMERY FIELD

The restrictions of a Class III "Airport Approach Zone" are briefly as follows:

No structure shall be permitted to exceed a height in excess of that made by an inclined plane which intersects the end of an airport runway and slopes upward at a slope of twenty (20) units of measure horizontally to one (1) unit vertically.

The restrictions of a Class III "Airport Turning Zone" are similar to those of an "Airport Approach Zone" except that the height of the structures is limited by an inclined plane which is drawn through the nearest edge of an "Airport Approach Plane" and slopes upward and away therefrom at a slope of twenty (20) units of measure horizontally to one (1) vertically.

The hearing will be held on May 20, 1953, at 3:15 P. M., in the Council Chamber, Administration Building, Civic Center, San Diego, California. Any person interested may appear and be heard at the time and place specified.

Dated: San Diego, California, February 25, 1953.

MILTON W. LANCASTER, President
MONA ANDREEN, Secretary
Planning Commission of the City of San Diego, California.

5/10

Figure 15: Approach and Turning Zones Around Montgomery Field dictated development within the surrounding area. Image taken from "All Weather Field Called Vital Need," *San Diego Union*, July 11, 1953.

The City viewed Montgomery Field as "essential to San Diego's development" and partnered with the Civil Aeronautics Administration in 1953 to prepare "building-height limits and zoning legislation for the Montgomery Field area."[37] The same was also sought in the area around Miramar NAS, which remained outside the city limits. Although the legality of instituting such building heights around Miramar NAS and Montgomery Field was debated, it was reported in June of 1953 that planning director Glenn A. Rick stated "We're proceeding with Montgomery, but we're 'held up' on Miramar."[38] It appears that it wasn't until 1960, though, that an official ordinance was adopted establishing the "Airport Approach Zones" and "Airport Turning Zones".[39] An ordinance that was adopted by City Council in 1953, however, put an end to some of the debate over land use within Kearny Mesa by rezoning 101 acres of land within the Navy's

[37] "All Weather Field Called Vital Need," *San Diego Union*, July 11, 1953.

[38] "Height Limit Opinion Divided," *San Diego Union* June 4, 1953.

[39] "Ordinance No. 8310," *San Diego Union*, June 19, 1960.

12,000 foot radius for light industrial purposes.[40] The following month, the *San Diego Union* reported that, "moving to provide Kearny Mesa land for future industry, the City Council yesterday authorized City Mgr. Campbell to execute an agreement for the purchase of 180 acres northwest of Montgomery Field."[41] Shortly thereafter, in early 1954, the San Diego Chamber of Commerce approved a resolution establishing a light industrial zone for additional Kearny Mesa land within 12,000 foot radius of the center of the Miramar NAS runways.[42] This resolution not only took into account the proximity of Miramar NAS, but it "also asked that present and future needs of Montgomery Field be examined carefully so that the field's growth will not be stunted by residential building getting too close."[43]

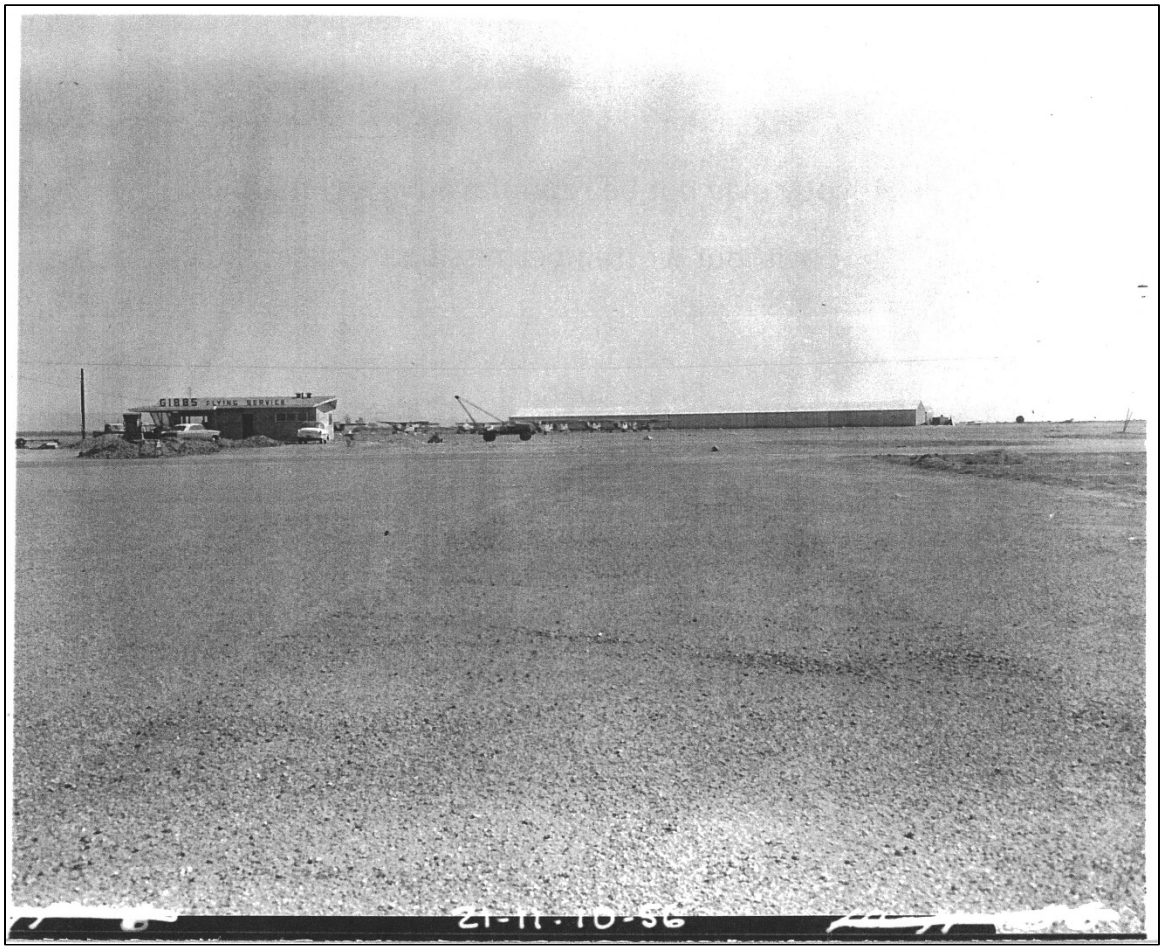


Figure 16: Gibbs Flying Service relocated to the newly graded, central, part of the airport around 1956. Newly built T-type hangars are visible in the background. *San Diego History Center, 2002-15, Box 2, Folder 1 Kearny Mesa.*

Tensions over residential and industrial zoning continued throughout the early 1950s as new, and typically large, acreages of land around Montgomery Field were annexed by the City. Residential developments

[40] "Kearny Mesa Zoning for Light Industry Adopted by Council," *San Diego Union,* September 23, 1953.
[41] "City Will Buy Mesa Land for New Industries," *San Diego Union*, October 16, 1953.
[42] "Chamber Asks End Of 2-Year Delay On Miramar Zoning," *San Diego Union*, January 14, 1954.
[43] Ibid.

occurred mainly to the south and east of the airport, in communities now known as Serra Mesa, Linda Vista, and Clairemont. However, due to Miramar NAS to the north and Montgomery Field to the south and east, the land between the two, which today makes up the community of Kearny Mesa, was instead prioritized for industrial and commercial use.



Figure 17: Montgomery Field and Kearny Mesa in 1960. *San Diego History Center, 92_18835-2095 Montgomery Field - General Dynamics - aerial - 1960*

Kearny Mesa was quickly recognized as "offering the city's best potential for future industry."[44] This was partly due to accessibility to U.S. 395. However, according to Stanley Grove, general manager of the San Diego Chamber of Commerce at the time, "the Kearny Mesa area, on Highway 395 beyond Linda Vista" was an especially attractive location for industrial development because "its proximity to Montgomery airport is important to manufacturers."[45] Recognizing the benefits of the area, a number of major aeronautical and defense-related companies, such as Ryan Aeronautical Co., Solar Aircraft Co., Consolidated Aircraft Corp., General Dynamics, and Rohr Aircraft Corp., began relocating to the area between 1954 and 1958. Other, more diversified, companies such as Cubic Corp, an electronics research firm, moved to the area as well.

[44] "Talk on Zoning Will Continue," *San Diego Union*, September 9, 1953.
[45] "Grove Says 9 New Industries," 1951.



Figure 18: Aerial photo c.1960, looking southeast at Convair/General Dynamics and other industrial development. Montgomery Field appears on the right-hand side of the photo. *San Diego History Center, 1998_63-19.*

Also beginning in the mid-1950s was an investigation to develop Montgomery Field into the City's primary airport.[46] The proximity of Montgomery Field to Miramar NAS proved to be too problematic, though, and, after the Navy outright rejected the idea, the proposition was no longer being considered by 1960.[47] Uncertain as to the future of the airport, the city began developing a master plan to recommend much needed upgrades and to help guide its future development.[48] It was reported that although "the plan is not intended as an answer to San Diego's search for a new jet-age municipal airport…development of the field is particularly needed because of the growth of private and business flying activity."[49] Among the work recommended by the master plan, which was approved in 1964, was a wider access road, expanded parking, a new administration building and a control tower.[50] Construction on the control tower began

[46] "Is Montgomery A Practical Airport Site?," *San Diego Union*, March 10, 1957.
[47] Martin, 1960.
[48] Roy C. Johns, "City Council Gets Montgomery Field Development Plan," *San Diego Union*, March 11, 1960.
[49] Ibid.
[50] "Montgomery Field Expansion Detailed," *San Diego Union*, February 23, 1964.

almost immediately and, following its completion in 1965, the City opened bids "on a repaving project for all runways, taxiways and aircraft parking areas at Montgomery Field."[51]

Industrial development in Kearny Mesa continued well into the late-1960s and included an increasing number of industrial parks, such as San Diego City Industrial Park and Aetna Insurance Co.'s Kearny Industrial Park.[52] By 1969, however, most of the industrially zoned land in Kearny Mesa was occupied.[53] As large scale industrial development began to wane in the 1970s, the availability of smaller lots gave way to a wave of explosive commercial, retail, and office development.

Such as it had in the decades prior, Montgomery Field continued to shape the community's development into the 1980s. In 1978, the *San Diego Union* reported on the rapidly increasing popularity in private aviation, stating, "in numbers, San Diego's downtown airport is the least busy…[and that] Montgomery Field on Kearny Mesa is where the biggest increases in aviation are centered."[54] In fact, the popularity of private aviation paired with the increase in corporate traffic at the time had caused Montgomery Field to rank among the top 10 in the nation in the numbers of aircraft based there and the 14th busiest airport overall.[55] To take advantage of this increased traffic the city authorized the construction of a hotel "designed to enable private pilots using Montgomery Field to taxi up to the lobby and check-in before parking their airplanes."[56] Construction began in 1984[57] and the hotel and accompanying golf course was located immediately south of Buildings 6, 7, and 8 at the southwestern corner of the airport, along Aero Drive and Kearny Villa Road.

The traffic of Montgomery Field also brought increased attention from real estate developers and new companies looking to relocate. As was reported by the *San Diego Union* in 1982, "Montgomery Field, until a few years ago only the home of private airplanes for flying clubs and weekend pilots, has taken on a new role – as an emerging North City building site which is becoming a haven for high technology and insurance companies."[58] Although it was largely the surrounding area, which the airport helped to shape, that attracted many new companies, the airport itself did attract a number of new office space users.[59] In particular, new complexes on or immediately adjacent to airport grounds included the Montgomery Airport Plaza, the Viewpoint Plaza, the Dynamic Office Park**,** the Airport Plaza, the Aero Office Park, the Kearny Mesa Office Park, and the Crossroads Building.[60] Although improvements continued into the 1990s and 2000s, both Montgomery Field and Kearny Mesa appeared to be effectively built out by 1989. In 2016, City Council passed a resolution officially renaming the airport Montgomery-Gibbs Executive Airport in honor of Bill Gibbs and the original airfield he created.

[51] "Bid Openings Scheduled On Airport Paving," *San Diego Union*, June 10, 1965.
[52] "Industrial Parks Lune Farsighted Businesses," *San Diego Union,* January 1, 1969.
[53] "EDC Attracts Firms," 1969.
[54] Hudson, 1978.
[55] Ibid.
[56] "City Authorizes Airport Hotel," *San Diego Union,* January 16, 1981.
[57] "Hotels," *San Diego Union*, November 13, 1983.
[58] "Montgomery Field is Building Up," *San Diego Union*, November 14, 1982.
[59] Ibid.
[60] Ibid.

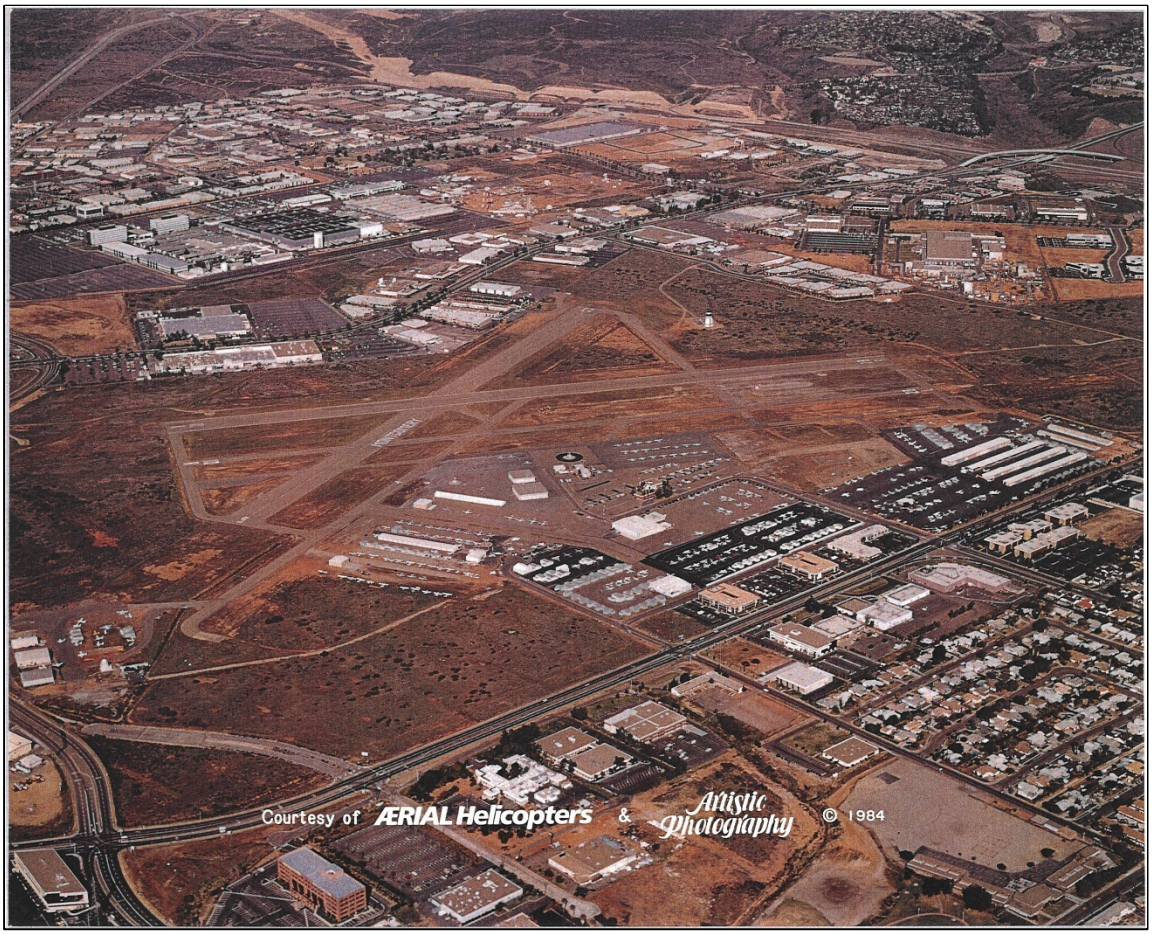


Figure 19: Montgomery Field in 1984. *San Diego History Center, 1998_047.702 Montgomery Field Aero Drive and Kearny Villa Road Intersection at lower left; Brouwer Collection.*

3 Methods and Results

3.1 Archival Research

Several cultural resource reports and research efforts that have been previously conducted for the airport property are on file with the City and were provided to HELIX for the purposes of the Master Plan Update. These were reviewed and used for this report as applicable. Additional archival research was conducted at the following locations:

- County of San Diego Recorder's Office
- County of San Diego Planning & Development Services
- Genealogy Bank (Historic newspapers)
- http://historicalmaps.arcgis.com/usgs (USGS Maps)
- San Diego County Assessor's Office
- San Diego History Center
- San Diego Public Library Online (Sanborn maps)
- www.historicaerials.com (Historic aerial photographs)
- Gibbs Flying Service
- Sorbi Aircraft Maintenance

3.2 Field Survey

Field surveys were conducted by Christopher Usler, MSc, and Rebecca McManus, MHP, in the course of writing this report. A tabular survey log follows.

DATE	SURVEY TYPE	SURVEY PURPOSE	SURVEYOR(S)
02/27/2019	Photographic, Pedestrian	Initial site visit and photographic documentation	Christopher Usler, MSc Rebecca McManus, MHP

3.3 Description of Surveyed Resources

For the purposes of this HRTR, ISA has been tasked with evaluating Building 6, Building 7, and Building 8 for their historic potential . Therefore, only Building 6, Building 7, Building 8, and their site located at 3873 Kearny Villa Road was surveyed. No official boundary was able to be determined for the site located at 3873 Kearny Villa Road. Therefore, the site was approximated based on existing boundaries to the west and south, which are delineated by chain-link fencing; geographic boundaries to the east, delineated by trenches; and by the edge of the access road to the north. These boundaries were also determined based on what the historic photos from 1947 and 1950 showed to be the core of the original Gibbs Field. The site has three potentially eligible resources: Building 6, Building 7, and Building 8. Due to the inability to determine an official boundary, there is no potentially eligible historic district.

3.3.1 Site – 3873 Kearny Villa Road

The site is located along the western boundary of the project area. The site is immediately bounded to the north by open, undeveloped airport land with grasses and other chaparral vegetation. Bounding the site immediately to the east is open land with taxiways that lead further east towards the runways and the administrative center of the Montgomery-Gibbs Executive Airport. To the south, the site is bounded by a hotel with a small golf course. Kearny Villa Road, with SR-163 to its west, runs along the western boundary of the site.

The site features a flat terrain with large areas of asphalt pavement and graded dirt with grass and chaparral vegetation. A chain link fence surrounds the western boundary, dividing Kearny Villa Road from the site. The site is accessed from Kearny Villa Road by an asphalt paved road located near its southwestern corner. From Kearny Villa Road, this access road splits in a number of directions. First, it curves to the north where, after running along the western elevations of Buildings 6, 7, and 8, and past a chain-link fence and gate, curves eastward and continues until merging with a taxiway that leads to the center of the airport. The second split in the access road runs from Kearny Villa Road, east, along the southern elevation of Building 8, past a large chain-link fence and gate, where it merges with a wide, asphalt paved, taxiway that runs roughly northward along the eastern elevations of Buildings 6, 7, and 8. This wide taxiway features two smaller taxiways, one at the southern end and one at the northern end, that curve eastward, across an area of graded dirt and grass, and merge with larger taxiway that continues to the center of the airport. Third, the access road curves south from Kearny Villa Road, which, after a short run, terminates in an asphalt-paved parking lot on the southern boundary of the site just north of the hotel.

Situated close to the western boundary along Kearny Villa Road are Buildings 6, 7, and 8, which are set side-by-side in sequential alignment. Building 6 is the northernmost building. Building 7 is situated to the south and sits between Building 6 and Building 8. Building 8 appears to the south of Building 7 and is the closest to the access point with Kearny Villa Road. The three aircraft hangars are spaced equidistant from each other. Graded areas mainly used for parking aircraft and cars exist between each of the hangars and to the northern and southern sides of Buildings 6 and 8, respectively. A short chain-link fence runs along the western edge of the graded areas to either side of Building 7. As mentioned above, running along the east elevation of these hangars is a wide, asphalt paved taxiway that connects to the runways and the administrative center of the airport.

Some remnants of concrete slab foundations from buildings that once stood on the site are located on the northern side of Building 6 and elsewhere around the site.



Figure 20: 1959 aerial of site, looking west.



Figure 21: Approximate boundaries for the site surveyed for this report.



Figure 22: Site Photo Survey Key Plan. Google Maps, 2019.



Figure 23: Looking NW from NE corner of Building 6 towards Kearny Villa Road and SR-163.



Figure 24: Looking S from NE corner of Building 6 towards the wide, asphalt paved taxiway.



Figure 25: Looking S from NW corner of Building 6 and the asphalt paved access road.



Figure 26: Looking E from the wide, asphalt paved taxiway, towards the runways and center of the airport.

Building 6

Building 6 is a single-story, pre-fabricated, steel-frame aircraft hangar with a semi-cylindrical massing. Oriented westward, its primary elevation faces Kearny Villa Road. It features a slightly raised, poured concrete foundation and a roof made entirely of corrugated galvanized steel panels. The roof curves downward, covering the northern and southern sides of the building, and terminates at the raised concrete foundation. The western end wall is the primary elevation of the building and was constructed with wood framing and sheathing. The exterior of this end wall has a squared, stuccoed, office-like façade that spans three-quarters of the height of the building. This stuccoed front façade features a central, flush door flanked by sets of two, fixed, steel sash windows. The windows closest to center are composed of eighteen lights stacked in three horizontal rows of six. The outer windows are of a similar composition but feature horizontal jalousie window in the top outside corner. Above the squared, stuccoed façade is the rounded top quarter of the western end wall. This top portion is clad in nailed sheets of lead and features a central, wood framed, tripartite window. This window is composed of a central, two-light, aluminum sliding window flanked by narrow, jalousie glass-filled side lights.

The eastern end wall makes up the rear elevation of the building. The lower half of this end wall features an exterior, four panel, horizontal sliding, hangar door. This door system is made of corrugated steel panels that slide sideways along an exposed top track made of a steel box rail and dimensional lumber.

The top track extends out past the sides of the buildings and terminate at vertical supports made of dimensional lumber. These vertical supports are also braced to the corrugated steel panel roof.

Above the hangar door, the rounded top half of the building features a corrugated steel paneled exterior. A horizontal row of four, large, fixed, wood-framed, square-shaped windows appears off-center with the façade. Curved vents made of metal mesh appear above three of the windows.



Figure 27: Detail of 1947 photo looking NE. *San Diego History Center, UT84_22856.2.*

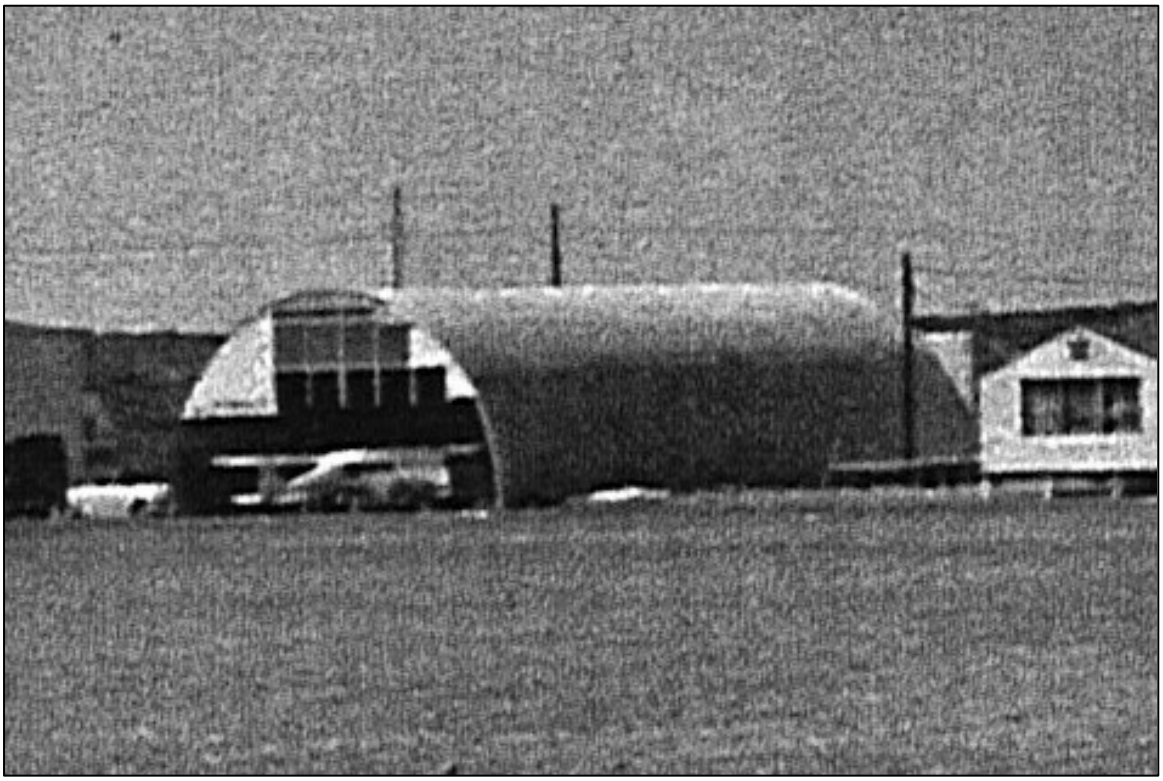


Figure 28: 1956 photo looking SW. *San Diego History Center, 2002-15, Box 2, Folder 1 Kearny Mesa.*



Figure 29: 1956 photo looking SE. *San Diego History Center, 2002-15, Box 2, Folder 1 Kearny Mesa.*



Figure 30: 1959 photo showing rear elevation of Building 6. *David J. Gauthier Memorial Collection, No.7644, November 1959. 1000aircraftphotos.com.*



Figure 31: Building 6 Photo Survey Key Plan. *Google Maps, 2019.*



Figure 32: Three-quarter view showing the north and west elevations.



Figure 33: Three-quarter view showing the east and north elevations.



Figure 34: Three-quarter view showing the west and south elevations.



Figure 35: Three-quarter view showing the west and south elevations.

3.3.2 Building 7

Building 7 is a wood-framed aircraft hangar with a box-like massing. Oriented eastward, its primary elevation faces towards the Montgomery-Gibbs Airport. Its roof is supported by timber bowstring trusses and is covered with asphalt roll roofing. The east facing end wall, and primary elevation, features a large, exterior, four panel, horizontal sliding hangar door system with a steel top track that extends out past the building at both ends of the elevation. The sliding hangar door panels are composed of corrugated steel panels. Above the hangar door is the top portion of the eastern end wall. This exterior is also clad in corrugated steel panels and features letters spelling “Spiders Aircraft.” Extending out near the top of the end wall is an aluminum lighting fixture. A fascia made of dimensionally cut lumber curves along the roof line's top elevation.

The south elevation features a stuccoed exterior wall that is largely uninterrupted except for two, fixed, 16-light, steel windows that covered by a protective steel mesh screen. These windows are located in the center and westernmost corner of the south elevation, respectively. A thin, wood fascia runs the entire length of the south elevation. The hangar's west, or rear, elevation features a stuccoed exterior and three, evenly spaced, fixed, 12-light, steel sash windows. A protective steel mesh screen covers each window. Located above the windows and affixed to the stuccoed exterior wall are letters spelling out “Spiders Aircraft.” Just beneath the roofline is a thin, wood, fascia that runs the length of the rear elevation. Projecting out from the northern corner of the west elevation is a single-story addition with a shed roof. The western elevation of this addition features a stuccoed exterior wall; a three-light, horizontal sliding, aluminum window; a projecting, open eave with exposed rafter tails that terminate behind wooden fascia board.

The shed roofed addition spans the entire lower half of the hangar’s northern elevation. The roof of the addition is covered in asphalt roll roofing and has a narrowly projecting, open eave with exposed rafter tails that terminate behind a fascia made of dimensional lumber. The addition also features a stuccoed exterior wall and a central, outward swinging, galvanized steel double door. East of the double door are four, two-light, horizontal sliding, aluminum windows. To the west of the double door is a fifth window of the same type and configuration as the previous four, as well as two, two-light, horizontal sliding, vinyl windows set between a single, inward swinging, wood door with a full, glass, light. At its western corner, a small portion of the addition recedes back to provide space for an entrance on the west elevation. Here, the recessed, north facing, exterior wall features a lower, identically pitched, shed roof that extends out from beneath the shed roof covering the rest of the addition. The stucco exterior of the original hangar appears above the height of the shed roofed addition to a thin, wood fascia at the base of the roofline.



Figure 36: March 1947 photo looking NE. *San Diego History Center, UT84_22856.2*

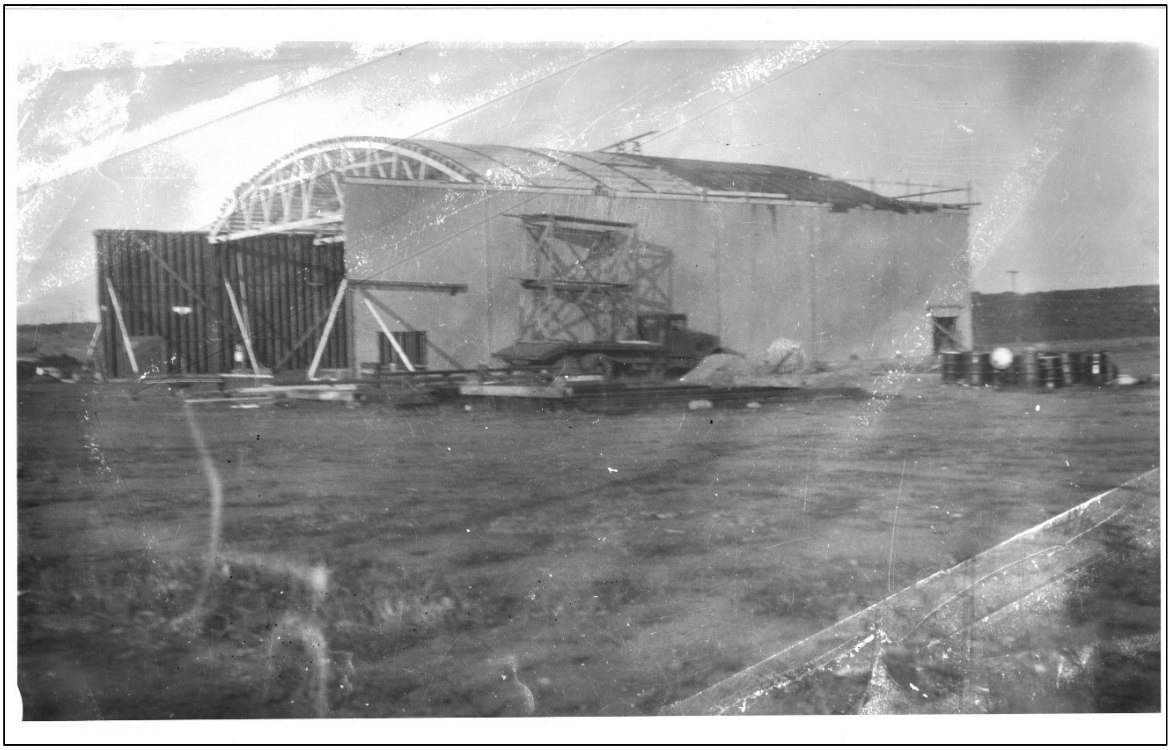


Figure 37: 1947 photo, looking SW. Original photo courtesy of Buzz Gibbs, *Gibbs Flying Service.*

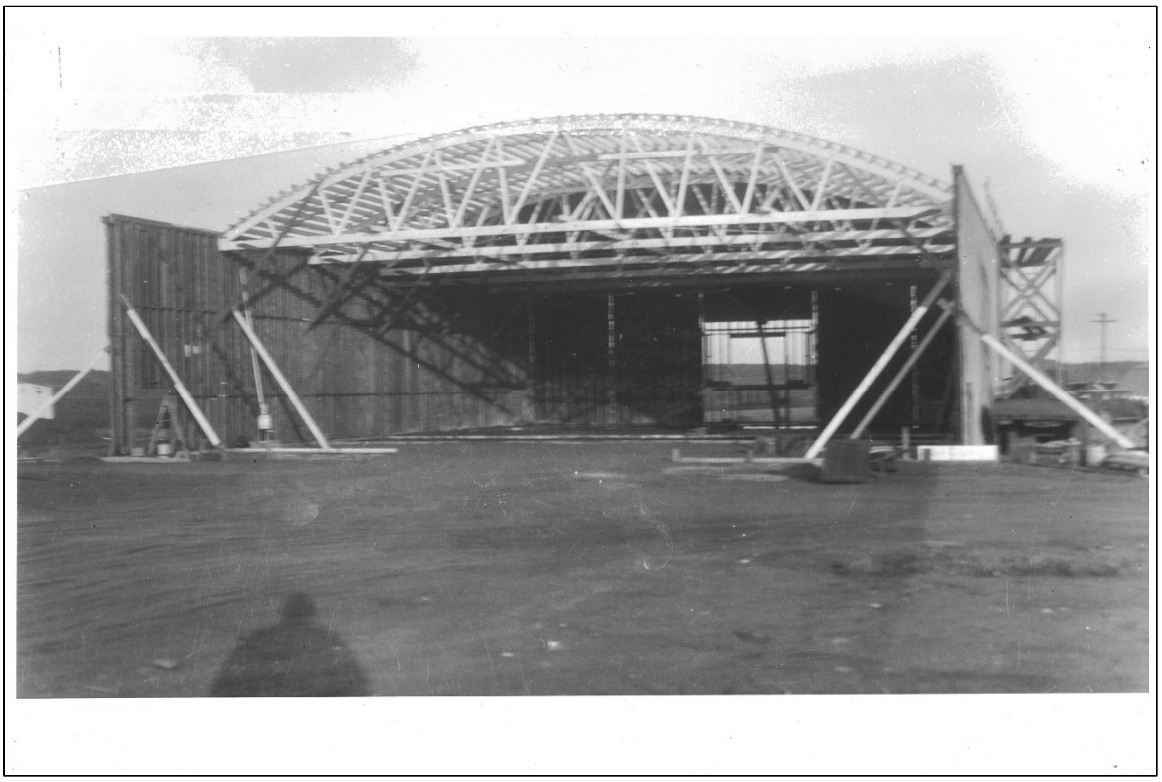


Figure 38: Photo, looking west, in 1947. Original photo courtesy of Buzz Gibbs, *Gibbs Flying Service.*

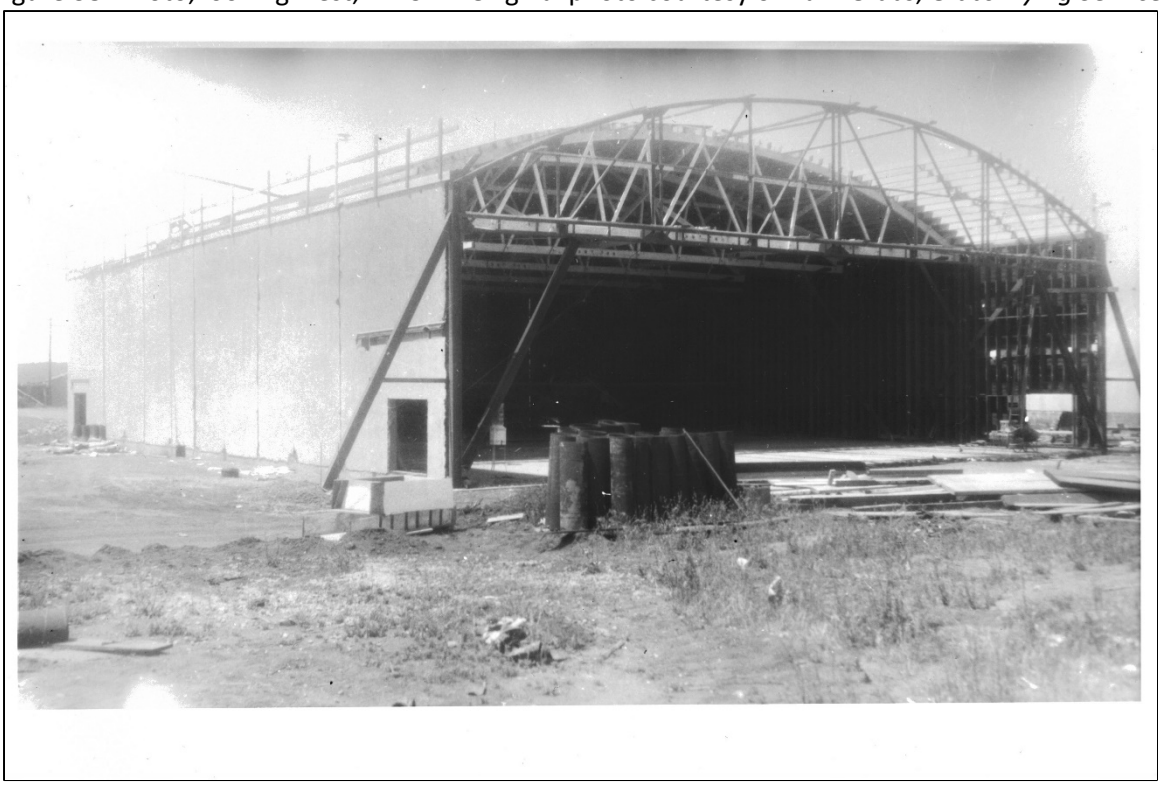


Figure 39: Photo, looking NW, in 1947. Original photo courtesy of Buzz Gibbs, *Gibbs Flying Service.*

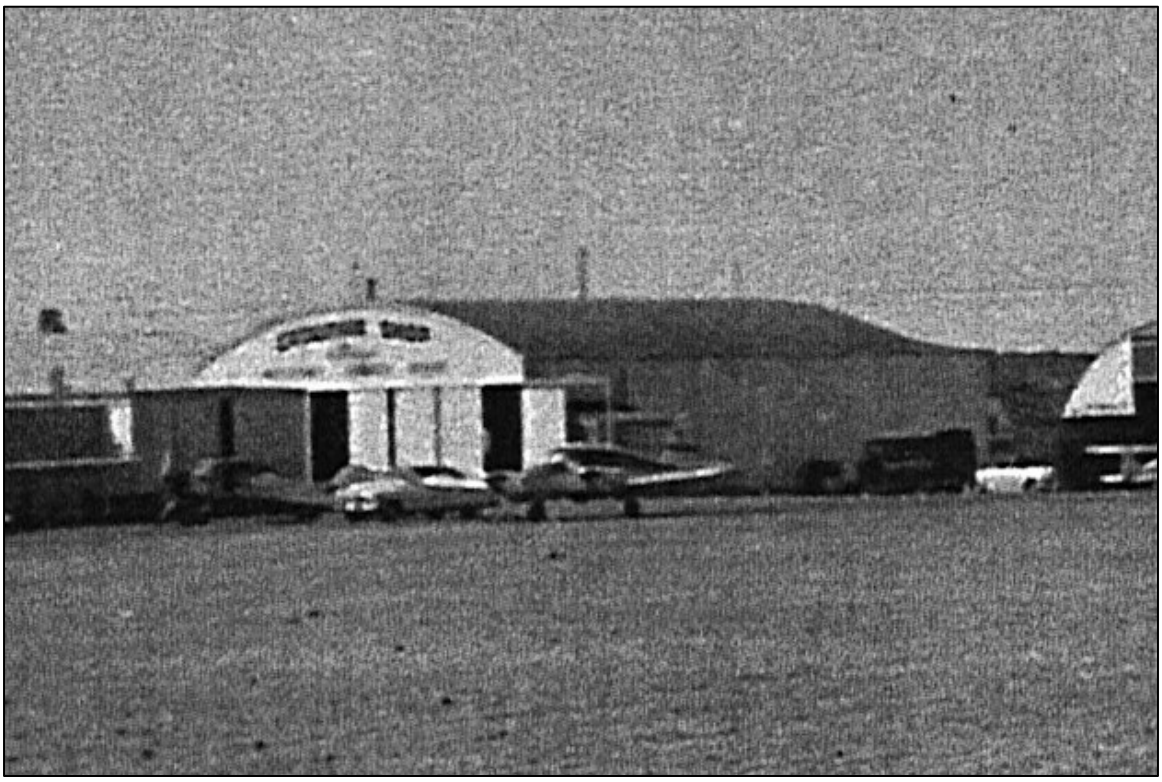


Figure 40: 1956 photo looking SW. *San Diego History Center, 2002-15, Box 2, Folder 1 Kearny Mesa.*



Figure 41: 1956 photo looking SE. *San Diego History Center, 2002-15, Box 2, Folder 1 Kearny Mesa.*

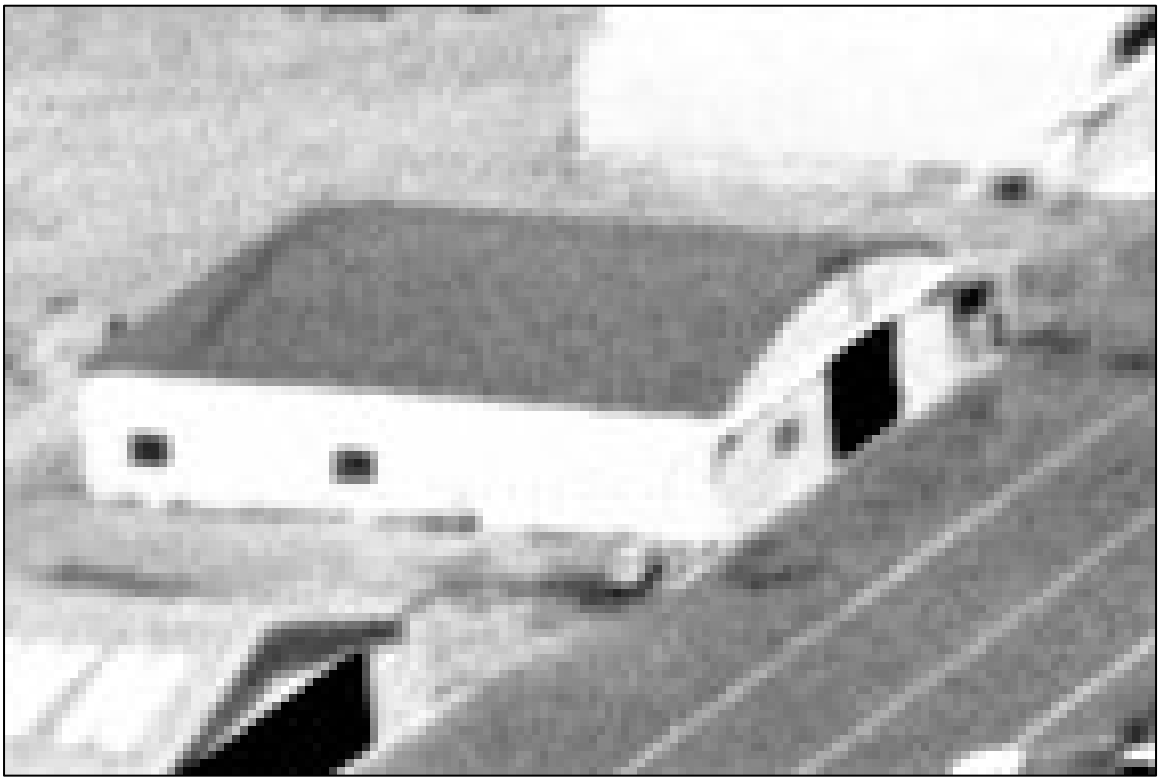


Figure 42: 1960 aerial looking NW. *San Diego History Center, 92_18835-2095*

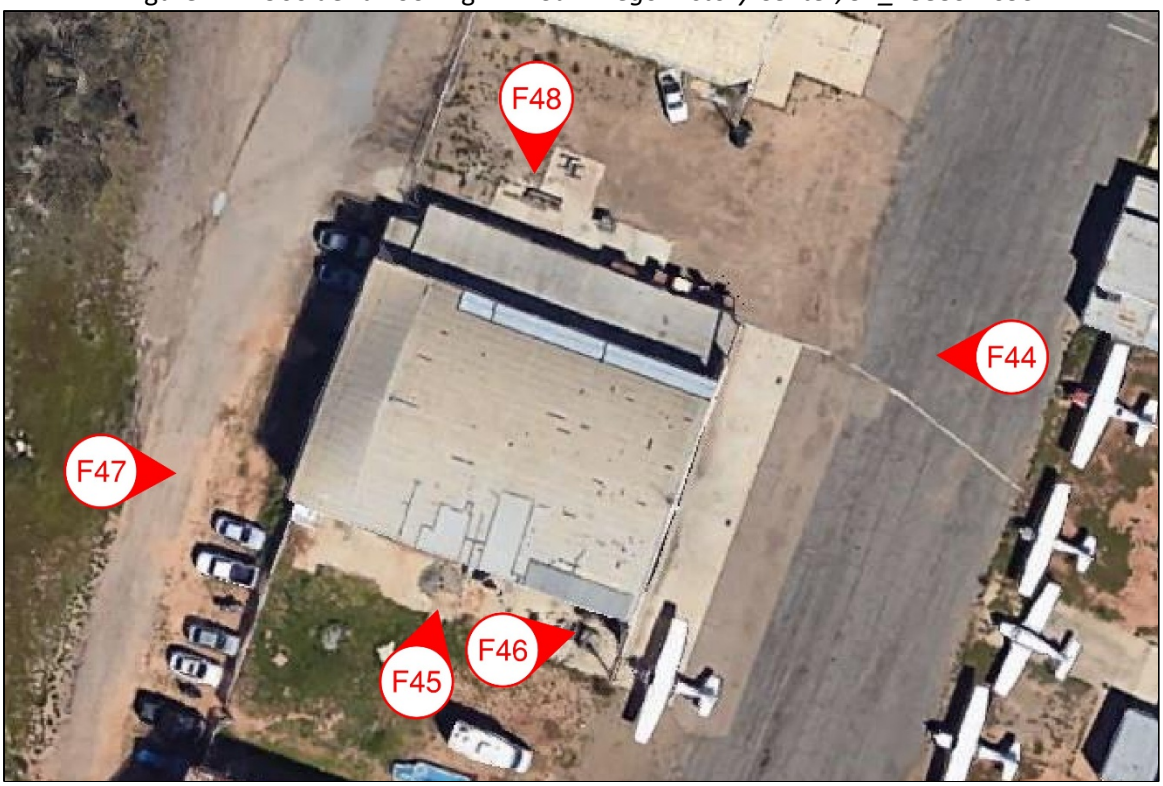


Figure 43: Building 7 Photo Survey Key Plan. *Google Maps, 2019.*



Figure 44: Three-quarter view showing Building 7 east and north elevations.



Figure 45: Building 7, South elevation.



Figure 46: Building 7 South elevation showing an early patch to the original stucco.



Figure 47: Three-quarter view of Building 7 east and south elevations.



Figure 48: Building 7 North elevation with shed roof addition.

3.3.3 Building 8

Building 8 is a steel-frame aircraft hangar with a box-like massing and a gable end roof that was reportedly custom built from surplus materials acquired by Buzz Gibbs. The gable end roof is composed of corrugated steel panels. Oriented eastward, the hangar's primary elevation faces towards the Montgomery-Gibbs Airport. The primary elevation features a large, exterior, four panel, horizontal sliding hangar door system with a steel top track that extends out past the building at both ends of the elevation to vertical supports. Angled steel braces also appear to either side of building to provide additional support for the large door system. The sliding hangar door panels are corrugated steel panels covered in failing paint. The exterior wall within the gable end above the hangar door comprises the same corrugated steel panels and features a single, centered, light fixture The south elevation is composed entirely of uninterrupted corrugated steel panels covered in failing paint. The west, or rear, elevation also features a completely uninterrupted wall surface composed of corrugated steel panels; however, five, evenly spaced, light fixtures project from the exterior within the gable end. The north elevation features a mostly uninterrupted wall surface composed of corrugated steel panels covered in failing paint. A flush, outward swinging, steel door appears near the western corner of the north elevation.



Figure 49: 1959 aerial looking East. Original photo provided by Buzz Gibbs, *Gibbs Flying Service.*

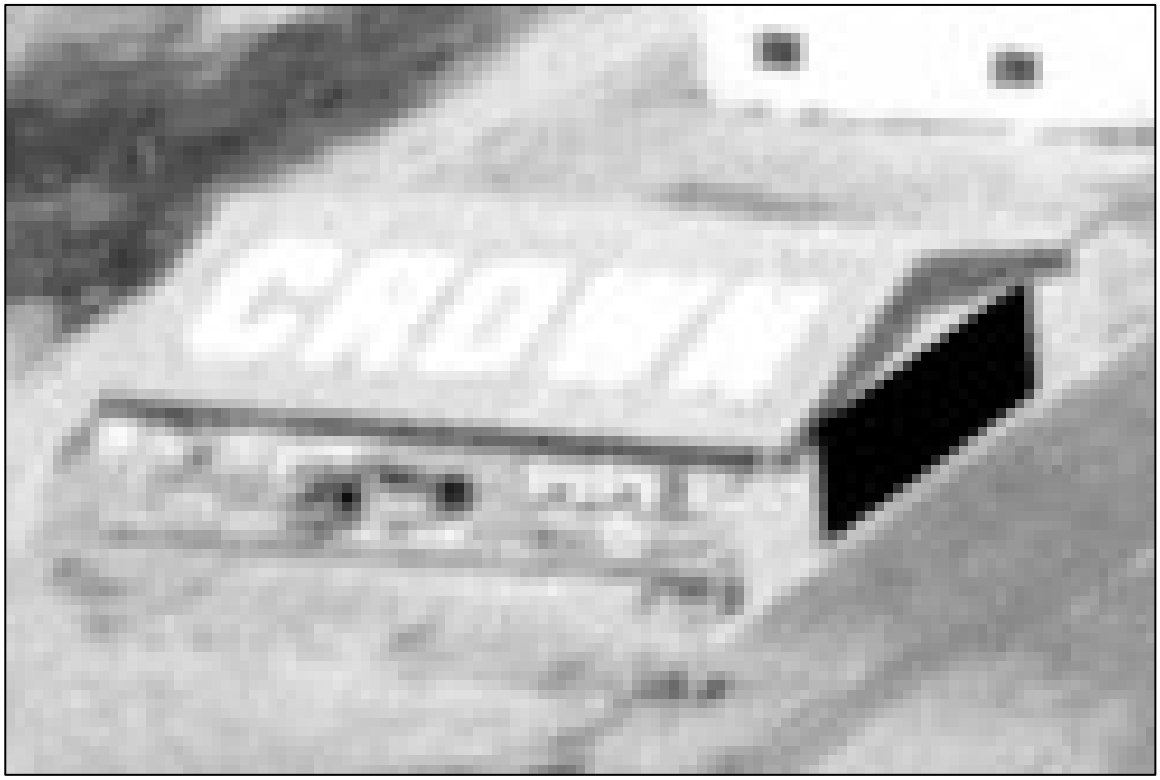


Figure 50: 1960 aerial, looking NE. *San Diego History Center, 1960 - 92_18835-2095*



Figure 51: Building 8 Photo Survey Key Plan. *Google Maps, 2019.*



Figure 52: Photo of the east elevation of Building 8.



Figure 53: Three-quarter view of the south and west elevations of Building 8.



Figure 54: Three-quarter view showing the east and north elevations of Building 8.



Figure 55: Building 8 North elevation.

4 Eligibility Evaluations

Under CEQA, historical resources are defined as resources listed in or determined to be eligible for listing in the NRHP, CRHR, or in a local register, such as the SDRHR.[61] The following section evaluates the eligibility of Buildings 6, 7, and 8 for listing in all three registers. 36 CFR 60.3(d) of the National Register defines a "District" as *"…a geographically definable area, urban or rural, possessing a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united by past events or aesthetically by plan or physical development. A district may also comprise individual elements separated geographically but linked by association or history*."[62] Because no official boundary could be determined for the site located at 3873 Kearny Villa Road, the site was approximated based on existing boundaries and historic photographs. Due to the inability to determine an official boundary, and the lack of geographic separation, a District as defined by the National Register does not exist at the site surveyed. This report does not evaluate the buildings as part of any larger proposed historic district at Montgomery Field.

4.1 Significance

In order to be eligible for designation, a resource must both have significance under one or more Significance Criteria and retain sufficient integrity to convey that significance in its current state. *What follows is an evaluation of significance only; see the Section 4.2 for an evaluation of integrity and Section 4.3 for a final eligibility conclusion.*

4.1.1 National Register of Historic Places

To be eligible for listing in the NRHP, a property must be at least 50 years of age and possess significance in American history and culture, architecture, or archaeology. Younger properties can be eligible for listing, however, if they achieve exceptional significance.[63] The National Park Service provides the guidance in National Register Bulletin #43, *Guidelines for Evaluating and Documenting Historic Aviation Properties*, that "…aviation properties, like wartime training fields and temporary buildings, similarly were never intended to last fifty years. Without identification and preservation of some of these properties before they reach the age of fifty years, the properties will not survive to reach fifty years of age." and "The phrase "exceptional importance" may be applied to the extraordinary importance of an event or to an entire category of resources so fragile that survivors of any age are unusual."[64]

A property must also meet one or more of the following four criteria:[65]

Criterion A: Associated with events that have made a significant contribution to the broad patterns of our history

[61] CEQA Guidelines, §15064.5.
[62] Title 36 Code of Federal Regulations Part 60.3
[63] *National Register Bulletin #15,* National Park Service, U.S. Department of the Interior, p. 2.
[64] *National Register Bulletin #43*, National Park Service, U.S. Department of the Interior, p. 33.
[65] Title 36 Code of Federal Regulations Part 60.4.

Buildings 6, 7, and 8 **are** significant under Criterion A at the local level as they are associated with a pattern of important events that not only shaped the historical development of the Montgomery-Gibbs Executive Airport, but, by extension, influenced the entire development of the community of Kearny Mesa. Among others, these events include the first private development in the area, the development of Gibbs Field between its founding in 1937 to 1947, San Diego's acquisition of the field in 1947, the annexation of the field by the City in 1948, the expansion and dedication of the airport as Montgomery Field in 1950, the ordinances that zoned Kearny Mesa for industrial and commercial uses in the 1950s, and the attraction of various types of companies to the area from at least 1947 to 1989 and later. The period of significance under Criterion A is 1947-1950. The period of significance is based on the buildings' appearance and construction on the site and coincides with San Diego's acquisition (1947), annexation (1948), and the expansion and dedication of the airport (1950).

Criterion B: Associated with the lives of persons significant in our past

Buildings 6, 7, and 8 **are not** significant under Criterion B at any level because, while they are associated with the lives of a significant person in our past, Bill Gibbs, there is not enough historical evidence to both determine which of the three buildings is most associated with Gibbs and to establish a specific significance under Criterion B.

The buildings were acquired and constructed by Bill Gibbs between 1947 and 1950 for use at the airport. Bill Gibbs was responsible for developing the original airport in 1937 where he operated his business, Gibbs Flying Service. In 1940, he leased the airport to Ryan Aeronautical, who then hired Gibbs to teach flying lessons in Arizona during World War II. After the war, Gibbs returned to his airport and, in 1947, acquired and re-constructed Buildings 6 and 7. Building 8 was constructed sometime between 1947 and 1950. It was also in 1947 that Bill Gibbs sold the airport and surrounding land to the City. As part of the sale, Gibbs was provided a lease to continue operating his business at the airport. The Gibbs Flying Service still operates out of the airport today. In recognition of his legacy, Bill Gibbs was inducted into the International Air & Space Hall of Fame at the San Diego Air & Space Museum in 2011. On Gibbs's importance, Jim Kidrick, President and CEO of the San Diego Air & Space Museum, stated, "Bill Gibbs lived through almost the entire history of aviation, and certainly through the history of aviation in San Diego."[66]

Although Bill Gibbs is most certainly a notable figure in San Diego history, Bill Gibbs has not been found to be significant under NRHP Criterion B. According to National Register Bulletin 15, "[p]ersons 'significant in our past' refers to individuals whose activities are demonstrably important within a local, State, or national historic context."[67] Additionally, to be significant under Criteria B, an individual must have specific events and accomplishments identified that are historically significant and that, when *"significance rests more in a property's representation of a pattern of history … the appropriate criterion is A rather than B. This is true even when the careers or actions of various individuals are discussed to illustrate these important patterns of history."*[68] Although he founded Gibbs Field in 1937, sold it to the

[66] *San Diego Air & Space Museum.* "San Diego Air & Space Museum mourns the loss of Aviation Legend Bill Gibbs." https://sandiegoairandspace.org/press/release/san-diego-air-space-museum-mourns-the-loss-of-aviation-legend-bill-gibbs.
[67] *National Register Bulletin 15*
[68] *National Register Bulletin # 32,* National Park Service, U.S. Department of the Interior

City in 1947, and was a lifelong aviator, Bill Gibbs's activities and contributions have not been found to be sufficiently important within a local, State, or national context to be considered significant under Criterion B because there is no specific event associated with him. Additionally, Bill Gibbs is potentially best associated with the entire Airfield for its original development in 1937; however, this analysis is outside the scope of this report. Thus, there is not enough documentary evidence to determine which of the three buildings, and others potentially associated with Gibbs, is most associated with any individual accomplishment of his.

Criterion C: Embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction

Building 6 **is** significant under Criterion C at the local level as it embodies the distinctive characteristics of the Quonset Hut. The Quonset Hut is an important building type that was developed by the U.S. Navy during World War II. Following the war, surplus Quonset Huts were sold to civilians for private use, and multiple companies that built wartime Quonset Huts continued their production. This combined wartime and civilian use sets the era of Quonset Huts as 1941-1960[69] and makes the Quonset Hut a particularly unique architectural style when considering historic significance, because relocation and reuse are one of the character-defining features for post-war Quonset Huts. Additionally, while originally developed by the George A. Fuller Company, wartime demand for the Quonset Hut led the Navy to contract with other companies, most notably the Stran-Steel division of the Great Lakes Steel Corporation, for increased production and use-specific designs.[70] Other manufacturers and models include the wooden Pacific Hut and Emkey Huts, the heavy steel Armco Hut, the Cowin and Company Inc "Steeldrome" Hut for the Air Corps, the Canadian Portaseal Hut, the arctic Jamesway Hut, and the half-U Buttler Hut.[71] Repurposed civilian Quonset Huts were extensively adapted and altered for their use, which ranged from modernist homes to sheds, barns, and hangars.[72]

The Character Defining Features of the Quonset Hut are:[73]

- Corrugated Metal Exterior
- Steel Frame of curved rib pieces
- Wood fiber insulation
- Inner Masonite walls
- Concrete or TNG floors on a raised metal framework
- Front and rear "bulkhead" end elevations with doors and windows
- Easily installed, taken down, and transported

[69] *Washington State Department of Archaeology & Historic Preservation (DAHP),* "Quonset Hut," Quonset Hut | Washington State Department of Archaeology & Historic Preservation (DAHP), https://dahp.wa.gov/historic-preservation/historic-buildings/architectural-style-guide/quonset-hut.
[70] Ibid.
[71] Julie Decker and Chris Chiel, eds. *Quonset Hut: Metal Living for a Modern Age*, (China: Princeton Architectural Press, 2005). 148-149
[72] Michael Lamm, "The Instant Building," *Invention & Technology Magazine* 13, no. 3 (Winter 1998): https://www.inventionandtech.com/content/instant-building-1
[73] Washington State (DAHP)

Building 6, with its curved steel frame ribs, corrugated metal exterior, concrete floors, bulkhead ends, and transportation to and reuse at the Montgomery Field site post-World War II, embodies the distinctive characteristics of the Quonset Hut, particularly in its postwar Civilian reuse era. It has, therefore, been found to be significant at the Local Level under Criterion C with a period of significance of 1947.

Building 7 **is not** significant under Criterion C at any level because it does not embody the distinctive characteristics of a style, type, period, or method of construction. It is a utilitarian aircraft hangar that is believed to have originally served as a women's gymnasium on Coronado's NAS North Island. It features wood frame construction with dimensional lumber and sheathing, stuccoed exterior walls, and the vaulted roof is supported by bowstring trusses. Building 7 is not associated with a Master. It does not possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

Building 8 **is not** significant under Criterion C at any level. It is a post-war era aircraft hangar that was custom built on site using surplus materials acquired by Bill Gibbs. It does not embody the distinctive characteristics of a style, type, period, or method of construction. Building 8 is not associated with a Master. It does not possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

Criterion D: Yield, or may be likely to yield, information important in prehistory or history.

The potential for yielding new information important to the prehistory or history of the area is slim and, therefore, Buildings 6, 7, and 8 are not considered significant under Criterion D at any level.

4.1.2 California Register of Historic Resources

The criteria for eligibility of listing the CRHR are based upon NRHP criteria, but are identified as 1-4 instead of A-D. To be eligible for listing in the CRHR, a property must be at least 50 years of age and possess significance at the local, state, or national level. Younger properties can be eligible for listing, however, if they achieve exceptional significance.[74]

A property of potential significance must meet one or more of four established 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 State; and/or
2. It is associated with the lives of persons important to local, California, or national history; and/or
3. It embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values; and/or
4. It has yielded, or has the potential to yield, information important in the prehistory or history of the local area, California, or the nation.

[74] California Office of Historic Preservation, *California Register of Historical Resources, Criteria for Designation*. http://ohp.parks.ca.gov/?page_id=21238.

Resources found to be significant under NRHP Significance Criteria can generally be found to be significant under the equivalent CRHR Significance Criteria. Accordingly, Buildings 6, 7, and 8 are significant under CRHR Criteria 1, at the local level. The period of significance under Criterion 1 is 1947-1950. The period of significance is based on the buildings' appearance and construction on the site and coinciding with San Diego's acquisition (1947), annexation (1948), and the expansion and dedication of the airport (1950). Additionally, Building 6, embodying the distinctive characteristics of the Quonset Hut in the postwar Civilian reuse era, is significant under CRHR Criteria 3 with a period of significance of 1947, its earliest identifiable appearance at Montgomery Field.

4.1.3 San Diego Register of Historical Resources

The Historical Resources Guidelines of the City's Land Development Manual identifies the criteria under which a resource may be historically designated. It states that any improvement, building, structure, sign, interior element and fixture, site, place, district, area, or object may be designated a historical resource on the SDRHR by the City's Historical Resources Board (HRB) if it meets one or more of the following HRB designation criteria:

Criterion 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.

Buildings 6, 7, and 8 **are** significant under Criterion A because they reflect a special element of Kearny Mesa's historical development. Specifically, the three hangars reflect the airfield created by Bill Gibbs, which was the earliest known development in Kearny Mesa. As such, these hangars influenced both the development of Montgomery Field, presently named Montgomery-Gibbs Executive Airport, which by extension, influenced the development of the entire community of Kearny Mesa.

As was shown in the historic context, the development of Montgomery-Gibbs Executive Airport by both Bill Gibbs, from 1937-1947, and the City of San Diego, from 1947-1989 and later, was in large part responsible for the way in which the community of Kearny Mesa, itself, developed. Not only was the airfield the first development to have occurred in the area, but it was also responsible for attracting new businesses to the area, such as Bee Aviation Associates and Crownair. It influenced the development of U.S. 395 (now SR-163), Aero Drive, and Kearny Villa Road. The airport was also responsible for the establishment of airport approach and turning zones that influenced the development of the area, as well as influencing the restriction of residential development in favor of zoning Kearny Mesa for light industrial and commercial uses. The combination of the industrial and commercial zoning, the proximity to the airport, and the accessibility of U.S. 395 then brought major aeronautical and technology companies to the area during the 1950s and 1960s. As private and corporate aviation grew in popularity, the airport continued to attract new businesses and real estate developers during the 1980s. As a result, a number of new office parks and plazas were built on airport grounds and within the immediate vicinity. A large hotel was also built on airport grounds to take advantage of the growing number of private aviators using the airport. As the Buildings 6, 7, and 8 reflect the airfield that has been shown to have greatly influenced the historical development of Kearny Mesa, they have been found to be significant under Criterion A. The period of significance under Criterion A is 1947-1950.

Criterion B: Is identified with persons or events significant in local, state or national history.

Buildings 6, 7, and 8 **are not** significant under Criterion B because, while they are associated with the lives of a significant person in our past, Bill Gibbs, there is not enough historical evidence to determine which of the three buildings is best associated and identified with Gibbs to establish a specific significance under Criterion B. According to the City's criteria guidelines, *"[p]ersons significant in our past refer to individuals associated with San Diego whose activities, achievements and contributions are demonstrably important within the City, state, or nation."* and *"Eligibility under Criterion B for significant person(s) involves first determining the importance of the individual, second ascertaining the length and nature of the individual's association with the resource under study and in comparison to other resources associated with the individual, and third determining if the resource is significant under HRB Criterion B as a resource that is best identified with a person(s) significant in local, state, or national history."*

Bill Gibbs founded Gibbs Field in 1937, sold it to the City in 1947, was a lifelong aviator, and was inducted into the International Air & Space Hall of Fame at the San Diego Air & Space Museum in 2011, and Jim Kidrick, President and CEO of the San Diego Air & Space Museum, stated of Gibbs's importance that he "…lived through almost the entire history of aviation, and certainly through the history of aviation in San Diego."[75] When Bill Gibbs passed in 2016, the San Diego Air and Space Museum declared him "a significant part of the legacy of aviation in the San Diego region."[76] Therefore, Bill Gibbs's activities and contributions have been found to be demonstrably important enough to be considered a significant person under Criterion B.

There is minimal evidence to establish the length and nature of Bill Gibb's association with Buildings 6, 7, and 8. While it is known that he acquired Building 6 and Building 7 in 1946 or early 1947 and built Building 8 between 1947 and 1950, he leased Buildings 6 and 7 to other various aviation-related businesses rather than using them himself, and by 1956 his business operations moved to the center of the airport to make use of other hangars. Therefore, Bill Gibbs' direct association with Buildings 6, 7, and 8 is limited to the years of their construction.

Finally, there is insufficient historical evidence to determine which of the three buildings is best identified with Gibbs to establish a specific significance under Criterion B, or if a different resource outside the scope of this report is best associated with him. Bill Gibbs' association with Buildings 6, 7, and 8 is only for the years of their construction, and there is not enough evidence to establish a stronger association for any one of the buildings over the others. Further, according to the City's criteria guidelines, "The best representatives are properties associated with the person's productive life." Thus, Bill Gibbs is best associated with a building or structure used in his career and aviation activities, neither of which applied to Buildings 6, 7, or 8 as they were used as rentals.

[75] *San Diego Air & Space Museum*
[76] Ibid.

Thus, while Bill Gibbs is a significant person, there is not enough documentary evidence to determine which of the three buildings, or others potentially associated with Gibbs, is best identified and associated with his productive life. Therefore, Buildings 6, 7, and 8 **are not** significant under Criterion B.

Criterion C: Embodies distinctive characteristics of style, type, period, or method of construction or is a valuable example of the use of indigenous materials or craftsmanship.

Building 6 **is** significant under Criterion C as it embodies the distinctive characteristics of the Quonset Hut. The Quonset Hut is an important building type that was developed by the U.S. Navy during World War II. Following the war, surplus Quonset Huts were sold to civilians for private use, and multiple companies that built wartime Quonset Huts continued their production. This combined wartime and civilian use sets the era of Quonset Huts as 1941-1960[77] and makes the Quonset Hut a particularly unique architectural style when considering historic significance, because relocation and reuse are one of the character-defining features for post-war Quonset Huts. Additionally, while originally developed by the George A. Fuller Company, wartime demand for the Quonset Hut led the Navy to contract with other companies, most notably the Stran-Steel division of the Great Lakes Steel Corporation, for increased production and use-specific designs.[78] Other manufacturers and models include the wooden Pacific Hut and Emkey Huts, the heavy steel Armco Hut, the Cowin and Company Inc "Steeldrome" Hut for the Air Corps, the Canadian Portaseal Hut, the arctic Jamesway Hut, and the half-U Buttler Hut.[79] Repurposed civilian Quonset Huts were extensively adapted and altered for their use, which ranged from modernist homes to sheds, barns, and hangars.[80]

The Character Defining Features of the Quonset Hut are:[81]

- Corrugated Metal Exterior
- Steel Frame of curved rib pieces
- Wood fiber insulation
- Inner Masonite walls
- Concrete or TNG floors on a raised metal framework
- Front and rear "bulkhead" end elevations with doors and windows
- Easily installed, taken down, and transported

Building 6, with its curved steel frame ribs, corrugated metal exterior, concrete floors, bulkhead ends, and transportation to and reuse at the Montgomery Field site post-World War II, embodies the distinctive characteristics of the Quonset Hut, particularly in its postwar Civilian reuse era. It has, therefore, been found to be significant at the Local Level under Criterion C with a period of significance of 1947.

Building 7 **is not** significant under Criterion C because it does not embody the distinctive characteristics of a style, type, period, or method on construction. It is a utilitarian aircraft hangar that is believed to have

[77] Washington State (DAHP)
[78] Ibid.
[79] Decker and Chiel, 148-149
[80] Lamm
[81] Washington State (DAHP)

originally served as a women's gymnasium on Coronado's NAS North Island. It features wood frame construction with dimensional lumber and sheathing, stuccoed exterior walls, and the vaulted roof is supported by bowstring trusses. Building 7 is not associated with a Master. It does not possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

Building 8 **is not** significant under Criterion C. It is a post-war era aircraft hangar that was custom built on site using surplus materials acquired by Bill Gibbs. It does not embody the distinctive characteristics of a style, type, period, or method of construction. Building 8 is not associated with a Master. It does not possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

Criterion D: Is representative of the notable work of a master builder, designer, architect, engineer, landscape architect, interior designer, artist or craftsman.

Buildings 6, 7, and 8 **are not** significant under Criterion D. They have not been found to be associated with an established Master. Therefore, the buildings have not been found to be representative of the notable work of a master.

Criterion E: is listed or has been determined eligible by the National Park Service for listing on the National Register of Historic Places or is listed or has been determined eligible by the State Historic Preservation Office for listing on the California Register of Historic Resources.

Buildings 6, 7, and 8 **are not** significant under Criterion E. Buildings 6, 7, and 8 have not previously been listed or determined eligible for listing in the National Register of Historic Places or the California Register of Historic Resources.

Criterion 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 which 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.

Buildings 6, 7, and 8 **are not** significant under Criterion F. They are not located within an identified, significant grouping, such as a historic district.

4.2 Integrity

To be eligible for listing, a property must not only be shown to be significant under the criteria, but it also must have integrity. Integrity is the ability of a property to convey its significance. Within the concept of integrity, the National Register criteria recognizes seven aspects or qualities that, in various combinations,

define integrity.[82] These seven aspects or qualities include Location, Setting, Design, Materials, Workmanship, Feeling, and Association. The following is an evaluation of integrity.

Location: The place where the historic property was constructed or the place where the historic event occurred.

Buildings 6, 7, and 8 **do** retain integrity of location to convey their significance under Criterion A/1 and Criterion C/3 for Building 6. The three hangars have not been moved since being relocated or erected by Bill Gibbs between 1947 and 1950.

Setting: The physical environment of a historic property.

Buildings 6, 7, and 8 **do** retain a sufficient integrity of setting to convey their significance under Criterion A/1 and Criterion C/3 for Building 6. Historic photos show that during the 1947-1950 period of significance, the physical environment surrounding Buildings 6, 7, and 8 was characterized as a small airfield on flat, open, graded terrain. By 1950, the site was bounded to the west by U.S. 395 (now SR-163) and an early section of what would become Kearny Villa Road. The airport runways and Aero Drive, to the south, had also been paved. Additionally, the airport had been expanded to what appears to be its current form and rededicated as Montgomery Field.

Although the airport has developed since 1950, the physical environment surrounding Buildings 6, 7, and 8 has remained sufficiently intact and is still characterized as an airport. The hangars are situated on flat, open, graded terrain and are still bounded to the west by the same section of Kearny Villa Road and SR-163. The proximity of the three hangars to the roadways to the west and south, as well as the runways and the expanded part of the airport to the east, remains the same. Because of these factors, the physical environment immediately surrounding Buildings 6, 7, and 8 has been found to retain a sufficient degree of integrity of setting.

Design: The combination of elements that create the form, plan, space, structure, and style of a property.

Buildings 6, 7 and 8 **do** retain sufficient integrity of design to convey their significance under Criterion A/1 and Criterion C/3 for Building 6. As is evidenced by the historic photographs, each of the three hangars still strongly reflect their original design and appearance. Although some alterations appear to have been made over time, such as the front door on the west elevation and the horizontal sliding door system on the east elevation, Building 6 retains its original semi-cylindrical form; open, rectangular, plan; steel frame structure with corrugated steel panels; the squared-off, stuccoed, business-entrance façade on the west elevation; and general utilitarian appearance associated with the Quonset Hut building type.

Building 7 still features its original box-like form, open plan, timber-frame structure, and bowstring truss supported roof. It is uncertain if the existing windows are original to the 1947 construction. Although historic photos confirm that the existing window openings on the west and south elevations had existed as early as 1956 and 1960, respectively, (Fig. 39, pg. 37; Fig.40, pg.38), the 1947 photos of the building under construction do not show them (Figs. 35 & 36, 37, pgs. 35 & 36). As the exterior walls are unfinished in the 1947 photos, it is possible that the two window openings on the south elevation and the three on the west elevation were cut out after the stucco exterior was finished. However, without the direct evidence showing that the original fenestration differed from that seen in 1947 photos, the windows

[82] *National Register Bulletin 15*.

cannot be found to be original. Since the south and west elevation steel sash windows match each other in material and design, it can be inferred that they were installed around the same time.

Building 8 appears to have remained entirely intact since its construction sometime between 1947 and 1950. Historic photos show that the hangar has always had a box-like form, a rectangular plan, a gable roof, windowless exterior elevations, and a massive, east facing, horizontal sliding hangar door system.

Materials: The physical elements that were combined or deposited during a particular period of time and in a pattern or configuration or form a historic property.

Buildings 6, 7 and 8 **do** retain sufficient integrity of materials to convey their significance under Criterion A/1 and Criterion C/3 for Building 6.

As is evidenced by the historic photos, Building 6 retains a majority of its materials. These include the poured concrete foundation, corrugated steel panels, wood and steel sash windows, and the stuccoed west façade, all common materials during the World War 2 and post-war period.

Building 7 still features its concrete foundation, wood-frame construction, timber bowstring truss supported roof, corrugated steel hangar doors and steel horizontal sliding rail system. The 1947 photographs (Figs. 35 & 36, 37, pgs. 35 & 36) prove that Building 7 originally had stuccoed exterior walls. Whereas the exterior of the shed roofed addition has relatively newer stucco, no physical or documentary evidence was found to suggest that the original building was ever restuccoed. Some patching has occurred, however. The 1947 photographs show that the Building 7 originally had short, square-shaped, openings at either end of its unfinished, stucco-clad, side elevations (north and south). The easternmost openings on both elevations also had what appears to have been a horizontal element affixed above them at the mid-point of the unfinished exterior wall. The 1956 photograph (Fig. 39, pg. 37) shows that the westernmost opening on the north elevation was intact at that time. The 1960 photograph (Fig.40, pg.38), however, shows that the openings on the south elevation had been infilled. Therefore, if the short, square, openings on the southern elevation were not infilled, and the horizontal element removed and patched over, when the exterior walls were finished in 1947, they were infilled by 1960. The fact that these patches can still be read in the exterior stucco of the south elevation today (Fig 43, pg.39), suggests that the building was never restuccoed. Because of this physical evidence, it has been determined that Building 7 retains most of its original stucco.

Building 8 was constructed using corrugated steel panels for the exterior walls, the roof, and the hangar door. These materials remain intact today. Based of the historic photos, no alterations appear to have occurred.

Workmanship: The physical evidence of the crafts of a particular culture or people during any given period in history or prehistory.

Buildings 6, 7 and 8 **do** retain sufficient integrity of workmanship to convey their significance under Criterion A/1 and Criterion C/3 for Building 6.

Building 6 still exhibits its utilitarian and functional craftsmanship. The physical evidence includes the wood and steel sash windows, the poured cement foundation, and the bolted, steel corrugated panels.

Building 7 still exhibits the craftsmanship common to the pre-and post-war periods. The physical evidence of the workmanship from these periods includes the wood framing and bowstring truss-supported roof, the steel sash windows, the poured concrete foundation, the exterior stucco, the corrugated steel paneled façade, and the horizontal sliding, steel, hangar doors and rail system.

As Building 8 does not appear to have ever been altered since its original construction, the hangar still exhibits the craftsmanship of the period in which it was built. The physical evidence of this craftsmanship is evident in the use of corrugated steel panels for the exterior walls and the gable roof, as well as the exterior steel, horizontal sliding, hangar door system.

Feeling: The property's expression of the aesthetic or historic sense of a particular period of time.

Buildings 6, 7 and 8 **do** retain a sufficient integrity of feeling to convey their significance under Criterion A/1 and Building 6 does retain a sufficient integrity of feel to convey its significance under Criterion C/3 as an embodiment of the Quonset Hut. As is evidenced by the historic photos, the three hangars still remain largely as they appeared when they were built between 1947 and 1950. Because of this, the three hangars still express a strong historic sense of their respective periods of significance.

Association: The direct link between an important historic event or person and a historic property.

Buildings 6, 7 and 8 **do** retain a sufficient integrity of association to convey their significance under Criterion A/1 and Building 6 **does** retain a sufficient integrity of association to convey its significance under Criterion C/3 as an embodiment of the Quonset Hut. As is evidenced by the historic photos, the three hangars still remain largely as they appeared when they were erected by Bill Gibbs for the airport between 1947 and 1950. Because of this, the direct link remains between the hangars, Bill Gibbs, and the early development of the Montgomery-Gibbs Executive Airport.

Building 6 **does** retain a sufficient integrity of association to convey its significance under Criterion C/3 as an embodiment of the Quonset Hut.

4.3 Eligibility Conclusion

Buildings 6, 7, and 8 are significant under Criterion A/1/A with a period of significance of 1947-1950. Building 6 is also significant under Criterion C/3/C with a period of significance of 1947. Buildings 6, 7, and 8 retain seven out of the seven aspects of integrity. Therefore, Buildings 6, 7, and 8 have been found eligible for listing in the SDRHR, CRHR, and the NRHP.

BUILDING 6				
Register	**Significance Level**	**Significance Criteria**	**Aspects of Integrity**	**Period of Significance**
National Register of Historic Places	Local	A, C	7 out of 7	1947-1950, 1947
California Register of Historical Resources	Local	1,3	7 out of 7	1947-1950, 1947

San Diego Register of Historical Resources	--	A, C	7 out of 7	1947-1950, 1947

BUILDING 7				
Register	**Significance Level**	**Significance Criteria**	**Aspects of Integrity**	**Period of Significance**
National Register of Historic Places	Local	A	7 out of 7	1947-1950
California Register of Historical Resources	Local	1	7 out of 7	1947-1950
San Diego Register of Historical Resources	--	A	7 out of 7	1947-1950

BUILDING 8				
Register	**Significance Level**	**Significance Criteria**	**Aspects of Integrity**	**Period of Significance**
National Register of Historic Places	Local	A	7 out of 7	1947-1950
California Register of Historical Resources	Local	1	7 out of 7	1947-1950
San Diego Register of Historical Resources	--	A	7 out of 7	1947-1950

5 Findings and Conclusions

5.1 Impact Findings

Under CEQA, a significant effect to a historical resource is one that "may cause a substantial adverse change in the significance of a historical resource" (§15064.5[b]). A substantial adverse change may include "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" (§15064.5[b][1]). Any change that alters a historical resource's eligibility for listing in a historical register must be classified as an impact.

The following classifications can be used to characterize impacts under CEQA:

- A ***beneficial impact*** would result when the proposed project would have a positive effect on the natural or human environment. No mitigation is required for beneficial impacts.
- ***No impact*** would result when no adverse change in the environment is expected. No mitigation is required for a finding of no impact.
- A ***less than significant impact*** would not cause a substantial change in the environment, although an adverse change in the environment may occur that does not rise to a level of significance. In the case of a less than significant impact, only compliance with standard regulatory conditions would be required.
- A ***less than significant impact with mitigation*** would cause a substantial adverse effect on the environment but would be reduced to a less-than-significant level through successful implementation of identified mitigation measures. Mitigation measures are required for a less than significant impact with mitigation.
- A ***significant and unavoidable impact*** would cause a substantial adverse effect on the environment, and no feasible mitigation measures would be available to reduce the impact to a less-than-significant level, even after all feasible mitigation measures have been implemented to reduce the impact to the extent possible. Mitigation measures are permitted for a significant and unavoidable impact, even though the mitigation will not reduce the impact below the level of significance.[83]

CEQA requires the evaluation of both direct and indirect impacts to resources within the project area. Direct impacts include design changes and the processes of development themselves, including but not limited to grading, demolition, alteration, new construction, and staging activities. Indirect impacts are those that alter the non-physical character of the historic resource or alter its significant setting. Indirect impacts can include but are not limited to the alteration or interruption of viewsheds, the addition of significant noise or vibration, or the substantial alteration of air quality. CEQA also recognizes the cumulative impact of changes on a resource, meaning that the accumulation of small-scale, individually insignificant changes may also constitute a significant impact.

5.1.1 Direct Impacts

[83] *Sierra Club v. County of Fresno*, 2018. Accessible at: https://cases.justia.com/california/supreme-court/2018-s219783a.pdf?ts=1545687370, p. 30.

Building 6, Building 7, and Building 8 have been established as historical resources under the California Environmental Quality Act (CEQA).

The PEIR Project Scope concerning Building 6, Building 7, and Building 8 is to consist only of **"currently unplanned" maintenance, repairs, or stabilization** and has no identified timeframe in the 20-year Master Plan. The Code of Federal Regulations, §36 CFR 68.2(a), defines *Preservation*, stating:

> ***Preservation*** *means the act or process of applying measures necessary to sustain the existing form, integrity and materials of an historic property. Work, including preliminary measures to protect and stabilize the property, generally focuses upon the ongoing maintenance and repair of historic materials and features rather than extensive replacement and new construction. New exterior additions are not within the scope of this treatment; however, the limited and sensitive upgrading of mechanical, electrical and plumbing systems and other code-required work to make properties functional is appropriate within a preservation project.*[84]

Therefore, the scope of work for Building 6, Building 7, and Building 8 is to be understood as Historic Preservation work.

Details regarding the preservation scope, design, and construction are not available because while the scope of work is identified as a potential, it is currently not planned or expected. For the purposes of this analysis, it is assumed that the work will be limited to maintenance, repairs, or stabilization and not consist of alterations, changes, or restoration activities to the buildings. This preservation scope may consist of, but not be limited to, mitigation measures of environmental concerns such as lead paint, hazardous materials in the ceiling and floors, pest infestations, and repairs of damage to the structure such as cracks in the foundation. Finally, it is assumed that all preservation work will comply with the U.S. Secretary of the Interior's Standards for the Treatment of Historic Properties.

Section §15331 of CEQA states that:

> *Class 31 consists of projects limited to maintenance, repair, stabilization, rehabilitation, restoration, preservation, conservation or reconstruction of historical resources in a manner consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings (1995), Weeks and Grimmer.*[85]

However, §15300.2. (f) of CEQA states that:

> *Historical Resources. A categorical exemption shall not be used for a project which may cause a substantial adverse change in the significance of a historical resource.*[86]

[84] Code of Federal Regulations. §36 CFR 68.2(a), Available at https://www.ecfr.gov/current/title-36/part-68/section-68.2#p-68.2(a)
[85] *2025 CEQA: California Environmental Quality Act Statute and Guidelines,* 2025. Association of Environmental Professionals. Accessible at: https://www.califaep.org/docs/CEQA_Handbook_2025combined.pdf, p. 331.
[86] Ibid, p. 3320.

Also, Section §15064.5[b][3] of CEQA states that:

> *Generally, a project that follows the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings or the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings (1995), Weeks and Grimmer, shall be considered as mitigated to a level of less than a significant impact on the historical resource.* [87]

Therefore, while CEQA's Categorical Exemption for Class 31 (Historical Resources) includes maintenance, repair, and stabilization when done in a consistent manner with the Secretary of the Interior's Standards for the Treatment of Historic Properties, it cannot be used for a project which may cause substantial adverse change to the resources' significance. Since specific details of the nature of any unplanned maintenance, repairs, or stabilization projects' scope, design, and construction are not possible to know, a categorical exemption cannot be assumed or determined at this time.

However, the PEIR specifically directs any unplanned maintenance, repairs, or stabilization that may occur during the AMP of Building 6, Building 7, and Building 8 are to be done in compliance with the Secretary of the Interiors Standards for the Treatment of Historic Properties, and therefore would have at the most, a ***less than significant impact with mitigation*** and most likely be a ***Categorical Exemption from CEQA*** if analyzed separately**.**

5.1.2 Indirect Impacts

There are ***no anticipated indirect impacts*** that would result from a preservation scope project of any unplanned maintenance, repairs, or stabilization of Building 6, Building 7, or Building 8.

5.1.3 Cumulative Impacts

The preservation of Building 6, Building 7, or Building 8 by a preservation scope project of any unplanned maintenance, repairs, or stabilization would not result in any cumulative impacts to the resources.

5.2 Mitigation Measures

This report provides mitigation measures to be included in the project to avoid unanticipated, potentially significant effects of the proposed project. Because details regarding the scope, design, and construction are not possible for currently unplanned work, it is not possible to conclude that the plans for the preservation of Building 6, Building 7, or Building 8 by maintenance, repair, or stabilization comply with the Secretary of the Interior's Standards. Therefore, implementation of the following measure would ensure that there would be no adverse impacts on the historic resource.

This report also does not include avoidance-type mitigation measures. The CEQA guidelines allow mitigation to include "avoiding the impact altogether by not taking a certain action or parts of an action"

[87] Ibid., p. 209.

(§15370[a]). In the event that maintenance, repairs, or stabilization do not occur during the AMP, as currently anticipated, the scope becomes equivalent to a No Project alternative. In the case that any currently unplanned maintenance, repairs, or stabilization do occur, there is no way to separate the programmatic preservation by programmatic maintenance of a building into "parts of an action" without further project details and development, and therefore the preservation scope should be considered a single action. Alterations that would demolish any part of the buildings are significantly different from the assumed project and should be evaluated as Project Alternatives, not mitigation measures.[88]

MM-1: Secretary of the Interior's Standards for the Treatment of Historic Properties

Since the definition of a preservation project of Building 6, Building 7, or Building 8 includes the project being done in compliance with the U.S. Secretary of the Interior's Standards for the Treatment of Historic Properties, the project definitionally "shall generally be considered as mitigated to a level of less than a significant impact" under the CEQA Guideline §15126.4[b][1], which states:

> *Where maintenance, repair, stabilization, rehabilitation, restoration, preservation, conservation or reconstruction of the historical resource will be conducted in a manner consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings (1995), Weeks and Grimmer, the project's impact on the historical resource shall generally be considered mitigated below a level of significance and thus is not significant.*[89]

Further development of any preservation projects of Building 6, Building 7, or Building 8 in the event of currently unplanned maintenance, repairs, or stabilization shall be done in compliance with the U.S. Secretary of the Interior's Standards for the Treatment of Historic Properties. These are:

Standards for Preservation

1. *A property will be used as it was historically, or be given a new use that maximizes the retention of distinctive materials, features, spaces and spatial relationships. Where a treatment and use have not been identified, a property will be protected and, if necessary, stabilized until additional work may be undertaken.*
2. *The historic character of a property will be retained and preserved. The replacement of intact or repairable historic materials or alteration of features, spaces and spatial relationships that characterize a property will be avoided.*
3. *Each property will be recognized as a physical record of its time, place and use. Work needed to stabilize, consolidate and conserve existing historic materials and features will be physically and visually compatible, identifiable upon close inspection and properly documented for future research.*
4. *Changes to a property that have acquired historic significance in their own right will be retained and preserved.*
5. *Distinctive materials, features, finishes and construction techniques or examples of craftsmanship that characterize a property will be preserved.*
6. *The existing condition of historic features will be evaluated to determine the appropriate*

[88] Assessing project alternatives is beyond the scope of this report.
[89] *2025 CEQA: California Environmental Quality Act Statute and Guidelines*, p. 245

level of intervention needed. Where the severity of deterioration requires repair or limited replacement of a distinctive feature, the new material will match the old in composition, design, color and texture.

7. *Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.*
8. *Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.*[90]

The City shall engage a qualified historic architect and/or architectural historian (pursuant to the Secretary of the Interior's Professional Qualifications in 36 CFR Part 61) to consult on the projects' development and analyze the final project scope for Compliance with the Secretary of the Interior's Standards for the Treatment of Historic Properties.

5.3 Conclusions

Buildings 6, 7, and 8 are significant under Criterion A/1/A with a period of significance of 1947-1950. Additionally, Building 6 is significant under Criterion C/3/C with a period of significance of 1947 as an embodiment of the Quonset Hut. Buildings 6, 7, and 8 retain seven out of the seven aspects of integrity. Therefore, Buildings 6, 7, and 8 have been found eligible for listing in the SDRHR, CRHR, and the NRHP.

A project done in compliance with the U.S. Secretary of the Interior's Standards for the Treatment of Historic Properties, is generally "considered as mitigated to a level of less than a significant impact" under the CEQA Guidelines and therefore, the preservation project of Building 6, Building 7, or Building 8 would have at the most, a ***less than significant impact with mitigation,*** under its preservation project description to be done in compliance with the Secretary of the Interiors Standards for the Treatment of Historic Places**.** Since specific details regarding the preservation project's scope, design, and construction are not possible at the programmatic level, this report stipulates **MM-1: Secretary of the Interior's Standards for the Treatment of Historic Properties** so that all feasible mitigation will be carried out following the assumptions of this preservation project's analysis.

[90] Code of Federal Regulations. §*36 CFR 68.3(b),* Available at https://www.ecfr.gov/current/title-36/part-68/section-68.3#p-68.3(a)

6 Bibliography

"All-Metal, Low Cost Light Plane Succeeds in Initial Flight Here." San Diego Union. July 13, 1952.

"All Weather Field Called Vital Need." *San Diego Union*. July 11, 1953.

"Bid Openings Scheduled On Airport Paving." *San Diego Union*. June 10, 1965.

"C.A.A. Grants $20,547 To Aid Gibbs Airport." *San Diego Union.* March 16, 1948.

"Chamber Asks End Of 2-Year Delay On Miramar Zoning." *San Diego Union*. January 14, 1954.

"City Authorizes Airport Hotel." *San Diego Union.* January 16, 1981.

"City in Control of Gibbs Airport." *San Diego Union.* October 16, 1947.

"City to Open Airport Bids." *San Diego Union*. June 13, 1948.

"City Will Annex Airport To Avoid County Tax." San Diego Union. April 15, 1948.

"City Will Buy Mesa Land for New Industries." *San Diego Union*. October 16, 1953.

"Council Delays Kearny Mesa Zoning Case." *San Diego Union*. December 16, 1953.

"Council May Act On Expansion Today." *San Diego Union.* February 1, 1951.

"Dedication Set At Field Today." *San Diego Union*. July 31, 1965.

"Dynamite Blast Sparks Airport Tower Rights." *San Diego Union.* July 19, 1964.

"EDC Attracts Firms to San Diego Area." San Diego Union. January 1, 1969.

"FAA Will Upgrade 3 Area Airports." *San Diego Union*. August 8, 1979.

"Flying for Fun." *San Diego Union.* March 9, 1947.

"Gibbs Airport Area Annexing Urged." *San Diego Union*. September 24, 1947.

"Gibbs Airport Sale to City Near Conclusion." *San Diego Union.* August 3, 1947.

"Gibbs Airport To Be Called Montgomery." *San Diego Union*. August 31, 1949.

"Grove Says 9 New Industries Interested in Locating Here." *San Diego Union*. March 4, 1951.

"Highway 395." *City of Poway.* https://poway.org/188/Highway-395.

"Honey Bee Plane To Make Initial Flight Here Today." *San Diego Union.* July 12, 1952.

"Hotels." San Diego Union. November 13, 1983.

"House Navy Group Members See Amphibious Force Act." *San Diego Union*. May 26, 1942.

"Industrial Parks Lune Farsighted Businesses." *San Diego Union.* January 1, 1969.

"Is Montgomery A Practical Airport Site?." *San Diego Union*. March 10, 1957.

"Kearny Mesa Land Sought By Navy." *San Diego Union.* January 20, 1956.

"Kearny Mesa Zoning for Light Industry Adopted by Council." *San Diego Union.* September 23, 1953.

"Montgomery Field Expansion Detailed." *San Diego Union*. February 23, 1964.

"Montgomery Field is Building Up." *San Diego Union*. November 14, 1982.

"New Plans for S.D." San Diego Union. February 9, 1947.

"Notice Inviting Bids." San Diego Union. January 22, 1950.

"Officials Look Over Gibbs Field Maps." *San Diego Union*. August 9, 1949.

"Ordinance No. 4015." *San Diego Union*. April 7, 1949.

"Owners Will Confer On Mesa Zoning." *San Diego Union.* December 17, 1953.

"Resolution No. 97985." San Diego Union. May 25, 1950.

"Rights Planned At Montgomery Airfield Tower." *San Diego Union.* July 15, 1965.

"Ryan's Classes Show 500% Gain." *San Diego Union*. August 5, 1940.

"S.D. Air Corps Training School Doubles Classes." *San Diego Union*. July 15, 1940.

"Stinson Aircraft Plans Expansion." *San Diego Union*. November 10, 1947.

"Talk on Zoning Will Continue." *San Diego Union*. September 9, 1953.

"Tiny Plane Makes Extended Flight." San Diego Union. March 13, 1949.

"Wee-Bee Makes Trial Flights Successfully." *San Diego Union*. November 21, 1948.

Association of Environmental Professionals. 2019 *CEQA: California Environmental Quality Act Statute and Guidelines.* 2019.

Association of Environmental Professionals. *2025 CEQA: California Environmental Quality Act Statute and Guidelines,* 2025. https://www.califaep.org/docs/CEQA_Handbook_2025combined.pdf.

Boland, Beth Grosvenor. "Guidelines for Evaluating and Documenting Properties Associated with Significant Persons." *National Register Bulletin.* Washington DC: National Park Service.

California Office of Historic Preservation. *California Register of Historical Resources, Criteria for Designation.* http://ohp.parks.ca.gov/?page_id=21238.

California Office of Historic Preservation. *Technical Assistant Series #1.* 2001. http://ohp.parks.ca.gov/pages/1054/files/ts01ca.pdf.

Code of Federal Regulations. §36 CFR 60.3. https://www.ecfr.gov/current/title-36/chapter-I/part-60/section-60.3.

Code of Federal Regulations. §36 CFR 68.2(a). https://www.ecfr.gov/current/title-36/part-68/section-68.2#p-68.2(a).

Criteria for Evaluation. Code of Federal Regulations Part 60.4, Title 36. https://www.ecfr.gov/current/title-36/section-60.4

Decker, Julie, and Chris Chiel, eds. *Quonset Hut: Metal Living for a Modern Age*. China: Princeton Architectural Press, 2005.

The City of San Diego. "Guidelines for the Application of Historical Resources Board Designation Criteria." City of San Diego, 2011.

The City of California, *Barrio Logan Historic Resource Survey*, San Diego, 2011.

City of San Diego, *Public Notice of Preparation of a Program Environmental Impact Report And Scoping Meeting*, City of San Diego Planning Department, February 7, 2019.

Harrison, Donald H. "San Diego's historic places: Montgomery Field as recalled by aviation pioneer Bill Gibbs." *sdjewishworld.com.* June 22, 2010. Accessible at: https://sdjewishworld.wordpress.com/2010/06/22/san-diegos-historic-places-montgomery-field-as-recalled-by-aviation-pioneer-bill-gibbs/0/.

Hudson, Ken. "Montgomery Field Has Biggest Increase: San Diego's Skies Buzzing With Aircraft Activity." *San Diego Union*. May 21, 1978.

Johns, Roy C. "City Council Gets Montgomery Field Development Plan." *San Diego Union.* March 11, 1960.

Lamm, Michael. "The Instant Building," *Invention & Technology Magazine* 13, no. 3 (Winter 1998): https://www.inventionandtech.com/content/instant-building-1.

Martin, E.G. "Montgomery Field Plan Vetoed By Navy: Potential Interference with Miramar

Cited." *San Diego Union.* December 15, 1960.

Milbrooke, Anne, Patrick Andrus, Jody Cook, and David B Whipple. National Park Service. "Guidelines for Evaluating and Documenting Historic Aviation Properties." *National Register Bulletin.* Washington DC: National Park Service, 1998.

National Park Service. "How to Apply the National Register Criteria for Evaluation." *National Register Bulletin.* Washington DC: National Park Service, 2002.

Plain, Carl. "Light Craft Test Due For Autumn." *San Diego Union*. March 6, 1957.

"Quonset Hut," Quonset Hut | Washington State Department of Archaeology & Historic Preservation (DAHP), *Washington State Department of Archaeology & Historic Preservation (DAHP),* https://dahp.wa.gov/historic-preservation/historic-buildings/architectural-style-guide/quonset-hut.

"San Diego Air & Space Museum mourns the loss of Aviation Legend Bill Gibbs." *San Diego Air & Space Museum*. https://sandiegoairandspace.org/press/release/san-diego-air-space-museum-mourns-the-loss-of-aviation-legend-bill-gibbs.

Sierra Club v. County of Fresno. 2018.
https://cases.justia.com/california/supreme-court/2018-s219783a.pdf?ts=1545687370.

The Secretary of the Interior's Standards for the Treatment of Historic Properties. Federal Regulations 36 CFR Part 68, (1995). https://www.ecfr.gov/current/title-36/part-68

Appendix A: Building Development Information

A.1 County Assessor's Building Record
A.2 Notice of Completion
A.3 Water/Sewer Connection Records
A.4 Construction Permits
A.5 Lot and Block Book Page
A.6 Previous Historical Resource Survey Forms

A.1 County Assessor's Building Record

Not Found

A.2 Notice of Completion

Not Found

A.3 Water/Sewer Connection Records

Not Found

A.4 Construction Permits

Not Found

A.5 Lot and Block Book Page

Not Available. According to the Chain of Title Report, the Lot Block Book Page for year 1944-1949 could not be located.

A.6 Previous Historical Resource Survey Forms

P-37-023982

37023982

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #: _____
HRI #: _____
Trinomial: _____
NRHP Status Code: _____
Other Listings: _____
Review Code: _____ Reviewer: _____ Date: _____

Page 1 of 2 **Resource Name or #:** (Assigned by recorder): MF-S-1

P1. Other Identifier: None

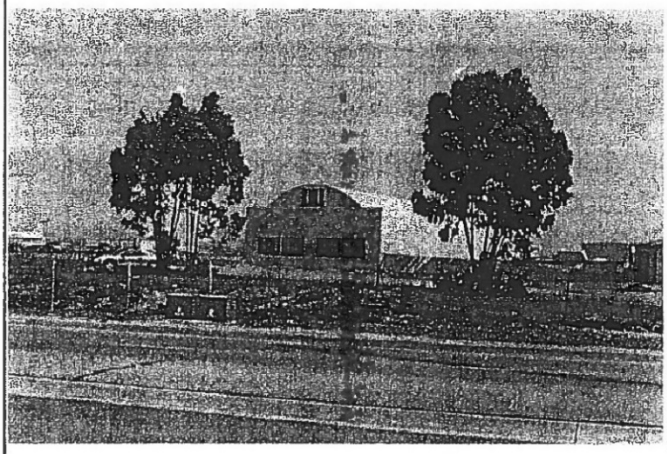
P2. **Location:** ☐ Not for Publication ■ Unrestricted **a. County:** San Diego
and (P2b and P2c or P2d. Attach a Location Map as necessary.)
b. **USGS 7.5' Quad:** La Jolla, CA **Date:** 1967 T 16S ; R 3W; unsectioned
c. Address: 3750 John J. Montgomery Drive, San Diego, CA 92123
d. UTM: Zone 11 ; NAD 1927; 486060 mE/ 3630460 mN
e. Other Locational Data (e.g., parcel #, directions to resource, elevation, etc., as appropriate): On east side of Kearny Villa Road, at the west end of Montgomery Field Airport is Building 114.

P3a. **Description** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries): This historic building is a large, off-white, quantsit hut/airplane hangar with a rectangular facade on the west side. The west facade also has a door in the center with two large, multi-paned (12X3 panes) windows on either side and two levered windows and an aluminum, sliding window centered in the top half of the hangar. The east facade contains four windows with vents above them on the top half of the hangar and side, sliding hangar doors. It is used for flight training and aircraft rentals.

P3b. **Resource Attributes** (List attributes and codes): HP39. Other (Airplane hangar)

P4. **Resources Present:** ■ Building ☐Structure ☐Object ☐Site ☐District ☐Element of District ☐Other (Isolates, etc.)

P5a. Photograph or Drawing (Photo required for buildings, structures, and objects)



P5b. Description of Photo (View, date, accession #):

P6. **Age and Sources:**
■ Historic ☐ Prehistoric
☐ Both

P7. **Owner and Address:**
City of San Diego
3750 John J. Montgomery Dr.
San Diego, CA 92123

P8. **Recorded by** (Name, affiliation, and address):
Stephanie Murray, Andrew Pigniolo, and Carmen Zepeda
Tierra Environmental Services
9903-E Businesspark Avenue
San Diego, CA 92131

P9. **Date Recorded:**
April 24, 2001

P10. **Survey Type** (Describe):
Constraints Study

P11. **Report Citation** (Cite survey report and other sources, or enter "none"): Pigniolo, Andrew R. and Stephanie Murray 2001 Cultural Resources Survey for the Montgomery Field Airport Master Plan Project, City of San Diego, California.
Attachments: ☐ NONE ■ Location Map ☐ Sketch Map ☐ Continuation Sheet ☐ Building, Structure, and Object Record
☐ Archaeological Record ☐ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record
☐ Artifact Record ☐ Photograph Record ☐ Other (List):

DPR 523A (1/95) Required information is bold

Building 6 - 2001 DPR 523A - page 1 of 2

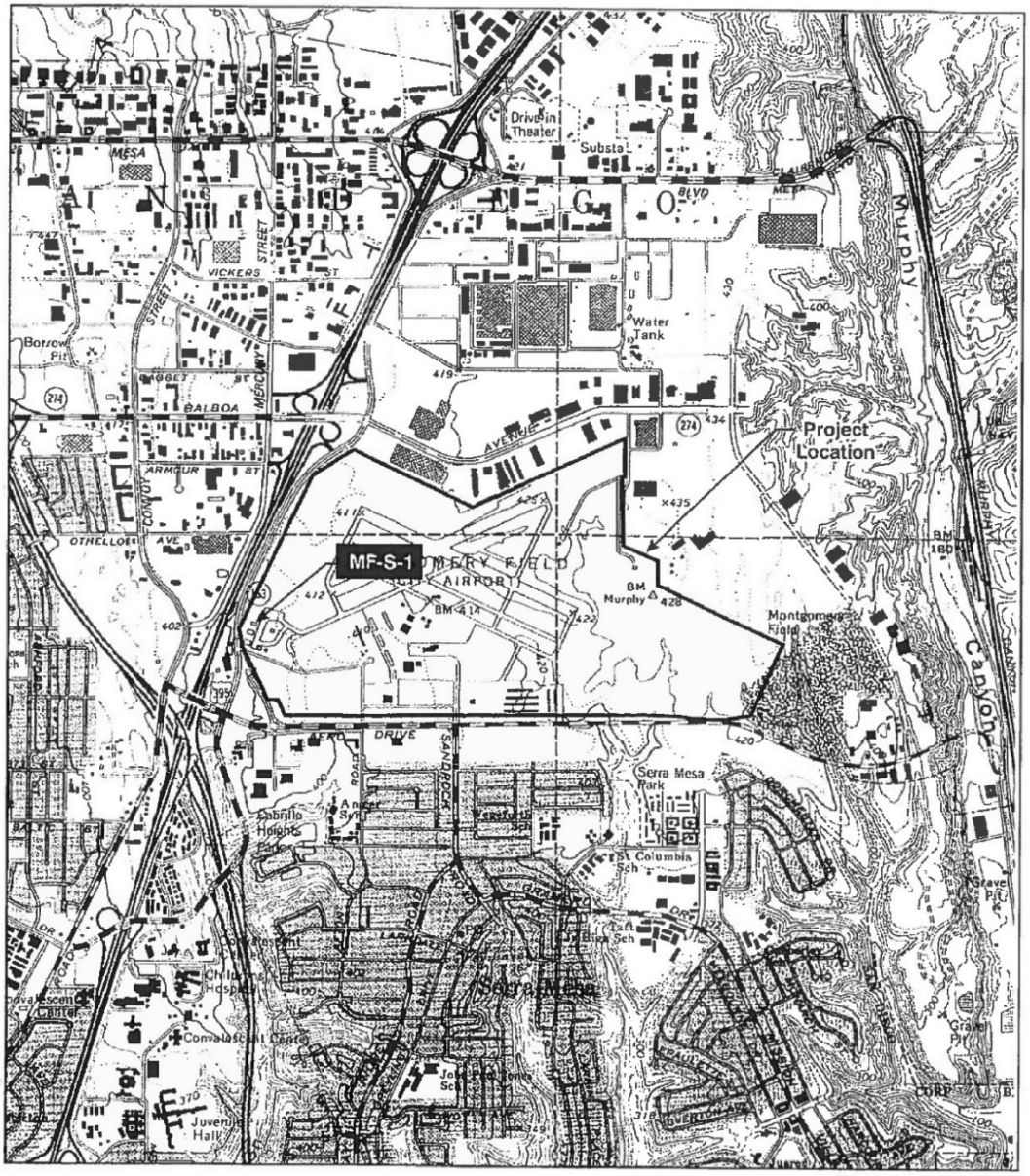
P-37-023982
37023982

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
Primary #: _____
Trinomial: _____

LOCATION MAP

Page 2 of 2 **Resource Name or #:** (Assigned by recorder): MF-S-1

Map Name: La Jolla, CA **Scale:** 1:24,000 **Date of Map:** 1975



DPR 523J (1/95) **Required information is bold**

Building 6 - 2001 DPR 523A - page 2 of 2

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #: P-37-023981
HRI #:
Trinomial:
NRHP Status Code:
Other Listings:
Review Code: Reviewer: Date:

Page 1 of 2 **Resource Name or #:** (Assigned by recorder): MF-S-2

P1. Other Identifier: None

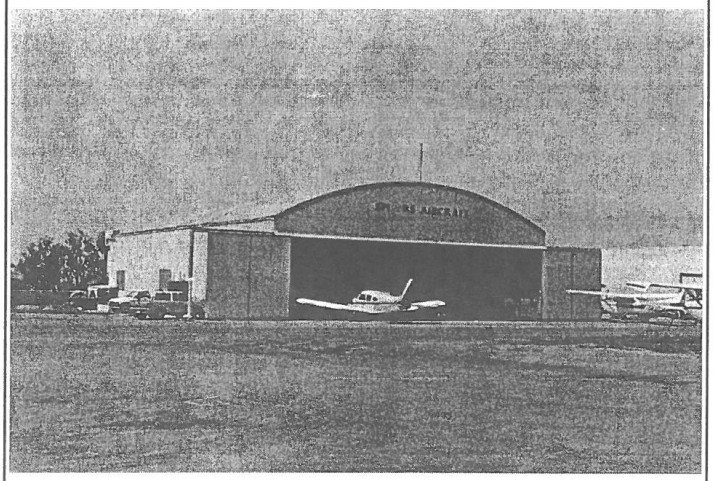
P2. **Location:** ☐ Not for Publication ■ Unrestricted **a. County:** San Diego
and (P2b and P2c or P2d. Attach a Location Map as necessary.)
b. **USGS 7.5' Quad:** La Jolla, CA **Date:** 1967 **T** 16S ; **R** 3W;unsectioned
c. Address: 3750 John J. Montgomery Drive, San Diego, CA 92123
d. UTM: Zone 11 ; NAD 1927; 486050 mE/ 3630420 mN
e. Other Locational Data (e.g., parcel #, directions to resource, elevation, etc., as appropriate): On east side of Kearny Villa Road, at the west end of Montgomery Field Airport is Building 3873.

P3a. **Description** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries): This historic building is an off-white, airplane hangar named "Spiders Aircraft." It has an asphalt, strip shingle roof with lath and plaster walls. A single-story shed with a blue door on the west facade extends from the north side of the hangar. The west facade has three multi-paned (3X3 panes) windows while the south facade has 2 windows. There are side, sliding hangar doors on the east facade. It is used for flight training and aircraft rentals.

P3b. **Resource Attributes** (List attributes and codes): HP39. Other (Airplane hangar)

P4. **Resources Present:** ■Building ☐Structure ☐Object ☐Site ☐District ☐Element of District ☐Other (Isolates, etc.)

P5a. Photograph or Drawing (Photo required for buildings, structures, and objects)



P5b. Description of Photo (View, date, accession #):

P6. **Age and Sources:**
■ Historic ☐ Prehistoric
☐ Both

P7. **Owner and Address:**
City of San Diego
3750 John J. Montgomery Dr.
San Diego, CA 92123

P8. **Recorded by** (Name, affiliation, and address):
Stephanie Murray, Andrew Pigniolo, and Carmen Zepeda
Tierra Environmental Services
9903-E Businesspark Avenue
San Diego, CA 92131

P9. **Date Recorded:**
April 24, 2001

P10. **Survey Type** (Describe):
Constraints Study

P11. **Report Citation** (Cite survey report and other sources, or enter "none"): Pigniolo, Andrew R. and Stephanie Murray 2001 Cultural Resources Survey for the Montgomery Field Airport Master Plan Project, City of San Diego, California.
Attachments: ☐ NONE ■ Location Map ☐ Sketch Map ☐ Continuation Sheet ☐ Building, Structure, and Object Record
☐ Archaeological Record ☐ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record
☐ Artifact Record ☐ Photograph Record ☐ Other (List):

DPR 523A (1/95) Required information is bold

Building 7 - 2001 DPR 523A - page 1 of 1

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #: P-37-023980
HRI #:
Trinomial:
NRHP Status Code:
Other Listings:
Review Code: Reviewer: Date:

Page 1 of 2 **Resource Name or #:** (Assigned by recorder): MF-S-3

P1. Other Identifier: None

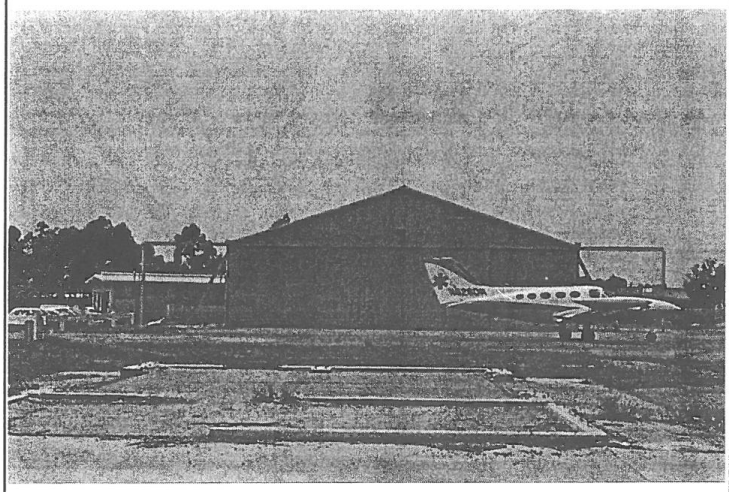
P2. **Location:** ☐ Not for Publication ■ Unrestricted **a. County:** San Diego
and (P2b and P2c or P2d. Attach a Location Map as necessary.)
b. **USGS 7.5' Quad:** La Jolla, CA **Date:** 1967 **T** 16S ; **R** 3W;unsectioned
c. Address: 3750 John J. Montgomery Drive, San Diego, CA 92123
d. UTM: Zone 11 ; NAD 1927; 486030 mE/ 3630380 mN
e. Other Locational Data (e.g., parcel #, directions to resource, elevation, etc., as appropriate): On east side of Kearny Villa Road, at the west end of Montgomery Field Airport, south of Building 3873.

P3a. **Description** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries): This historic building is a corrugated, metal hangar with a gabled roof and no windows. There are five lights extending out of the west facade. The east facade has side, sliding hangar doors. It is used for flight training and aircraft rentals.

P3b. **Resource Attributes** (List attributes and codes): HP39. Other (Airplane hangar)

P4. **Resources Present:** ☐Building ☐Structure ☐Object ☐Site ☐District ☐Element of District ■Other (Isolates, etc.)

P5a. Photograph or Drawing (Photo required for buildings, structures, and objects)



P5b. Description of Photo (View, date, accession #):

P6. **Age and Sources:**
■ Historic ☐ Prehistoric
☐ Both

P7. **Owner and Address:**
City of San Diego
3750 John J. Montgomery Dr.
San Diego, CA 92123

P8. **Recorded by** (Name, affiliation, and address):
Stephanie Murray, Andrew Pigniolo, and Carmen Zepeda
Tierra Environmental Services
9903-E Businesspark Avenue
San Diego, CA 92131

P9. **Date Recorded:**
April 24, 2001

P10. **Survey Type** (Describe):
Constraints Study

P11. **Report Citation** (Cite survey report and other sources, or enter "none"): Pigniolo, Andrew R. and Stephanie Murray 2001 Cultural Resources Survey for the Montgomery Field Airport Master Plan Project, City of San Diego, California.

Attachments: ☐ NONE ■ Location Map ☐ Sketch Map ☐ Continuation Sheet ☐ Building, Structure, and Object Record
☐ Archaeological Record ☐ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record
☐ Artifact Record ☐ Photograph Record ☐ Other (List):

DPR 523A (1/95) Required information is bold

Building 8 - 2001 DPR 523A - page 1 of 1

Appendix B: Ownership and Occupant Information

B1. Chain of Title

B2. City Directory Listing of Occupants

B.3 Copy of Deed from Date of Construction

B1. Chain of Title

The following Chain of Title Report was completed for 3873 Kearny Villa Road, the address for Buildings 6, 7, and 8. The legal description initially identifies the parcel as Lot 26 of the New Riverside Subdivision in accordance with Map No. 679 filed in 1891. Current San Diego County Assessor's Maps Book 421, Page 29, SHT 1 of 2 (pg. 85), however, clearly show that lot 26 is not the lot containing Buildings 6, 7, and 8. Instead, this map locates Lot 26 in the center of Montgomery-Gibbs Executive Airport. Moreover, the Chain of Title shows that Lot 26 was acquired by Bill Gibbs in 1941. This information conflicts with that obtained during the research for this report, which cites *San Diego Union* articles from 1940 to 1984, articles with interviews of Bill Gibbs, and other resources regarding the established history of the Montgomery-Gibbs Executive Airport. The research for this report has determined that Bill Gibbs developed Gibbs Field in 1937.

The following Chain of Title also identifies the property as Lease Lot 9 in Montgomery Field. It is unknown if this is accurate. The Property Detail Report following the Chain of Title identifies the property as "Sublease (Unit 3) in Lot 9 in Montgomery Field Tr 10Blic." Upon referencing San Diego County Assessor's Map, Book 421, Page 29, SHT 1 of 2, as well as the original New Riverside map from 1891, tract 10 does appear to contain Buildings 6, 7, and 8. However, the Property Detail Report lists "CLL-Airplane 1 LLC" as the owner and not the City of an Diego. It is not certain if this property report is referring to 3873 Kearny Villa Road.

Despite the discrepancies stated above, the following Chain of Title report and Property Detail Report are included for completeness.

California Lot Book, Inc.
dba California Title Search Co.
P.O. Box 9004
Rancho Santa Fe, CA 92067
(858) 278-8797 Fax (858) 278-8393
WWW.LOTBOOK.COM

Chain of Title Report

IS Architecture
5645 La Jolla Blvd.
La Jolla, CA 92037
Attn: Chris Usler

CTS Reference No.: 0319405

Title Search Through:	March 14, 2019
Property Address:	3873 Kearny Villa Road San Diego, CA 92123
Assessor's Parcel No.:	760-222-32-07 (Sublease) 421-290-11-00 (Fee)
Assessed Value:	$508,392
Exemption:	None

Property Characteristics

Use:	Garage
Improvements:	3,600 square feet

Legal Description

LOT 26 OF NEW RIVERSIDE IN THE CITY OF SAN DIEGO, COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO MAP THEREOF NO. 679, FILED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY, AUGUST 11, 1891.

SUBJECT PROPERTY ALSO IDENTIFIED AS LEASE LOT 9 OF MONTGOMERY-GIBBS EXECUTIVE AIRPORT IN THE CITY OF SAN DIEGO, COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO CITY OF SAN DIEGO DRAWING THEREOF NO. 13246-D AS APPROVED BY THE FEDERAL AVIATION ADMINISTRATION (FAA) AND FILED WITH THE SAN DIEGO CITY CLERK.

B1. Chain of Title

California Lot Book, Inc., dba California Title Search Co.
CTS Reference No.: 0319405

Chain of Title
(August 25, 1891 through March 14, 2019)

1. Grant Deed	
Grantor:	D. C. Reed and J. C. Reed
Grantee:	Dr. Nathan Hunt
Recorded:	August 25, 1891, Deed Book 187, Page 227
2. Grant Deed	
Grantor:	Nathan Hunt
Grantee:	Clarence E. Hunt
Recorded:	August 14, 1930, #38999, Deed Book 1800, Page 264
3. Grant Deed	
Grantor:	Clarence E. Hunt
Grantee:	Nathan Hunt and Ida E. Hunt
Recorded:	August 18, 1930, #39434, Deed Book 1787, Page 474
4. Grant Deed	
Grantor:	Nathan Hunt and Ida E. Hunt
Grantee:	Hettie J. S. Hunt
Recorded:	November 4, 1936, #71461, Official Records Book 582, Page 277
5. Grant Deed	
Grantor:	Hettie J. S. Hunt
Grantee:	William Gibbs, Jr.
Recorded:	February 26, 1941, #11639 Official Records Book 1143, Page 206

Please be advised that this is not Title Insurance. The information provided herein reflects matters of public record which impart constructive notice in accordance with California Insurance Code 12340.10

Page 2 of 3

B1. Chain of Title

6. Grant Deed

Grantor:	Wm. Gibbs, Jr., aka William Gibbs Jr., and Barbara M. Gibbs
Grantee:	The City of San Diego
Recorded:	October 10, 1947, #105892 of Official Records

7. From a review of available Lot Block Book Pages, it appears that the first year with assessed improvements is after 1944.

The Lot Block Book Page for the years between 1944 and 1949 could not be located.

8. Notice of Completion

Recorded:	April 11, 1958, #58658, Official Records Book 7034, Page 452
Note:	We are unable to determine if this relates to the subject property

– End of Report –

****

Please be advised that this is not Title Insurance. The information provided herein reflects matters of public record which impart constructive notice in accordance with California Insurance Code 12340.10. Note that we are not a Title Insurance Company, and that no express or implied warranty as to the accuracy or completeness of the information provided herein is granted. Our work has been performed under short time constraints with a quick turn around, and is based in part on the use of databases outside of our control. The recipient hereby acknowledges that California Lot Book, Inc. assumes no liability with respect to any errors or omissions related to the information provided herein. Also note that this search has been performed without the benefit of a Statement of Identification from the property owners, and if a search was performed for liens recorded against owner names, we cannot be sure that the information provided relates to the actual property owners, or is complete with respect to the property owners. In any event, our liability is limited to the amount of fees collected for the information provided herein.

****

Page 3 of 3

B1. Chain of Title (Supplemental) – Property Detail Report

Property Detail Report

Montgomery Fld, San Diego, CA
APN: 760-222-32-07

San Diego County Data as of: 02/21/2019

Owner Information

Owner Name:	CLL-Airplane 1 LLC		
Vesting:	Corporation		
Mailing Address:	3565 Riviera Dr, San Diego, CA 92109-6639	Occupancy:	Unknown

Location Information

Legal Description:	Sublease(Unit 3)In Lot 9 In Montgomery Field Tr 10Blic			County:	San Diego, CA
APN:	760-222-32-07	Alternate APN:		Census Tract / Block:	
Munic / Twnshp:	San Diego	Twnshp-Rng-Sec:		Legal Lot / Block:	9 /
Subdivision:		Tract #:	10Blic	Legal Book / Page:	760 / 22
Neighborhood:	Eastern San Diego	School District:	San Diego Unified School District		
Elementary School:	Wegeforth Elementa...	Middle School:	Taft Middle School	High School:	

Last Transfer / Conveyance - Current Owner

Transfer / Rec Date:	/ 03/05/1999	Price:		Transfer Doc #:	1999.904399
Buyer Name:	CLL-Airplane 1 LLC LF Crownair Holdings Inc	Seller Name:	Owner Name Unavailable	Deed Type:	Deed

Last Market Sale

Sale / Rec Date:	/ 03/05/1999	Sale Price / Type:		Deed Type:	Deed
Multi / Split Sale:		Price / Sq. Ft.:		New Construction:	
1st Mtg Amt / Type:		1st Mtg Rate / Type:		1st Mtg Doc #:	N/A
2nd Mtg Amt / Type:		2nd Mtg Rate / Type:		Sale Doc #:	1999.904399
Seller Name:	Owner Name Unavailable				
Lender:					
Title Company:					

Prior Sale Information

Sale / Rec Date:	/ 03/05/1999	Sale Price / Type:		Prior Deed Type:	Deed
1st Mtg Amt / Type:		1st Mtg Rate / Type:		Prior Sale Doc #:	1999.904399
Prior Lender:					

Property Characteristics

Gross Living Area:	3,600 Sq. Ft.	Total Rooms:	0	Year Built / Eff:	
Living Area:	3,600 Sq. Ft.	Bedrooms:		Stories:	
Total Adj. Area:		Baths (F / H):		Parking Type:	
Above Grade:		Pool:		Garage #:	
Basement Area:		Fireplace:		Garage Area:	
Style:		Cooling:		Porch Type:	
Foundation:		Heating:		Patio Type:	
Quality:		Exterior Wall:		Roof Type:	
Condition:		Construction Type:		Roof Material:	

Site Information

Land Use:	Garage	Lot Area:	17,849,653 Sq. Ft.	Zoning:	INDUSTRIAL
State Use:		Lot Width / Depth:		# of Buildings:	1
County Use:	46 - Automotive Garages (Small)	Usable Lot:		Res / Comm Units:	1 / 1
Site Influence:		Acres:	409.77	Water / Sewer Type:	
Flood Zone Code:	X	Flood Map #:	06073C1610G	Flood Map Date:	05/16/2012
Community Name:	City Of San Diego	Flood Panel #:	1610G	Inside SFHA:	False

Tax Information

Assessed Year:	2018	Assessed Value:	$508,392	Market Total Value:	
Tax Year:	2018	Land Value:	$42,871	Market Land Value:	
Tax Area:	8-001	Improvement Value:	$465,521	Market Imprv Value:	
Property Tax:	$5,971.62	Improved %:	91.57%	Market Imprv %:	
Exemption:		Delinquent Year:			

DataTree® By FIRST AMERICAN®

© 2017 FIRST AMERICAN DATA TREE AND/OR ITS AFFILIATES. ALL RIGHTS RESERVED.

PAGE 1 OF 1

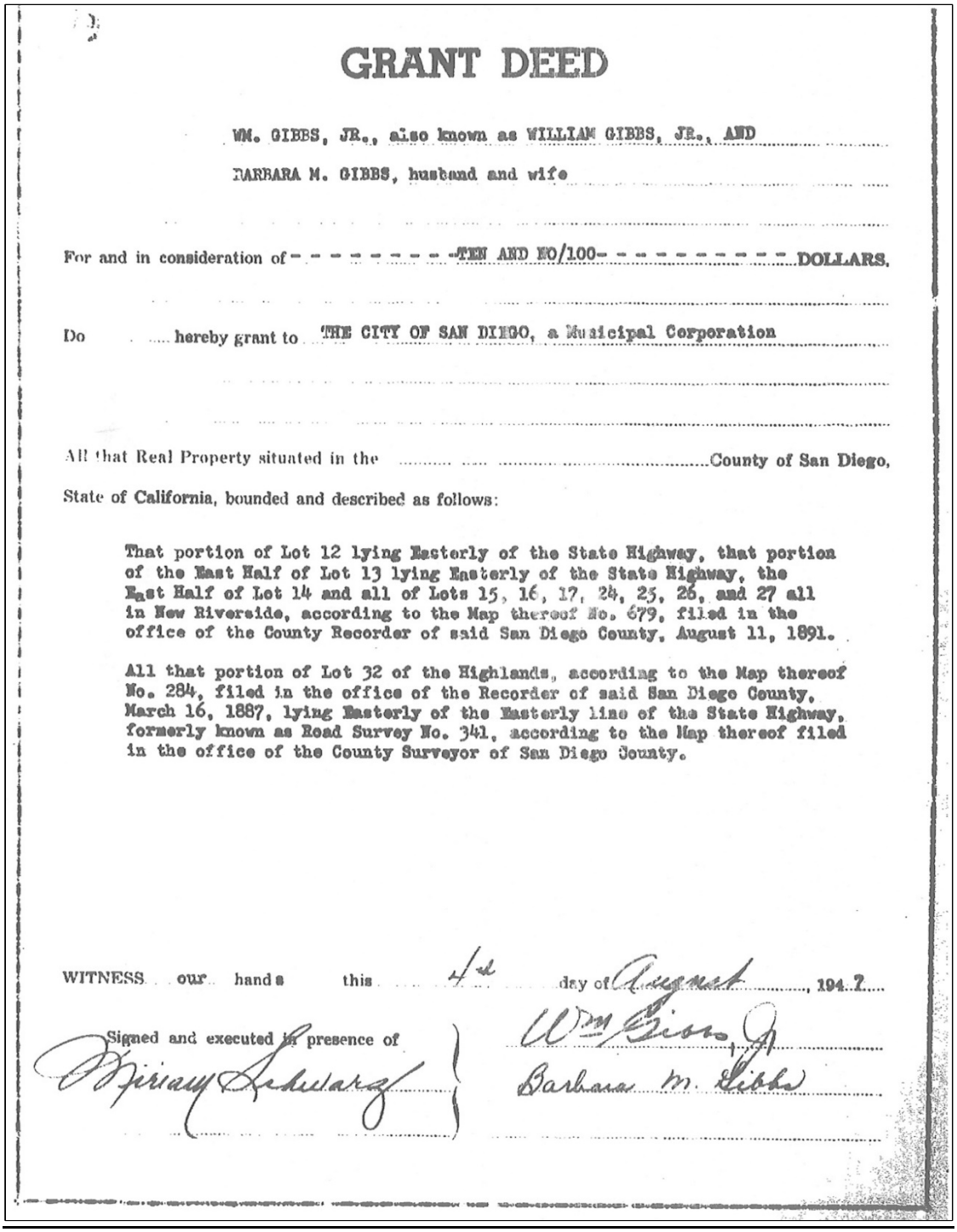
B2. City Directory Listing of Occupants

Not Found

B.3 Copy of Deed from Date of Construction

The 1937 deed conveying the original New Riverside Subdivision lots to Bill Gibbs was not found. This would have been the deed during the time Buildings 6 and 7, and possibly 8, were built.

B.3 Copy of Deed from Date of Construction



GRANT DEED

WM. GIBBS, JR., also known as WILLIAM GIBBS, JR., AND
BARBARA M. GIBBS, husband and wife

For and in consideration of - - - - - - - - - TEN AND NO/100- - - - - - - - - - DOLLARS,

Do hereby grant to THE CITY OF SAN DIEGO, a Municipal Corporation

All that Real Property situated in the County of San Diego,
State of California, bounded and described as follows:

That portion of Lot 12 lying Easterly of the State Highway, that portion of the East Half of Lot 13 lying Easterly of the State Highway, the East Half of Lot 14 and all of Lots 15, 16, 17, 24, 25, 26, and 27 all in New Riverside, according to the Map thereof No. 679, filed in the office of the County Recorder of said San Diego County, August 11, 1891.

All that portion of Lot 32 of the Highlands, according to the Map thereof No. 284, filed in the office of the Recorder of said San Diego County, March 16, 1887, lying Easterly of the Easterly line of the State Highway, formerly known as Road Survey No. 341, according to the Map thereof filed in the office of the County Surveyor of San Diego County.

WITNESS our hands this 4th day of August, 1947

Signed and executed in presence of
Miriam Lebedarz
Wm Gibbs Jr
Barbara M. Gibbs

1947 deed from William Gibbs, Jr. (Bill Gibbs) and Barabara M. Gibbs conveying Gibbs Field to the City of San Diego. If Building 8 was constructed after August 4, 1947, this would have been the deed at the time of its construction.

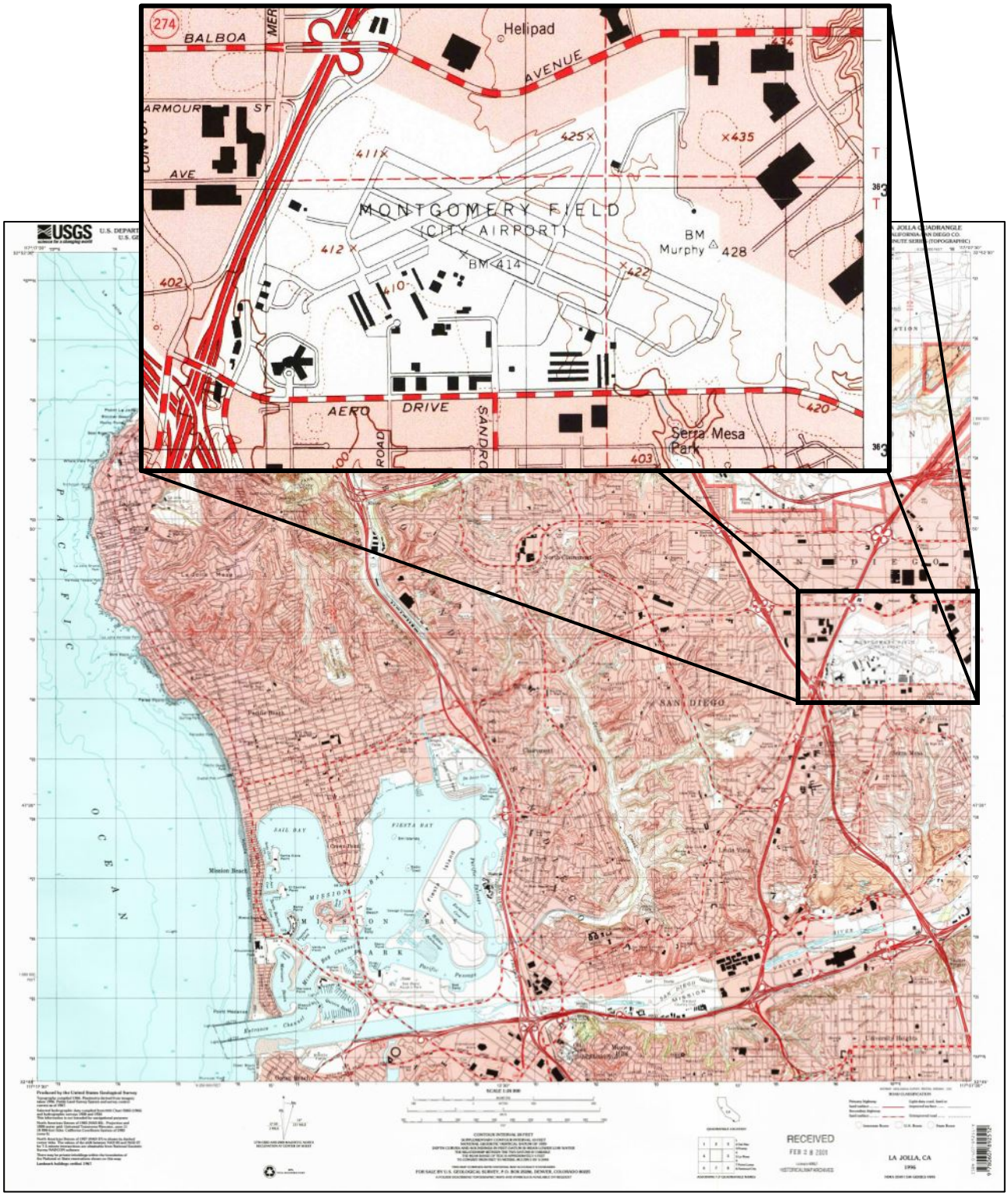
Appendix C: Maps

C.1 City of San Diego 800 Scale Engineering Map
C.2 USGS Maps
C.3 Original Subdivision Map
C.4 Sanborn Fire Insurance Maps

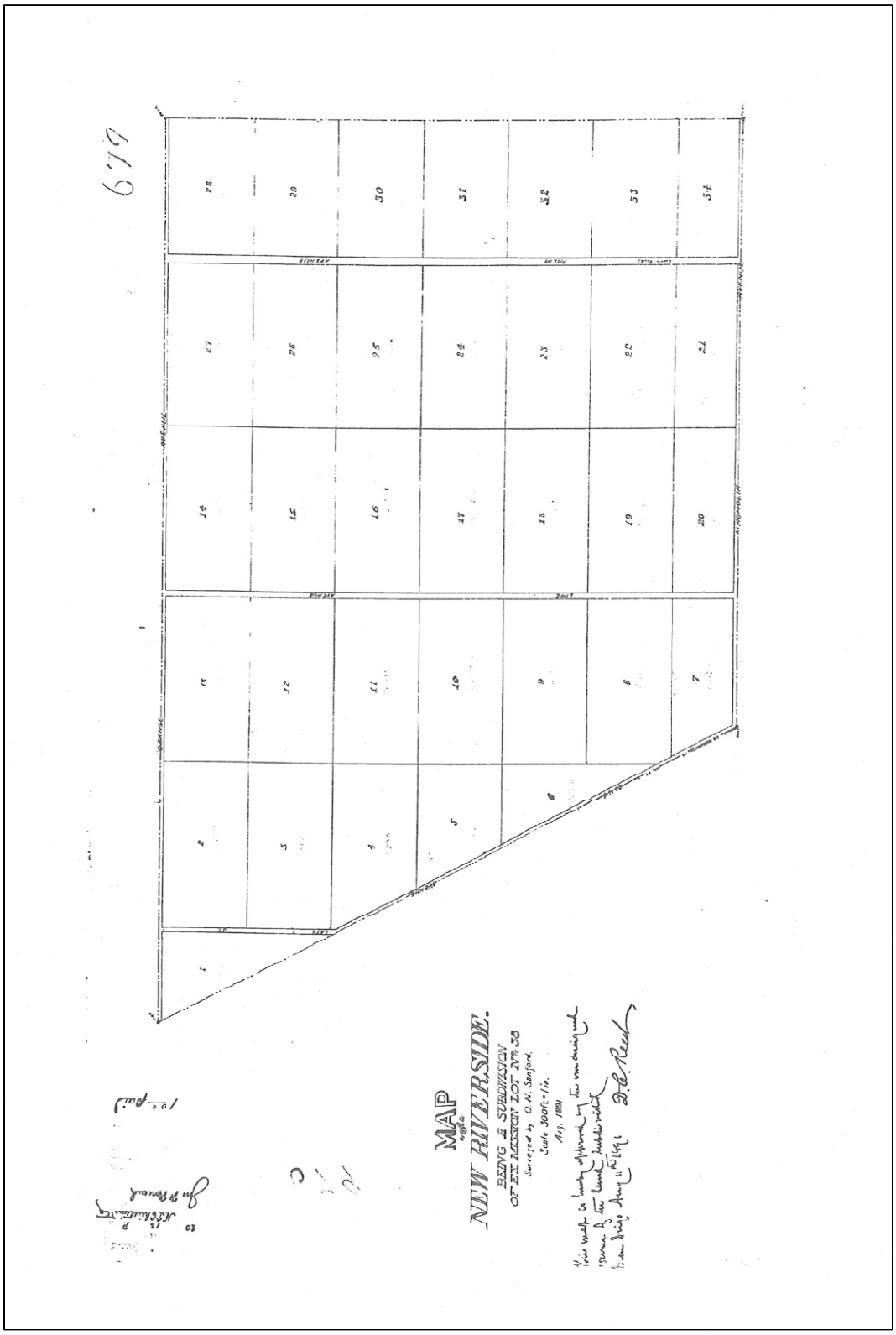
C.1 City of San Diego 800 Scale Engineering Map

Not Available.

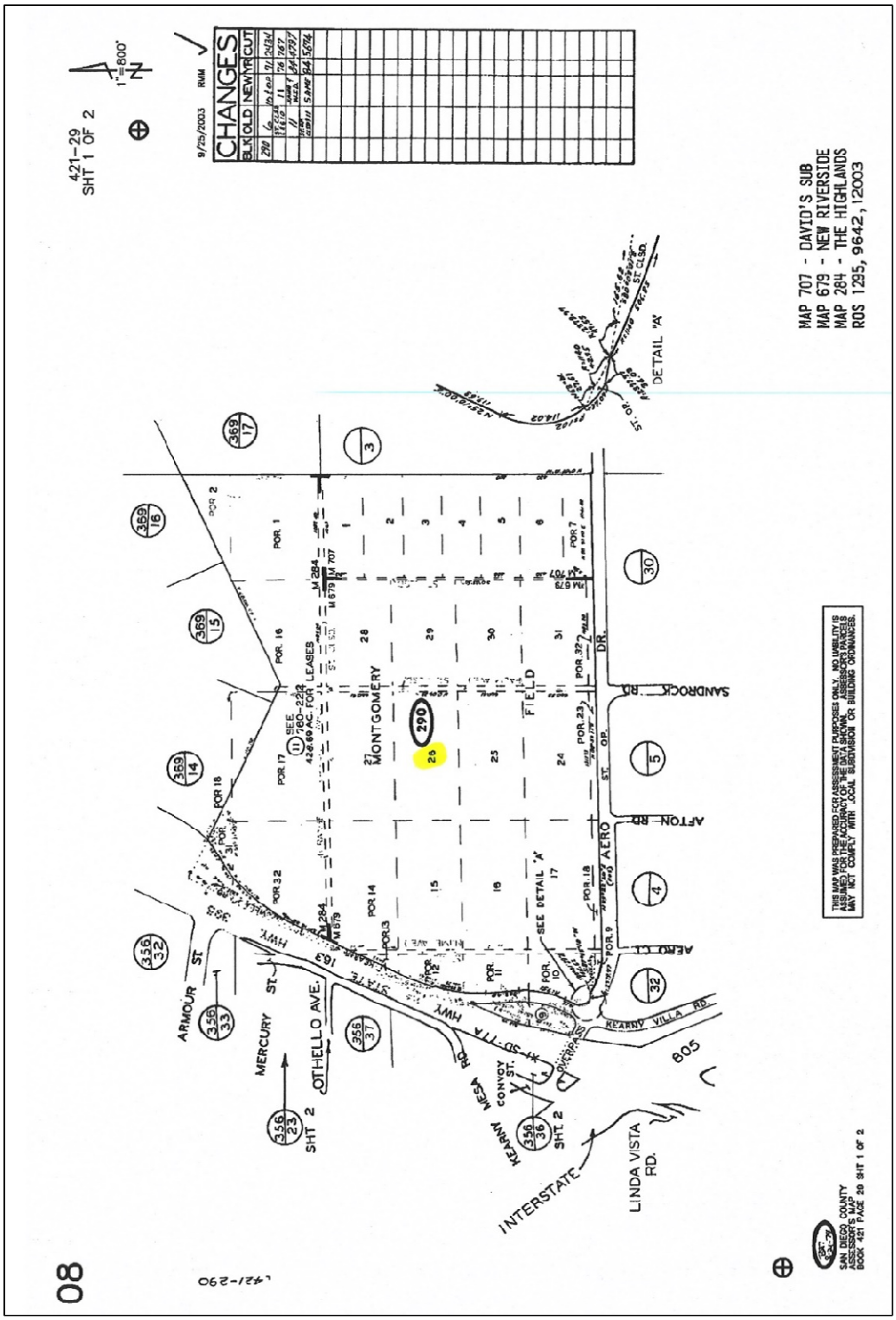
C.2 USGS Map (1996)



C.3 Original Subdivision Map – New Riverside Subdivision



C.3 Current Subdivision Map



San Diego County Assessor's Map, Book 421, Page 29, SHT 1 of 2.

C.4 Sanborn Fire Insurance Maps

Not Available

Appendix D: DPR Forms

[DPR Forms Begin on the Next Page]

State of California The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code 5S1

Other Listings
Review Code | Reviewer | Date

*Resource Name or #: Building 6

P1. Other Identifier: N/A

*P2. Location: ☐ Not for Publication ☒ Unrestricted *a. County: San Diego

*b. USGS 7.5' Quad: La Jolla Date: 1996

c. Address: 3873 Kearny Villa Road City: San Diego Zip: 92123

d. UTM: Zone 11 S; 486003.35 mE/ 3630633.49 mN (G.P.S.)

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Legal Description

On east side of Kearny Villa Road at the west end of Montgomery-Gibbs Executive Airport, north of Building 7.

*P3a. Description:

Building 6 is a single-story, pre-fabricated, steel-frame aircraft hangar with a semi-cylindrical massing. Oriented westward, its primary elevation faces Kearny Villa Road. It features a slightly raised, poured concrete foundation, and features a roof made entirely of corrugated galvanized steel panels. The roof curves downward, covering the northern and southern sides of the building, and terminates at the raised concrete foundation. *(Continued on pg 3).*

*P3b. Resource Attributes: HP39 - Other

*P4. Resources Present: ☒Building ☐Structure ☐Object ☐Site ☐District ☐Element of District ☐Other (Isolates, etc.)

P5a. Photo or Drawing



P5b. Description of Photo:
¾ view showing west and south elevations. IS Architecture, 2019.

*P6. Date Constructed/Age:
☒Historic ☐Prehistoric ☐Both
1947.

*P7. Owner and Address:
City of San Diego
202 C Street
San Diego, CA 92101

*P8. Recorded by:
IS Architecture
5645 La Jolla Boulevard
La Jolla, California 92037

*P9. Date Recorded: April 2019

*P10 Survey Type: Intensive/pedestrian

*P11. Report Citation: None.

*Attachments: ☐NONE ☐Location Map ☐Sketch Map ☒Continuation Sheet ☒Building, Structure, and Object Record
☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record
☐Artifact Record ☐Photograph Record ☐Other (List):

BUILDING, STRUCTURE, AND OBJECT RECORD

***Resource Name: Building 6** ***NRHP Status Code: 5S1**

B1. Historic Name: N/A
B2. Common Name: Building 6
B3. Original Use: Aircraft Hangar (1947) B4. Present Use: Aircraft Hangar
***B5. Architectural Style:** Quonset Hut
***B6. Construction History:**

Sometime in 1946 or early 1947, Bill Gibbs acquired Building 6, which was likely sold as a surplus building no longer needed by the Navy following the war. A historic photograph shows that the reconstruction of Building 6 was nearly completed by March of 1947.

***B7. Moved?** ☐**No** ☒**Yes** ☐**Unknown** **Date:** 1947 **Original Location:** Unknown
***B8. Related Features:** N/A
B9a. Architect: N/A **b. Builder:** Bill Gibbs
***B10. Significance** **Theme:** Historical Development **Area:** Kearny Mesa
Period of Significance: 1947-1950 **Property Type:** Aircraft Hangar **Applicable Criteria:** A

HISTORIC CONTEXT

Prior to settlement, the community now known as Kearny Mesa was part of a large area solely occupied by the native Kumeyaay people. After the arrival of the Spanish explorers, the area was claimed by Spain for the Mission San Diego de Alcalá. After the Mission was secularized following Mexican independence in 1822, the land was parceled out as part of a massive tract known as Rancho Ex-Mission San Diego. By the end of the 19th century, the mesa north of Mission Valley had become known as the Linda Vista mesa and a few small farming settlements had developed around present-day University City and Miramar *(Continued on p.3).*

B11. Additional Resource Attributes:

***B12. References:** See endnotes.

B13. Remarks: None.

***B14. Evaluator:** IS Architecture

***Date of Evaluation:** April 2019



(This space reserved for official comments.)

P3a. Description: Continued

The western end wall is the primary elevation of the building and was constructed with wood framing and sheathing. The exterior of this end wall has a squared, and stuccoed, office-like façade that spans three-quarters of the height of the building. This stuccoed front façade features a central, flush door flanked by sets of two, fixed, steel sash windows. The windows closest to center are composed of eighteen lights stacked in three horizontal rows of six. The windows outer windows are of a similar composition but feature horizontal jalousie window in the top outside corner. Above the squared, stuccoed façade is the rounded top quarter of the western end wall. This top portion is clad in nailed sheets of lead and features a central, wood framed, tripartite window. This window is composed of a central, two-light, aluminum sliding window flanked by narrow, jalousie glass-filled, side lights.

The eastern end wall makes up the rear elevation of the building. The lower half of this end wall features an exterior, four panel, horizontal sliding, hangar door. This door system is made of corrugated steel panels that slide sideways along an exposed top track made of a steel box rail and dimensional lumber. The top track extends out past the sides of the buildings and terminate at vertical supports made of dimensional lumber. These vertical supports are also braced to the corrugated steel panel roof.

Above the hangar door, the rounded top half of the building features a corrugated steel paneled exterior. A horizontal row of four, large, fixed, wood framed, square-shaped windows appears here off-center with the façade. Curved vents made of metal mesh appear above three of the windows.

***B10. Significance: Continued**

In 1891, a large swath of Ex-Mission land, which would come to include a major portion of the Montgomery-Gibbs Executive Airport, was surveyed, subdivided, as parceled out as part of the New Riverside subdivision (see appendix C.3, pg. 83). These parcels were sold to speculators but due to the complete lack of water, roads, and other improvements, the lots remained undeveloped.

The most significant development to occur on the mesa land by the turn of the 20th century was the creation of the Inland Highway. This road, which ran from San Diego's Old Town, across present-day Kearny Mesa, to the Old Poway Road and on to Los Angeles, was improved from what was likely an old trail from the Ex-Mission era.[91] The land on the Linda Vista mesa remained otherwise untouched until 1917 when the outbreak of World War I resulted in the explosive development of Camp Kearny near present-day Marine Corps Air Station (MCAS) Miramar. Camp Kearny was a large, completely self-sustaining military installation that brought improvements to the Ex-Mission lands for the first time. Although the end of the war in 1918 effectively halted any further inland development, the camp's influence was such that the entire mesa became commonly known as the Kearny mesa by the early 1920s.

The Kearny mesa's first residential subdivision, which was named "Chesterton," was developed by O.W. Cotton in 1927 and was located around the present-day community of Linda Vista. This development was only made possible, however, due to advancements in the city's water development and the creation of the Sixth Street Extension, which provided a through boulevard from the Kearny mesa to downtown San Diego. Despite the early improvements the military brought

[91] "Highway 395," *City of Poway, California*, https://poway.org/188/Highway-395. Accessed April 12, 2019.

to the north, and those brought to the south by the city, the general lack of roadways, water, and other improvements in the heart of the Kearny mesa continued to make expanding development further inland impossible.

The inability to develop the land likely played a major role in its relative affordability. Looking for cheap land that would not flood, Bill Gibbs acquired 25 acres of land in the New Riverside subdivision on the Kearny mesa in 1937 with the dream of establishing his own aviation field and business.[92] During that time, the closest development to the north was Camp Kearny, which by then had been renamed Camp Holcomb. The Chesterton subdivision was located a few miles southwest. Grantville, one of San Diego's oldest communities, existed some miles southeast across Murphy Canyon Road. Other than the Inland Highway, no prior development is known to have existed in the immediately surrounding area. Therefore, the creation of Gibbs Field in 1937 was not only among the first developments to occur on the mesa north of Mission Valley, but it was also the first known development in the area now known as the community of Kearny Mesa.

In 1940, Gibbs Field was leased to the Ryan School of Aeronautics who used the airfield for its Army Air Corps pilot training program.[93] To better support its operation and to accommodate its growing enrollment, Ryan expanded the runways and likely added small ancillary buildings and barracks for the cadets in training.[94] As civilian aviation so close to the coast was banned following the onset of World War II, Bill Gibbs relocated to Tucson, Arizona where he continued work as a flight instructor.[95] With Gibbs in Arizona, the United States military took control of Gibbs Field and used the airport as a training ground for bombing exercises and simulated battles.[96]

Bill Gibbs returned to the airport shortly after the end of the war in 1945 and continued to provide flying lessons and other aviation related services.[97] Sometime in 1946 or early 1947, Gibbs acquired Building 6 and Building 7, which were likely sold as surplus buildings no longer needed by the Navy following the war. Although no direct evidence exists, it is believed that Building 7 was originally a women's gymnasium located on Coronado's NAS North Island, and that after being acquired, it was dismantled, ferried across the bay, and shipped to Gibbs Field where it was reassembled.[98] A historic photograph from early March 1947 shows that the reassembly of Building 6 was nearly completed by that time and that Building 7 was just getting underway.[99] Although Building 8 does not appear in this photograph, another photograph from 1950 proves that it was built sometime between 1947 and 1950. Building 8, which is said to have been custom built by hand, was likely built from surplus materials acquired from the military.[100] As is evidenced by the historic photos, a few ancillary buildings and trailers had also surrounded the three hangars at the time.

[92] Harrison, 2010.
[93] "S.D. Air Corps Training School Doubles Classes," 1940.
[94] "Ryan's Classes Show 500% Gain," *San Diego Union*, August 5, 1940.
[95] Harrison, 2010.
[96] "House Navy Group Members See Amphibious Force Act," *San Diego Union*, May 26, 1942.
[97] Harrison, 2010.
[98] This information was provided during an interview with Buzz Gibbs of Gibbs Flying Service.
[99] The original negative from SDHC only lists the year, 1947, as the date. However, the same photograph was used for an article in the *San Diego Union* on March 9, 1947. See: "Flying for Fun," *San Diego Union*, March 9, 1947.
[100] This information was provided during an interview with Buzz Gibbs of Gibbs Flying Service.

In October 1947, the City of San Diego purchased the airport from Bill Gibbs with plans to make it the City's only private flying field.[101] As part of the deal, Bill Gibbs was granted a lease on 15 acres of the field so that he could continue to operate his aviation business.[102] Almost immediately after acquiring the airport, the City began work on a major expansion and improvement project, which included moving ten former Navy buildings from Balboa Park to the center of the airport; grading the field; extending, surfacing, and lighting the runways; paving new taxiways and parking areas; updating telephone lines; installing water and sewer lines; and creating a new access road to the recently developed U.S. 395.[103] The new runway improvements were completed and officially approved in 1949.[104]

That same year, an ordinance was passed dedicating the public land required for new airport access roads named Aero Drive, East Aero Way (now John J. Montgomery Drive) and West Aero Way (now Glenn H. Curtiss Road.[105] As is shown in Figure 12, and supported in a bid notice from January 22, 1950, an early section of present-day Kearny Villa Road connecting Aero Drive to the Inland Highway was developed in 1950, as well.[106] Capping off all of this major development was Resolution No. 97985, passed by the City Council in May of 1950, which officially renamed the airport to Montgomery Field.[107]

Following the City's acquisition of the airport, Bill Gibbs continued to lease out Buildings 6 and 7 to various aviation-related businesses like Pacific Airmotive Corp. and Crownair Aviation. As his own business grew, Gibbs moved closer to the center of the airport and began to rent out spaces for aircraft in newly built T-type hangars.[108] As the airport attracted more aviation-related activities and businesses, so too did the surrounding area. One of the earliest examples was reported one month after the City's acquisition of the airport by the *San Diego Union,* which detailed the relocation plan of the Stinson Aircraft Tool & Engineering Corp. to a large plant just off U.S. 395 on Clairemont Mesa Road in Kearny Mesa.[109]

With the newly developed Linda Vista housing project on the southern end of the mesa and Miramar NAS to the north, the Navy's presence was also growing stronger. In reaction to the growth of both the Navy and the aerospace industry, the City began to forecast a major housing boom in the Kearny Mesa area around 1951.[110] In response to the proposed residential development, the Navy made it clear that it favored agricultural, recreational and light industrial zoning around Miramar NAS, and stated that no residences were to be built within a 12,000 foot, or 2.3 mile, radius of the installation's runway.[111] Large areas of Kearny Mesa land outside of the Navy's 12,000 foot radius, which had already been zoned for residential use, were also called to be recategorized as temporary holding zones while the zoning issue

[101] "New Plans for S.D.," 1947.
[102] "City in Control of Gibbs Airport," 1947.
[103] "C.A.A. Grants $20,547 To Aid Gibbs Airport," *San Diego Union,* March 16, 1948; "City to Open Airport Bids," *San Diego Union*, June 13, 1948; "Gibbs Airport Sale to City Near Conclusion," *San Diego Union,* August 3, 1947; "Gibbs Airport Area Annexing Urged," *San Diego Union*, September 24, 1947.
[104] "Officials Look Over Gibbs Field Maps," *San Diego Union*, August 9, 1949.
[105] "Ordinance No. 4015," *San Diego Union*, April 7, 1949.
[106] "Notice Inviting Bids," *San Diego Union*, January 22, 1950.
[107] "Resolution No. 97985," *San Diego Union*, May 25, 1950.
[108] Harrison, 2010.
[109] "Stinson Aircraft Plans Expansion," *San Diego Union*, November 10, 1947.
[110] "Council May Act On Expansion Today," *San Diego Union,* February 1, 1951.
[111] "Owners Will Confer On Mesa Zoning," *San Diego Union*, December 17, 1953.

was debated. The reason stated by the *San Diego Union* was that "although outside the Miramar circle, the recently annexed land is opposite the city's Montgomery Field."[112]

The City viewed Montgomery Field as "essential to San Diego's development" and partnered with the Civil Aeronautics Administration in 1953 to prepare "building-height limits and zoning legislation for the Montgomery Field area."[113] The same was also sought in the area around Miramar NAS, which remained outside the city limits. Although the legality of instituting such building heights around Miramar NAS and Montgomery Field was debated, it was reported in June of 1953 that planning director Glenn A. Rick stated "We're proceeding with Montgomery, but we're 'held up' on Miramar."[114] It appears that it wasn't until 1960, though, that an official ordinance was adopted establishing the "Airport Approach Zones" and "Airport Turning Zones".[115] An ordinance that was adopted by City Council in 1953, however, put an end to some of the debate over land use within Kearny Mesa by rezoning 101 acres of land within the Navy's 12,000 foot radius for light industrial purposes.[116] The following month, the *San Diego Union* reported that, "moving to provide Kearny Mesa land for future industry, the City Council yesterday authorized City Mgr. Campbell to execute an agreement for the purchase of 180 acres northwest of Montgomery Field."[117] Shortly thereafter, in early 1954, the San Diego Chamber of Commerce approved a resolution establishing a light industrial zone for additional Kearny Mesa land within 12,000 foot radius of the center of the Miramar NAS runways.[118] This resolution not only took into account the proximity of Miramar NAS, but it "also asked that present and future needs of Montgomery Field be examined carefully so that the field's growth will not be stunted by residential building getting too close."[119]

Tensions over residential and industrial zoning continued throughout the early 1950s as new, and typically large, acreages of land around Montgomery Field were annexed by the City. Residential developments occurred mainly to the south and east of the airport, in communities now known as Serra Mesa, Linda Vista, and Clairemont. However, due to Miramar NAS to the north and Montgomery Field to the south and east, the land between the two, which today makes up the community of Kearny Mesa, was instead prioritized for industrial and commercial use.

Kearny Mesa was quickly recognized as "offering the city's best potential for future industry."[120] This was partly due to accessibility to U.S. 395. However, according to Stanley Grove, general manager of the San Diego Chamber of Commerce at the time, "the Kearny Mesa area, on Highway 395 beyond Linda Vista" was an especially attractive location for industrial development because "its proximity to Montgomery airport is important to manufacturers."[121] Recognizing the benefits of the area, a number of major aeronautical and defense-related companies, such as Ryan Aeronautical Co., Solar Aircraft Co., Consolidated Aircraft Corp., General Dynamics, and Rohr Aircraft Corp., began relocating to the area between 1954 and 1958. Other, more diversified, companies such as Cubic Corp, an electronics research firm, moved to the area as well.

---

[112] "Council Delays Kearny Mesa Zoning Case," *San Diego Union*, December 16, 1953.
[113] "All Weather Field Called Vital Need," *San Diego Union*, July 11, 1953.
[114] "Height Limit Opinion Divided," *San Diego Union* June 4, 1953.
[115] "Ordinance No. 8310," *San Diego Union*, June 19, 1960.
[116] "Kearny Mesa Zoning for Light Industry Adopted by Council," *San Diego Union,* September 23, 1953.
[117] "City Will Buy Mesa Land for New Industries," *San Diego Union*, October 16, 1953.
[118] "Chamber Asks End Of 2-Year Delay On Miramar Zoning," *San Diego Union*, January 14, 1954.
[119] Ibid.
[120] "Talk on Zoning Will Continue," *San Diego Union*, September 9, 1953.
[121] "Grove Says 9 New Industries," 1951.

Also beginning in the mid-1950s was an investigation to develop Montgomery Field into the City's primary airport.[122] The proximity of Montgomery Field to Miramar NAS proved to be too problematic, though, and, after the Navy outright rejected the idea, the proposition was no longer being considered by 1960.[123] Uncertain as to the future of the airport, the city began developing a master plan to recommend much needed upgrades and to help guide its future development.[124] It was reported that although "the plan is not intended as an answer to San Diego's search for a new jet-age municipal airport…development of the field is particularly needed because of the growth of private and business flying activity."[125] Among the work recommended by the master plan, which was approved in 1964, was a wider access road, expanded parking, a new administration building and a control tower.[126] Construction on the control tower began almost immediately and, following its completion in 1965, the City opened bids "on a repaving project for all runways, taxiways and aircraft parking areas at Montgomery Field."[127]

Industrial development in Kearny Mesa continued well into the late-1960s and included an increasing number of industrial parks, such as San Diego City Industrial Park and Aetna Insurance Co.'s Kearny Industrial Park.[128] By 1969, however, most of the industrially zoned land in Kearny Mesa was occupied.[129] As large scale industrial development began to wane in the 1970s, the availability of smaller lots gave way to a wave of explosive commercial, retail, and office development.

Such as it had in the decades prior, Montgomery Field continued to shape the community's development into the 1980s. In 1978, the *San Diego Union* reported on the rapidly increasing popularity in private aviation, stating, "in numbers, San Diego's downtown airport is the least busy…[and that] Montgomery Field on Kearny Mesa is where the biggest increases in aviation are centered."[130] In fact, the popularity of private aviation paired with the increase in corporate traffic at the time had caused Montgomery Field to rank among the top 10 in the nation in numbers of aircraft based there and the 14th busiest airport overall.[131] To take advantage of this increased traffic the city authorized the construction of a hotel "designed to enable private pilots using Montgomery Field to taxi up to the lobby and check in before parking their airplanes."[132] Construction began in 1984[133] and the hotel and accompanying golf course was located immediately south of Buildings 6, 7, and 8 at the southwestern corner of the airport, along Aero Drive and Kearny Villa Road.

The traffic of Montgomery Field also brought increased attention from real estate developers and new companies looking to relocate. As was reported by the *San Diego Union* in 1982, "Montgomery Field, until a few years ago only the home of private airplanes for flying clubs and weekend pilots, has taken on a new role – as an emerging North City building site which is becoming a haven for high technology and insurance companies."[134] Although it was largely the

[122] "Is Montgomery A Practical Airport Site?," *San Diego Union*, March 10, 1957.
[123] Martin, 1960.
[124] Roy C. Johns, "City Council Gets Montgomery Field Development Plan," *San Diego Union*, March 11, 1960.
[125] Ibid.
[126] "Montgomery Field Expansion Detailed," *San Diego Union*, February 23, 1964.
[127] "Bid Openings Scheduled On Airport Paving," *San Diego Union*, June 10, 1965.
[128] "Industrial Parks Lune Farsighted Businesses," *San Diego Union,* January 1, 1969.
[129] "EDC Attracts Firms," 1969.
[130] Hudson, 1978.
[131] Ibid.
[132] "City Authorizes Airport Hotel," *San Diego Union,* January 16, 1981.
[133] "Hotels," *San Diego Union*, November 13, 1983.
[134] "Montgomery Field is Building Up," *San Diego Union*, November 14, 1982.

surrounding area, which the airport helped to shape, that attracted many new companies, the airport itself did attract a number of new office space users.[135] In particular, new complexes on or immediately adjacent to airport grounds included the Montgomery Airport Plaza, the Viewpoint Plaza, the Dynamic Office Park**,** the Airport Plaza, the Aero Office Park, the Kearny Mesa Office Park, and the Crossroads Building.[136] Although improvements continued into the 1990s and 2000s, both Montgomery Field and Kearny Mesa appeared to be effectively built out by 1989. In 2016, City Council passed a resolution officially renaming the airport Montgomery-Gibbs Executive Airport in honor of Bill Gibbs and the original airfield he created.

CITY OF SAN DIEGO HISTORICAL SIGNIFICANCE CRITERIA

In order to be eligible for designation on the City of San Diego's Register of Historical Resources, a resource must both have significance under one or more of the City's Historical Significance Criteria *and* retain sufficient integrity to convey that significance in its current state. *What follows is an evaluation of significance only; see the following sections for an evaluation of integrity and for a final eligibility conclusion.*

Criterion 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.

Buildings 6 **is** significant under Criterion A because it reflects a special element of the Kearny Mesa's historical development. Specifically, it reflects Gibbs Field (now the Montgomery-Gibbs Executive Airport), the earliest development to have occurred in Kearny Mesa, which was instrumental in shaping the development of the entire community.

As was shown in the historic context, the Gibbs Field/Montgomery Field/Montgomery-Gibbs Executive Airport was in large part responsible for the way in which the community of Kearny Mesa developed. Not only was it the first development to have occurred in the area, but it also responsible for attracting new businesses, such as Bee Aviation and Crownair, to the area. It was also responsible for a number of new improvements, such as major roadways. New aircraft safety zones created for both the airport and Miramar NAS further shaped the area, restricting residential development and zoning Kearny Mesa for light industrial and commercial uses. The combination of the industrial and commercial zoning, the proximity to the airport, and the accessibility of U.S. 395 (now SR-163) then brought major aeronautical and technology companies to the area during the 1950s and 1960s. The layout of the airport's approach and turning zones also likely dictated the location of major industrial plants north of airport. Additionally, it is likely that these zones were partly responsible for slow development of the open lots located east and west of the airport, which did not develop in earnest until the 1970s. As private and corporate aviation grew in popularity, the airport continued to attract new businesses and real estate developers during the 1980s. As a result, a number of new office parks and plazas were built on airport grounds and within the immediate vicinity. A large hotel was also built on airport grounds to take advantage of the growing number of private aviators using the airport.

[135] Ibid.
[136] Ibid.

Criterion B: Is identified with persons or events significant in local, state or national history.

Building 6 **is not** significant under Criterion B because, while it is associated with the lives of a significant person in our past, Bill Gibbs, there is not enough historical evidence to determine it is best associated and identified with Gibbs to establish a specific significance under Criterion B. The building was acquired and constructed by Bill Gibbs between 1947 for use at the airport. Bill Gibbs is an important figure because he was responsible for developing the original airport in 1937 where he operated his business, Gibbs Flying Service. In 1940, he leased the airport to Ryan Aeronautical and was hired on to teach flying lessons during World War II. After the war, Gibbs returned to his airport and, in 1947, constructed Buildings 6 and 7. Building 8 was constructed sometime between 1947 and 1950. It was also in 1947 that Bill Gibbs sold the airport and surrounding land to the City. As part of the sale, Gibbs was provided a lease so that he could continue to operate his business at the airport. Bill Gibbs was also a philanthropist who supported the San Diego Air & Space Museum, the Salvation Army, and the San Diego Zoo.[137]

In recognition of his legacy, Bill Gibbs was inducted into the International Air & Space Hall of Fame at the San Diego Air & Space Museum in 2011. On Gibbs's induction, Jim Kidrick, President and CEO of the San Diego Air & Space Museum stated that "Bill Gibbs lived through almost the entire history of aviation, and certainly through the history of aviation in San Diego."[138] When Bill Gibbs passed in 2016, the San Diego Air and Space Museum declared him "a significant part of the legacy of aviation in the San Diego region."[139] Therefore, Bill Gibbs's activities and contributions have been found to be demonstrably important enough to be considered a significant person under Criterion B.

According to the City's criteria guidelines, *"[p]ersons significant in our past refer to individuals associated with San Diego whose activities, achievements and contributions are demonstrably important within the City, state, or nation."* and *"Eligibility under Criterion B for significant person(s) involves first determining the importance of the individual, second ascertaining the length and nature of the individual's association with the resource under study and in comparison to other resources associated with the individual, and third determining if the resource is significant under HRB Criterion B as a resource that is best identified with a person(s) significant in local, state, or national history."*

There is minimal evidence to establish the length and nature of Bill Gibb's association with Buildings 6. While it is known that he acquired Building 6 in 1946 or early 1947, he leased the Building to other various aviation-related businesses rather than using it himself, and by 1956 his business operations moved to the center of the airport to make use of other hangars. Therefore, Bill Gibbs' direct association with Building 6 is limited to the years of its construction.

Finally, there is insufficient historical evidence to determine which of the three buildings at Montgomery Field is best identified with Gibbs to establish a specific significance under Criterion B, or if a different resource outside the scope of this report is best associated with him. Bill Gibbs' association with Building 6 is only for the years of its construction, and there is not enough evidence to establish a stronger association for it over the others. Further, according to the City's criteria guidelines, "The best representatives are properties associated with the person's productive life." Thus, Bill

[137] "San Diego Air & Space Museum mourns the loss of Aviation Legend Bill Gibbs," *San Diego Air & Space Museum*, http://sandiegoairandspace.org/press/release/san-diego-air-space-museum-mourns-the-loss-of-aviation-legend-bill-gibbs. Accessed April 16, 2019.
[138] Ibid
[139] Ibid.

Gibbs is best associated with a building or structure used in his career and aviation activities, neither of which applied to Building 6 which was used as a rental.

Thus, while Bill Gibbs is a significant person, there is not enough documentary evidence to determine which building is best identified and associated with his productive life. Therefore, Building 6 **is not** significant under Criterion B.

Buildings 6 **is not** significant under Criterion B because it could not be identified with events significant in local, state, or national history. What was discovered during research was a photograph showing that Bee Aviation Associates, Inc. had operated out of Building 6 in 1956. Bee Aviation Associates, Inc. is notable for creating three experimental airplanes between 1948 and 1960.

The first prototype, known as the "Wee Bee," was regarded by the media as the "world's smallest airplane."[140] According to the *San Diego Union,* a number of trial flights occurred at Gillespie Airport in 1948.[141] The official first extended flight took place at Brown Field in March 1949.[142] Moreover, as a 1947 photograph shows that Pacific Airmotive Corp. had operated out of Building 6. There has been no direct evidence found linking the development of the Wee Bee to Building 6.

The second experimental airplane developed by Bee Aviation Associates, Inc. was the "Honey Bee." This prototype was larger than the Wee Bee and, as noted in the *San Diego Union,* was "described by its builders as the world's first all-metal, single place, low-cost, light plane."[143] The Honey Bee made its first flight on July 12, 1952 at Montgomery Field.[144] Despite this, it is unknown where the Honey Bee was designed and built. Therefore, no direct evidence was found linking the Honey Bee to Buildings 6.

The third prototype, known as the "Queen Bee," was larger than its predecessor. It was a light, all-metal, low-wing, monoplane. A 1957 article from the *San Diego Union* that reported on the plane's development noted that "Bee's factory is 1,500 square feet of rented hangar space at Montgomery Field on Kearny Mesa."[145] The 1956 photograph identifies this hangar as Building 6.

The City's criteria guidelines state that "resources associated with historical events are those associated with a single event such as the place where an important battle occurred, a building in which an important invention was developed, or a factory district where a significant strike occurred."[146] No direct evidence was found linking the creation of the Wee Bee or the Honey Bee to Buildings 6. The Queen Bee prototype was found to have been created in Building 6, however, it has not been found to be an important invention.

---

[140] "Tiny Plane Makes Extended Flight," *San Diego Union,* March 13, 1949.
[141] "Wee-Bee Makes Trial Flights Successfully," *San Diego Union*, November 21, 1948.
[142] "Tiny Plane Makes Extended Flight," 1949.
[143] "All-Metal, Low Cost Light Plane Succeeds in Initial Flight Here," *San Diego Union,* July 13, 1952.
[144] "Honey Bee Plane To Make Initial Flight Here Today," *San Diego Union,* July 12, 1952.
[145] Carl Plain, "Light Craft Test Due For Autumn," *San Diego Union*, March 6, 1957.
[146] The City of San Diego, "Guidelines for the Application of Historical Resources Board Designation Criteria," City of San Diego, 2011.

Additionally, Building 6 **is not** significant under Criterion B because it could not be identified with events significant in local, state, or national history. What was discovered during research was a photograph showing that Bee Aviation Associates, Inc. had operated out of Building 6 in 1956. Bee Aviation Associates, Inc. is notable for creating three experimental airplanes between 1948 and 1960.

The first prototype, known as the "Wee Bee," was regarded by the media as the "world's smallest airplane."[147] According to the *San Diego Union,* a number of trial flights occurred at Gillespie Airport in 1948.[148] The official first extended flight took place at Brown Field in March 1949.[149] Moreover, as a 1947 photograph shows that Pacific Airmotive Corp. had operated out of Building 6, there has been no direct evidence found linking the development of the Wee Bee to Building 6.

The second experimental airplane developed by Bee Aviation Associates, Inc. was the "Honey Bee." This prototype was larger than the Wee Bee and, as noted in the *San Diego Union,* was "described by its builders as the world's first all-metal, single place, low-cost, light plane."[150] The Honey Bee made its first flight on July 12, 1952 at Montgomery Field.[151] Despite this, it is unknown where the Honey Bee was designed and built. Therefore, no direct evidence was found linking the Honey Bee to Building 6.

The third prototype, known as the "Queen Bee," was larger than its predecessor. It was a light, all-metal, low-wing, monoplane. A 1957 article from the *San Diego Union* that reported on the plane's development noted that "Bee's factory is 1,500 square feet of rented hangar space at Montgomery Field on Kearny Mesa."[152] A 1956 photograph identifies this hangar as Building 6.

The City's criteria guidelines state that "resources associated with historical events are those associated with a single event such as the place where an important battle occurred, a building in which an important invention was developed, or a factory district where a significant strike occurred."[153] Whereas enough evidence was found to determine that the Queen Bee prototype was built in Building 6, the Queen Bee has not been found to be an important invention.

Criterion C: Embodies distinctive characteristics of style, type, period, or method of construction or is a valuable example of the use of indigenous materials or craftsmanship.

Building 6 **is** significant under Criterion C as it embodies the distinctive characteristics of the Quonset Hut. The Quonset Hut is an important building type that was developed by the U.S. Navy during World War II. Following the war, surplus Quonset Huts were sold to civilians for private use, and multiple companies that built wartime Quonset Huts continued their production. This combined wartime and civilian use sets the era of Quonset Huts as 1941-1960[154] and makes the

[147] "Tiny Plane Makes Extended Flight," *San Diego Union,* March 13, 1949.
[148] "Wee-Bee Makes Trial Flights Successfully," *San Diego Union*, November 21, 1948.
[149] "Tiny Plane Makes Extended Flight," *San Diego Union,* March 13, 1949. https://www.historynet.com/the-wee-bee.htm
[150] "All-Metal, Low Cost Light Plane Succeeds in Initial Flight Here," *San Diego Union,* July 13, 1952.
[151] "Honey Bee Plane To Make Initial Flight Here Today," *San Diego Union,* July 12, 1952.
[152] Carl Plain, "Light Craft Test Due For Autumn," *San Diego Union*, March 6, 1957.
[153] The City of San Diego, "Guidelines for the Application of Historical Resources Board Designation Criteria," *City of San Diego,* 2011.
[154] Washington State (DAHP)

Quonset Hut a particularly unique architectural style when considering historic significance, because relocation and reuse are one of the character-defining features for post-war Quonset Huts. Additionally, while originally developed by the George A. Fuller Company, wartime demand for the Quonset Hut led the Navy to contract with other companies, most notably the Stran-Steel division of the Great Lakes Steel Corporation, for increased production and use-specific designs.[155] Other manufacturers and models include the wooden Pacific Hut and Emkey Huts, the heavy steel Armco Hut, the Cowin and Company Inc "Steeldrome" Hut for the Air Corps, the Canadian Portaseal Hut, the arctic Jamesway Hut, and the half-U Buttler Hut.[156] Repurposed civilian Quonset Huts were extensively adapted and altered for their use, which ranged from modernist homes to sheds, barns, and hangars.[157]

The Character Defining Features of the Quonset Hut are:[158]

- Corrugated Metal Exterior
- Steel Frame of curved rib pieces
- Wood fiber insulation
- Inner Masonite walls
- Concrete or TNG floors on a raised metal framework
- Front and rear "bulkhead" end elevations with doors and windows
- Easily installed, taken down, and transported

Building 6, with its curved steel frame ribs, corrugated metal exterior, concrete floors, bulkhead ends, and transportation to and reuse at the Montgomery Field site post-World War II, embodies the distinctive characteristics of the Quonset Hut, particularly in its postwar Civilian reuse era. It has, therefore, been found to be significant at the Local Level under Criterion C with a period of significance of 1947.

Criterion D: Is representative of the notable work of a master builder, designer, architect, engineer, landscape architect, interior designer, artist or craftsman.

Building 6 **is not** significant under Criterion D. It has not been found to be associated with an established Master.

Criterion E: is listed or has been determined eligible by the National Park Service for listing on the National Register of Historic Places or is listed or has been determined eligible by the State Historic Preservation Office for listing on the California Register of Historic Resources.

Building 6 **is not** significant under Criterion E. It has not previously been listed or determined eligible for listing in the Nation Register of Historic Places or the California Register of Historic Resources.

Criterion 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 which have a special character, historical interest or

[155] Ibid.
[156] Decker and Chiel, 148-149
[157] Lamm
[158] Washington State (DAHP)

aesthetic value or which represent one or more architectural periods or styles in the history and development of the City.

Building 6 **is not** significant under Criterion F. It is not located within an identified, significant grouping, such as a historic district.

INTEGRITY EVALUATION

To be eligible for designation under any City of San Diego Historical Significance Criteria, a resource must retain integrity. According to the National Park Service (NPS), the integrity of a resource is determined by "the ability of a resource to convey its significance." In this case, Building 6 is significant under Criteria A and C as it reflects special elements of Kearny Mesa's historical development and embodies the distinctive characteristics of the Quonset Hut building type, respectively. In the context of Criterion A, each aspect of integrity share an equal weight of importance. For Criterion C, however, the Design, Materials, and Workmanship aspects of integrity are of particular importance.

What follows is an evaluation of integrity only; see the preceding section for an evaluation of significance and the following section for a final eligibility conclusion.

Location: **Location is defined by the NPS as the "place where the historic property was constructed or the place where the historic event occurred."**

Building 6 **does** retain sufficient of integrity of location to convey its significance. It has not been moved since being constructed by Bill Gibbs in 1947.

Setting: **Setting is defined as the "physical environment of a historic property."**

Building 6 **does** retain a sufficient integrity of setting to convey its significance. Historic photos show that during the 1947 period of significance, the physical environment surrounding Buildings 6 was characterized as a small airfield on flat, open, graded terrain. It was bounded to the west by the Inland Highway and sat to the north of Building 7. Although the airport has developed since 1947, the physical environment surrounding Building 6 has remained sufficiently intact and is still characterized as an airport. The hangar is situated on flat, open, graded terrain and is still bounded to the west by a major roadway. Because of these factors, the physical environment immediately surrounding Buildings 6, 7, and 8 has been found to retain a sufficient degree of integrity of setting.

Design**: Design is defined as the "combination of elements that create the form, plan, space, structure, and style of a property."**

Buildings 6 **does** retain sufficient integrity of design to convey its significance. As is evidenced by the historic photographs, each of the hangars still strongly reflects its original design and appearance. Although some alterations appear to have been made over time, such as the front door on the west elevation and the horizontal sliding door system on the east elevation, Building 6 retains its original semi-cylindrical form; open, rectangular, plan; steel frame structure with corrugated steel panels; the squared-off, stuccoed, business-entrance façade on the west elevation; and general utilitarian appearance associated with the Quonset Hut building type.

Materials: **Materials are defined as the "physical elements that were combined or deposited during a particular period of time and in a pattern or configuration to form a historic property."**

Building 6 **does** retain sufficient integrity of materials to convey its significance. As is evidenced by the historic photos, Building 6 retains a majority of its original materials. These include the poured concrete foundation, corrugated steel panels, wood and steel sash windows, and the stuccoed west façade, all common materials during the World War 2 and post-war period.

Workmanship: **Workmanship is defined as the "physical evidence of the crafts of a particular culture or people during any given period in history or prehistory."**

Building 6 **does** retain sufficient integrity of workmanship to convey its significance. Building 6 still exhibits the utilitarian and functional craftsmanship common during the World War 2 and post-war period. The physical evidence includes the wood and steel sash windows, the poured cement foundation, and the bolted, steel corrugated panels.

Feeling: **Feeling is defined as the "property's expression of the aesthetic or historic sense of a particular period of time."**

Building 6 **does** retain a sufficient integrity of feeling to convey its significance. It is remarkably intact and expresses a strong historic sense of what both the building and Gibbs Field was like during the 1947 period of significance.

Association: **Association is defined as the "direct link between an important historic event or person and a historic property."**

Building 6 **does** retain a sufficient integrity of association to convey its significance. As is evidenced by the historic photos, it remains largely as it appeared when it was built by Buzz Gibbs for his airport in 1947. Because of this, the direct link remains between Building 6, Buzz Gibbs, and Gibbs Field.

Conclusion:
Building 6 is significant under HRB Criterion A with a period of significance of 1947-1950 as it reflects special elements of Kearny Mesa's historical development and embodies the distinctive characteristics of the Quonset Hut building type. It has also been found to retain 7 out of the 7 aspects of integrity. Therefore, it has been determined eligible for listing in the San Diego Register of Historical Resources.

State of California The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code 5S1

Other Listings
Review Code | Reviewer | Date

*Resource Name or #: Building 7

P1. Other Identifier: N/A

***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted** ***a. County:** San Diego

***b. USGS 7.5' Quad:** La Jolla **Date:** 1996

c. Address: 3873 Kearny Villa Road City: San Diego Zip: 92123

d. UTM: Zone 11 S; 486003.35 mE/ 3630633.49 mN (G.P.S.)

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Legal Description

On east side of Kearny Villa Road at the west end of Montgomery-Gibbs Executive Airport.

***P3a. Description:**

Building 7 is a wood-framed aircraft hangar with a box-like massing. Oriented eastward, its primary elevation faces towards the Montgomery-Gibbs Airport. Its vaulted roof that is supported by timber bowstring trusses and is covered with asphalt roll roofing. The east facing end wall, and primary elevation, features a large, exterior, four panel, horizontal sliding hangar door system with a steel top track that extends out past the building at both ends of the elevation. The sliding hangar door panels are composed of corrugated steel panels. *(Continued on pg 3).*

***P3b. Resource Attributes:** HP39 - Other

***P4. Resources Present:** ☒Building ☐Structure ☐Object ☐Site ☐District ☐Element of District ☐Other (Isolates, etc.)

P5a. Photo or Drawing



P5b. Description of Photo:
¾ view showing west and south elevations. IS Architecture, 2019.

***P6. Date Constructed/Age:**
☒Historic ☐Prehistoric ☐Both
1947

***P7. Owner and Address:**
City of San Diego
202 C Street
San Diego, CA 92101

***P8. Recorded by:**
IS Architecture
5645 La Jolla Boulevard
La Jolla, California 92037

***P9. Date Recorded:** April 2019

***P10 Survey Type:** Intensive/pedestrian

***P11. Report Citation:** None.

***Attachments:** ☐NONE ☐Location Map ☐Sketch Map ☒Continuation Sheet ☒Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐Other (List):

B1. Historic Name: N/A
B2. Common Name: Building 7
B3. Original Use: Gymnasium (1920s); Aircraft Hangar (1947) B4. Present Use: Aircraft Hangar
***B5. Architectural Style:** N/A
***B6. Construction History:**

Sometime in 1946 or early 1947, Bill Gibbs acquired Building 7, which was likely sold as surplus buildings no longer needed by the Navy following the war. A historic photograph from March 1947 shows that the construction of Building 7 had just begun.

***B7. Moved?** ☐No ☒Yes ☐Unknown **Date:** 1947 **Original Location:** Believed to be NAS North Island (1920s)
***B8. Related Features:** N/A
B9a. Architect: N/A **b. Builder:** Bill Gibbs
***B10. Significance** **Theme:** Historical Development of Kearny Mesa **Area:** Kearny Mesa
Period of Significance: 1947-1950 **Property Type:** Aircraft Hangar **Applicable Criteria:** A

HISTORIC CONTEXT

Prior to settlement, the community now known as Kearny Mesa was part of a large area solely occupied by the native Kumeyaay people. After the arrival of the Spanish explorers, the area was claimed by Spain for the Mission San Diego de Alcalá. After the Mission was secularized following Mexican independence in 1822, the land was parceled out as part of a massive tract known as Rancho Ex-Mission San Diego. By the end of the 19th century, the mesa north of Mission Valley had become known as the Linda Vista mesa and a few small farming settlements had developed around present-day University City and Miramar *(Continued on p.3).*

B11. Additional Resource Attributes:

***B12. References:** See endnotes.

B13. Remarks: None.

***B14. Evaluator:** IS Architecture

***Date of Evaluation:** April 2019



(This space reserved for official comments.)

P3a. Description: Continued

Above the hangar door is the top portion of the eastern end wall. This exterior is also clad in corrugated steel panels and features letters spelling "Spiders Aircraft," which is the name of the company currently operating out of the building. Extending out near the top of the end wall is an aluminum lighting fixture. A fascia made of dimensionally cut lumber curves along the top of elevation at the roof line.

The south elevation features a stuccoed exterior wall that is largely uninterrupted except for two, fixed, 16-light, steel windows that covered by a protective steel mesh screen. These windows are located in the center and westernmost corner of the south elevation, respectively. A thin, wood fascia runs the entire length of the south elevation. The west, or rear, elevation of the hangar features a stuccoed exterior and three, evenly spaced, fixed, 12-light, steel sash windows. Each window is covered by a protective steel mesh screen. Located above the windows, and affixed to the stuccoed exterior wall are letters spelling out "Spiders Aircraft." Just beneath the roofline is a thin, wood, fascia that runs the length of the rear elevation. Projecting out from the northern corner of the west elevation is a single-story addition with a shed roof. The western elevation of this addition features a stuccoed exterior wall; a three-light, horizontal sliding, aluminum window; a projecting, open eave with exposed rafter tails that terminate behind wooden fascia board.

The shed roofed addition spans the entire lower half of the hangar's northern elevation. The roof of the addition is covered in asphalt roll roofing and has a narrowly projecting, open eave with exposed rafter tails that terminate behind a fascia made of dimensional lumber. The addition also features a stuccoed exterior wall and a central, outward swinging, galvanized steel double door. East of the double door are four, 2-light, horizontal sliding, aluminum windows. To the west of the double door is a fifth window of the same type and configuration as the previous four, as well as two, 2-light, horizontal sliding, vinyl windows set between a single, inward swinging, wood door with a full, glass, light. At its western corner, a small portion of the addition recedes back to provide space for an entrance on the west elevation. Here, the recessed, north facing, exterior wall features a lower, identically pitched, shed roof extends out from beneath the shed roof covering the rest of the addition. The uninterrupted stucco exterior of the hangar continues past the height of the shed roofed addition to a thin, wood fascia at the base of the roofline.

***B10. Significance: Continued**

In 1891, a large swath of Ex-Mission land, which would come to include a major portion of the Montgomery-Gibbs Executive Airport, was surveyed, subdivided, as parceled out as part of the New Riverside subdivision (see appendix C.3, pg. 83). These parcels were sold to speculators but due to the complete lack of water, roads, and other improvements, the lots remained undeveloped.

The most significant development to occur on the mesa land by the turn of the 20th century was the creation of the Inland Highway. This road, which ran from San Diego's Old Town, across present-day Kearny Mesa, to the Old Poway Road and on to Los Angeles, was improved from what was likely an old trail from the Ex-Mission era.[159] The land on the Linda Vista mesa remained otherwise untouched until 1917 when the outbreak of World War I resulted in the explosive development of Camp Kearny near present-day Marine Corps Air Station (MCAS) Miramar. Camp Kearny was a large, completely self-sustaining military installation that brought improvements to the Ex-Mission lands for the first time.

[159] "Highway 395," *City of Poway, California*, https://poway.org/188/Highway-395. Accessed April 12, 2019.

Although the end of the war in 1918 effectively halted any further inland development, the camp's influence was such that the entire mesa became commonly known as the Kearny mesa by the early 1920s.

The Kearny mesa's first residential subdivision, which was named "Chesterton," was developed by O.W. Cotton in 1927 and was located around the present-day community of Linda Vista. This development was only made possible, however, due to advancements in the city's water development and the creation of the Sixth Street Extension, which provided a through boulevard from the Kearny mesa to downtown San Diego. Despite the early improvements the military brought to the north, and those brought to the south by the city, the general lack of roadways, water, and other improvements in the heart of the Kearny mesa continued to make expanding development further inland impossible.

The inability to develop the land likely played a major role in its relative affordability. Looking for cheap land that would not flood, Bill Gibbs acquired 25 acres of land in the New Riverside subdivision on the Kearny mesa in 1937 with the dream of establishing his own aviation field and business.[160] During that time, the closest development to the north was Camp Kearny, which by then had been renamed Camp Holcomb. The Chesterton subdivision was located a few miles southwest. Grantville, one of San Diego's oldest communities, existed some miles southeast across Murphy Canyon Road. Other than the Inland Highway, no prior development is known to have existed in the immediately surrounding area. Therefore, the creation of Gibbs Field in 1937 was not only among the first developments to occur on the mesa north of Mission Valley, but it was also the first known development in the area now known as the community of Kearny Mesa.

In 1940, Gibbs Field was leased to the Ryan School of Aeronautics who used the airfield for its Army Air Corps pilot training program.[161] To better support its operation and to accommodate its growing enrollment, Ryan expanded the runways and likely added small ancillary buildings and barracks for the cadets in training.[162] As civilian aviation so close to the coast was banned following the onset of World War II, Bill Gibbs relocated to Tucson, Arizona where he continued work as a flight instructor.[163] With Gibbs in Arizona, the United States military took control of Gibbs Field and used the airport as a training ground for bombing exercises and simulated battles.[164]

Bill Gibbs returned to the airport shortly after the end of the war in 1945 and continued to provide flying lessons and other aviation related services.[165] Sometime in 1946 or early 1947, Gibbs acquired Building 6 and Building 7, which were likely sold as surplus buildings no longer needed by the Navy following the war. Although no direct evidence exists, it is believed that Building 7 was originally a women's gymnasium located on Coronado's NAS North Island, and that after being acquired, it was dismantled, ferried across the bay, and shipped to Gibbs Field where it was reassembled.[166] A historic photograph from early March 1947 shows that the reassembly of Building 6 was nearly completed by that time and that Building 7 was just getting underway.[167] Although Building 8 does not appear in this photograph, another

[160] Harrison, 2010.
[161] "S.D. Air Corps Training School Doubles Classes," 1940.
[162] "Ryan's Classes Show 500% Gain," *San Diego Union*, August 5, 1940.
[163] Harrison, 2010.
[164] "House Navy Group Members See Amphibious Force Act," *San Diego Union*, May 26, 1942.
[165] Harrison, 2010.
[166] This information was provided during an interview with Buzz Gibbs of Gibbs Flying Service.
[167] The original negative from SDHC only lists the year, 1947, as the date. However, the same photograph was used for an article in the *San Diego Union* on March 9, 1947. See: "Flying for Fun," *San Diego Union*, March 9, 1947.

photograph from 1950 proves that it was built sometime between 1947 and 1950. Building 8, which is said to have been custom built by hand, was likely built from surplus materials acquired from the military.[168] As is evidenced by the historic photos, a few ancillary buildings and trailers had also surrounded the three hangars at the time.

In October 1947, the City of San Diego purchased the airport from Bill Gibbs with plans to make it the City's only private flying field.[169] As part of the deal, Bill Gibbs was granted a lease on 15 acres of the field so that he could continue to operate his aviation business.[170] Almost immediately after acquiring the airport, the City began work on a major expansion and improvement project, which included moving ten former Navy buildings from Balboa Park to the center of the airport; grading the field; extending, surfacing, and lighting the runways; paving new taxiways and parking areas; updating telephone lines; installing water and sewer lines; and creating a new access road to the recently developed U.S. 395.[171] The new runway improvements were completed and officially approved in 1949.[172]

That same year, an ordinance was passed dedicating the public land required for new airport access roads named Aero Drive, East Aero Way (now John J. Montgomery Drive) and West Aero Way (now Glenn H. Curtiss Road.[173] As is shown in Figure 12, and supported in a bid notice from January 22, 1950, an early section of present-day Kearny Villa Road connecting Aero Drive to the Inland Highway was developed in 1950, as well.[174] Capping off all of this major development was Resolution No. 97985, passed by the City Council in May of 1950, which officially renamed the airport to Montgomery Field.[175]

Following the City's acquisition of the airport, Bill Gibbs continued to lease out Buildings 6 and 7 to various aviation-related businesses like Pacific Airmotive Corp. and Crownair Aviation. As his own business grew, Gibbs moved closer to the center of the airport and began to rent out spaces for aircraft in newly built T-type hangars.[176] As the airport attracted more aviation-related activities and businesses, so too did the surrounding area. One of the earliest examples was reported one month after the City's acquisition of the airport by the *San Diego Union,* which detailed the relocation plan of the Stinson Aircraft Tool & Engineering Corp. to a large plant just off U.S. 395 on Clairemont Mesa Road in Kearny Mesa.[177]

With the newly developed Linda Vista housing project on the southern end of the mesa and Miramar NAS to the north, the Navy's presence was also growing stronger. In reaction to the growth of both the Navy and the aerospace industry, the City began to forecast a major housing boom in the Kearny Mesa area around 1951.[178] In response to the proposed residential development, the Navy made it clear that it favored agricultural, recreational and light industrial zoning

[168] This information was provided during an interview with Buzz Gibbs of Gibbs Flying Service.
[169] "New Plans for S.D.," 1947.
[170] "City in Control of Gibbs Airport," 1947.
[171] "C.A.A. Grants $20,547 To Aid Gibbs Airport," *San Diego Union,* March 16, 1948; "City to Open Airport Bids," *San Diego Union*, June 13, 1948; "Gibbs Airport Sale to City Near Conclusion," *San Diego Union,* August 3, 1947; "Gibbs Airport Area Annexing Urged," *San Diego Union*, September 24, 1947.
[172] "Officials Look Over Gibbs Field Maps," *San Diego Union*, August 9, 1949.
[173] "Ordinance No. 4015," *San Diego Union*, April 7, 1949.
[174] "Notice Inviting Bids," *San Diego Union*, January 22, 1950.
[175] "Resolution No. 97985," *San Diego Union*, May 25, 1950.
[176] Harrison, 2010.
[177] "Stinson Aircraft Plans Expansion," *San Diego Union*, November 10, 1947.
[178] "Council May Act On Expansion Today," *San Diego Union,* February 1, 1951.

around Miramar NAS, and stated that no residences were to be built within a 12,000 foot, or 2.3 mile, radius of the installation's runway.[179] Large areas of Kearny Mesa land outside of the Navy's 12,000 foot radius, which had already been zoned for residential use, were also called to be recategorized as temporary holding zones while the zoning issue was debated. The reason stated by the *San Diego Union* was that "although outside the Miramar circle, the recently annexed land is opposite the city's Montgomery Field."[180]

The City viewed Montgomery Field as "essential to San Diego's development" and partnered with the Civil Aeronautics Administration in 1953 to prepare "building-height limits and zoning legislation for the Montgomery Field area."[181] The same was also sought in the area around Miramar NAS, which remained outside the city limits. Although the legality of instituting such building heights around Miramar NAS and Montgomery Field was debated, it was reported in June of 1953 that planning director Glenn A. Rick stated "We're proceeding with Montgomery, but we're 'held up' on Miramar."[182] It appears that it wasn't until 1960, though, that an official ordinance was adopted establishing the "Airport Approach Zones" and "Airport Turning Zones".[183] An ordinance that was adopted by City Council in 1953, however, put an end to some of the debate over land use within Kearny Mesa by rezoning 101 acres of land within the Navy's 12,000 foot radius for light industrial purposes.[184] The following month, the *San Diego Union* reported that, "moving to provide Kearny Mesa land for future industry, the City Council yesterday authorized City Mgr. Campbell to execute an agreement for the purchase of 180 acres northwest of Montgomery Field."[185] Shortly thereafter, in early 1954, the San Diego Chamber of Commerce approved a resolution establishing a light industrial zone for additional Kearny Mesa land within 12,000 foot radius of the center of the Miramar NAS runways.[186] This resolution not only took into account the proximity of Miramar NAS, but it "also asked that present and future needs of Montgomery Field be examined carefully so that the field's growth will not be stunted by residential building getting too close."[187]

Tensions over residential and industrial zoning continued throughout the early 1950s as new, and typically large, acreages of land around Montgomery Field were annexed by the City. Residential developments occurred mainly to the south and east of the airport, in communities now known as Serra Mesa, Linda Vista, and Clairemont. However, due to Miramar NAS to the north and Montgomery Field to the south and east, the land between the two, which today makes up the community of Kearny Mesa, was instead prioritized for industrial and commercial use.

Kearny Mesa was quickly recognized as "offering the city's best potential for future industry."[188] This was partly due to accessibility to U.S. 395. However, according to Stanley Grove, general manager of the San Diego Chamber of Commerce at the time, "the Kearny Mesa area, on Highway 395 beyond Linda Vista" was an especially attractive location for industrial development because "its proximity to Montgomery airport is important to manufacturers."[189] Recognizing

[179] "Owners Will Confer On Mesa Zoning," *San Diego Union*, December 17, 1953.
[180] "Council Delays Kearny Mesa Zoning Case," *San Diego Union*, December 16, 1953.
[181] "All Weather Field Called Vital Need," *San Diego Union*, July 11, 1953.
[182] "Height Limit Opinion Divided," *San Diego Union* June 4, 1953.
[183] "Ordinance No. 8310," *San Diego Union*, June 19, 1960.
[184] "Kearny Mesa Zoning for Light Industry Adopted by Council," *San Diego Union,* September 23, 1953.
[185] "City Will Buy Mesa Land for New Industries," *San Diego Union*, October 16, 1953.
[186] "Chamber Asks End Of 2-Year Delay On Miramar Zoning," *San Diego Union*, January 14, 1954.
[187] Ibid.
[188] "Talk on Zoning Will Continue," *San Diego Union*, September 9, 1953.
[189] "Grove Says 9 New Industries," 1951.

the benefits of the area, a number of major aeronautical and defense-related companies, such as Ryan Aeronautical Co., Solar Aircraft Co., Consolidated Aircraft Corp., General Dynamics, and Rohr Aircraft Corp., began relocating to the area between 1954 and 1958. Other, more diversified, companies such as Cubic Corp, an electronics research firm, moved to the area as well.

Also beginning in the mid-1950s was an investigation to develop Montgomery Field into the City's primary airport.[190] The proximity of Montgomery Field to Miramar NAS proved to be too problematic, though, and, after the Navy outright rejected the idea, the proposition was no longer being considered by 1960.[191] Uncertain as to the future of the airport, the city began developing a master plan to recommend much needed upgrades and to help guide its future development.[192] It was reported that although "the plan is not intended as an answer to San Diego's search for a new jet-age municipal airport…development of the field is particularly needed because of the growth of private and business flying activity."[193] Among the work recommended by the master plan, which was approved in 1964, was a wider access road, expanded parking, a new administration building and a control tower.[194] Construction on the control tower began almost immediately and, following its completion in 1965, the City opened bids "on a repaving project for all runways, taxiways and aircraft parking areas at Montgomery Field."[195]

Industrial development in Kearny Mesa continued well into the late-1960s and included an increasing number of industrial parks, such as San Diego City Industrial Park and Aetna Insurance Co.'s Kearny Industrial Park.[196] By 1969, however, most of the industrially zoned land in Kearny Mesa was occupied.[197] As large scale industrial development began to wane in the 1970s, the availability of smaller lots gave way to a wave of explosive commercial, retail, and office development.

Such as it had in the decades prior, Montgomery Field continued to shape the community's development into the 1980s. In 1978, the *San Diego Union* reported on the rapidly increasing popularity in private aviation, stating, "in numbers, San Diego's downtown airport is the least busy…[and that] Montgomery Field on Kearny Mesa is where the biggest increases in aviation are centered."[198] In fact, the popularity of private aviation paired with the increase in corporate traffic at the time had caused Montgomery Field to rank among the top 10 in the nation in numbers of aircraft based there and the 14th busiest airport overall.[199] To take advantage of this increased traffic the city authorized the construction of a hotel "designed to enable private pilots using Montgomery Field to taxi up to the lobby and check in before parking their airplanes."[200] Construction began in 1984[201] and the hotel and accompanying golf course was located immediately south of Buildings 6, 7, and 8 at the southwestern corner of the airport, along Aero Drive and Kearny Villa Road.

[190] "Is Montgomery A Practical Airport Site?," *San Diego Union*, March 10, 1957.
[191] Martin, 1960.
[192] Roy C. Johns, "City Council Gets Montgomery Field Development Plan," *San Diego Union*, March 11, 1960.
[193] Ibid.
[194] "Montgomery Field Expansion Detailed," *San Diego Union*, February 23, 1964.
[195] "Bid Openings Scheduled On Airport Paving," *San Diego Union*, June 10, 1965.
[196] "Industrial Parks Lune Farsighted Businesses," *San Diego Union,* January 1, 1969.
[197] "EDC Attracts Firms," 1969.
[198] Hudson, 1978.
[199] Ibid.
[200] "City Authorizes Airport Hotel," *San Diego Union,* January 16, 1981.
[201] "Hotels," *San Diego Union*, November 13, 1983.

The traffic of Montgomery Field also brought increased attention from real estate developers and new companies looking to relocate. As was reported by the *San Diego Union* in 1982, "Montgomery Field, until a few years ago only the home of private airplanes for flying clubs and weekend pilots, has taken on a new role – as an emerging North City building site which is becoming a haven for high technology and insurance companies."[202] Although it was largely the surrounding area, which the airport helped to shape, that attracted many new companies, the airport itself did attract a number of new office space users.[203] In particular, new complexes on or immediately adjacent to airport grounds included the Montgomery Airport Plaza, the Viewpoint Plaza, the Dynamic Office Park**,** the Airport Plaza, the Aero Office Park, the Kearny Mesa Office Park, and the Crossroads Building.[204] Although improvements continued into the 1990s and 2000s, both Montgomery Field and Kearny Mesa appeared to be effectively built out by 1989. In 2016, City Council passed a resolution officially renaming the airport Montgomery-Gibbs Executive Airport in honor of Bill Gibbs and the original airfield he created.

CITY OF SAN DIEGO HISTORICAL SIGNIFICANCE CRITERIA

In order to be eligible for designation on the City of San Diego's Register of Historical Resources, a resource must both have significance under one or more of the City's Historical Significance Criteria *and* retain sufficient integrity to convey that significance in its current state. *What follows is an evaluation of significance only; see the following sections for an evaluation of integrity and for a final eligibility conclusion.*

Criterion 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.

Building 7 **is** significant under Criterion A because it reflects a special element of the Kearny Mesa's historical development. Specifically, the it reflects Gibbs Field, the earliest development to have occurred in Kearny Mesa, which was instrumental in shaping the development of the entire community.

As was shown in the historic context, the Gibbs Field/Montgomery Field/Montgomery-Gibbs Executive Airport was in large part responsible for the way in which the community of Kearny Mesa developed. Not only was it the first development to have occurred in the area, but it also responsible for attracting new businesses, such as Bee Aviation Associates and Crownair, to the area. It was also responsible for a number of new improvements, such as major roadways. New aircraft safety zones created for both the airport and Miramar NAS further shaped the area, restricting residential development and zoning Kearny Mesa for light industrial and commercial uses. The combination of the industrial and commercial zoning, the proximity to the airport, and the accessibility of U.S. 395 (now SR-163) then brought major aeronautical and technology companies to the area during the 1950s and 1960s. The layout of the airport's approach and turning zones also likely dictated the location of major industrial plants north of airport. Additionally, it is likely that these zones were partly responsible for slow development of the open lots located east and west of the airport, which did not develop in earnest until the 1970s. As private and corporate aviation grew in popularity, the airport continued to attract new businesses and real estate developers during the 1980s. As a result, a

[202] "Montgomery Field is Building Up," *San Diego Union*, November 14, 1982.
[203] Ibid.
[204] Ibid.

number of new office parks and plazas were built on airport grounds and within the immediate vicinity. A large hotel was also built on airport grounds to take advantage of the growing number of private aviators using the airport.

Criterion B: Is identified with persons or events significant in local, state or national history.

Building 7 **is not** significant under Criterion B because, while it is associated with the lives of a significant person in our past, Bill Gibbs, there is not enough historical evidence to determine it is best associated and identified with Gibbs to establish a specific significance under Criterion B. The building was acquired and constructed by Bill Gibbs between 1947 for use at the airport. Bill Gibbs is an important figure because he was responsible for developing the original airport in 1937 where he operated his business, Gibbs Flying Service. In 1940, he leased the airport to Ryan Aeronautical and was hired on to teach flying lessons during World War II. After the war, Gibbs returned to his airport and, in 1947, constructed Buildings 6 and 7. Building 8 was constructed sometime between 1947 and 1950. It was also in 1947 that Bill Gibbs sold the airport and surrounding land to the City. As part of the sale, Gibbs was provided a lease so that he could continue to operate his business at the airport. Bill Gibbs was also a philanthropist who supported the San Diego Air & Space Museum, the Salvation Army, and the San Diego Zoo.[205]

In recognition of his legacy, Bill Gibbs was inducted into the International Air & Space Hall of Fame at the San Diego Air & Space Museum in 2011. On Gibbs's induction, Jim Kidrick, President and CEO of the San Diego Air & Space Museum stated that "Bill Gibbs lived through almost the entire history of aviation, and certainly through the history of aviation in San Diego."[206] When Bill Gibbs passed in 2016, the San Diego Air and Space Museum declared him "a significant part of the legacy of aviation in the San Diego region."[207] Therefore, Bill Gibbs's activities and contributions have been found to be demonstrably important enough to be considered a significant person under Criterion B.

According to the City's criteria guidelines, *"[p]ersons significant in our past refer to individuals associated with San Diego whose activities, achievements and contributions are demonstrably important within the City, state, or nation."* and *"Eligibility under Criterion B for significant person(s) involves first determining the importance of the individual, second ascertaining the length and nature of the individual's association with the resource under study and in comparison to other resources associated with the individual, and third determining if the resource is significant under HRB Criterion B as a resource that is best identified with a person(s) significant in local, state, or national history."*

There is minimal evidence to establish the length and nature of Bill Gibb's association with Building 7. While it is known that he acquired Building 7 in 1946 or early 1947, he leased the Building to other various aviation-related businesses rather than using it himself, and by 1956 his business operations moved to the center of the airport to make use of other hangars. Therefore, Bill Gibbs' direct association with Building 7 is limited to the years of its construction.

Finally, there is insufficient historical evidence to determine which of the three buildings at Montgomery Field is best identified with Gibbs to establish a specific significance under Criterion B, or if a different resource outside the scope of this report is best associated with him. Bill Gibbs' association with Building 7 is only for the years of its construction, and

[205] "San Diego Air & Space Museum mourns the loss of Aviation Legend Bill Gibbs," *San Diego Air & Space Museum*, http://sandiegoairandspace.org/press/release/san-diego-air-space-museum-mourns-the-loss-of-aviation-legend-bill-gibbs. Accessed April 16, 2019.
[206] Ibid
[207] Ibid.

there is not enough evidence to establish a stronger association for it over the others. Further, according to the City's criteria guidelines, "The best representatives are properties associated with the person's productive life." Thus, Bill Gibbs is best associated with a building or structure used in his career and aviation activities, neither of which applied to Building 7 which was used as a rental.

Thus, while Bill Gibbs is a significant person, there is not enough documentary evidence to determine which building is best identified and associated with his productive life. Therefore, Building 7 **is not** significant under Criterion B.

Additionally, Building 7 **is not** significant under Criterion B because it could not be identified with events significant in local, state, or national history.

Criterion C: Embodies distinctive characteristics of style, type, period, or method of construction or is a valuable example of the use of indigenous materials or craftsmanship.

Building 7 **is not** significant under Criterion C at any level because it does not embody the distinctive characteristics of a style, type, period, or method on construction. It is a utilitarian aircraft hangar that is believed to have originally served as a women's gymnasium on Coronado's NAS North Island. It features wood frame construction with dimensional lumber and sheathing, stuccoed exterior walls, and the vaulted roof is supported by bowstring trusses. Building 7 is not associated with a Master. It does not possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

Criterion D: Is representative of the notable work of a master builder, designer, architect, engineer, landscape architect, interior designer, artist or craftsman.

Buildings 7 **is not** significant under Criterion D. It has not been found to be associated with an established Master. According to Buzz Gibbs, the son of Bill Gibbs, Building 7 was originally constructed in the 1920s as a women's gymnasium on NAS North Island.[208] It became a surplus property following World War 2 and was acquired by Bill Gibbs for use as an aircraft hangar sometime around 1946 or early 1947. After being dismantled, ferried across the bay, and shipped to the existing site, the building was reconstructed in 1947.

Criterion E: is listed or has been determined eligible by the National Park Service for listing on the National Register of Historic Places or is listed or has been determined eligible by the State Historic Preservation Office for listing on the California Register of Historic Resources.

Building 7 **is not** significant under Criterion E. It has not previously been listed or determined eligible for listing in the Nation Register of Historic Places or the California Register of Historic Resources.

Criterion 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 which 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.

[208] This information was learned during an interview with Buzz Gibbs, Gibbs Flying Service.

Building 7 **is not** significant under Criterion F. It is not located within an identified, significant grouping, such as a historic district.

INTEGRITY EVALUATION

To be eligible for designation under any City of San Diego Historical Significance Criteria, a resource must retain integrity. According to the National Park Service (NPS), the integrity of a resource is determined by "the ability of a resource to convey its significance." In this case, Building 7 is significant under Criteria A as it reflects a special element of Kearny Mesa's historical development. In the context of Criterion A, each aspect of integrity share an equal weight of importance.

What follows is an evaluation of integrity only; see the preceding section for an evaluation of significance and the following section for a final eligibility conclusion.

Location: **Location is defined by the NPS as the "place where the historic property was constructed or the place where the historic event occurred."**

Building 7 **does** retain integrity of location. It has not been moved since being constructed by Bill Gibbs in 1947.

Setting: **Setting is defined as the "physical environment of a historic property."**

Building 7 **does** retain a sufficient integrity of setting. Historic photos show that during the 1947 period of significance, the physical environment surrounding Buildings 119 was characterized as a small airfield on flat, open, graded terrain. It was bounded to the west by the Inland Highway and sat to the north of Building 7. Although the airport has developed since 1947, the physical environment surrounding Building 7 has remained sufficiently intact and is still characterized as an airport. The hangar is situated on flat, open, graded terrain and is still bounded to the west by a major roadway. Because of these factors, the physical environment immediately surrounding Buildings 6, 7, and 8 has been found to retain a sufficient degree of integrity of setting.

Design**: Design is defined as the "combination of elements that create the form, plan, space, structure, and style of a property."**

Building 7 **does** retain a sufficient integrity of design to convey its significance. As is evidenced by the historic photographs, it strongly reflects its original design and appearance. Building 7 still features its original box-like form, open plan, timber-frame structure, and bowstring truss supported roof. It is uncertain if the existing windows are original to the 1947 construction. Although historic photos confirm that the existing window openings on the west and south elevations had existed as early as 1956 and 1960, respectively, (Fig. 39, pg. 37; Fig.40, pg.38), the 1947 photos of the building under construction do not show them (Figs. 35 & 36, 37, pgs. 35 & 36). As the exterior walls are unfinished in the 1947 photos, it is possible that the two window openings on the south elevation and the three on the west elevation were cut out after the stucco exterior was finished. However, without the direct evidence showing that the original fenestration differed from that seen in 1947 photos, the windows cannot be found to be original. Since the south and west elevation steel sash windows match each other in material and design, it can be inferred that they were installed around the same time.

Materials: **Materials are defined as the "physical elements that were combined or deposited during a particular period of time and in a pattern or configuration to form a historic property."**

Building 7 **does** retain sufficient integrity of materials to convey its significance. Building 7 still features its concrete foundation, wood frame construction, timber bowstring truss supported roof, corrugated steel hangar doors and steel horizontal sliding rail system. The 1947 photographs prove that Building 7 originally had stuccoed exterior walls. Whereas the exterior of the shed roofed addition has relatively newer stucco, no physical or documentary evidence was found to suggest that the original building was ever restuccoed. Some patching has occurred, however. The 1947 photographs show that the Building 7 originally had short, square-shaped, openings at either end of its unfinished, stucco-clad, side elevations (north and south). The easternmost openings on both elevations also had what appears to have been a horizontal element affixed above them at the mid-point of the unfinished exterior wall. The 1956 photograph shows that the westernmost opening on the north elevation was intact at that time. The 1960 photograph, however, shows that the openings on the south elevation had been infilled. Therefore, if the short, square, openings on the southern elevation were not infilled, and the horizontal element removed and patched over, when the exterior walls were finished in 1947, they were infilled by 1960. The fact that these patches can still be read in the exterior stucco of the south elevation today, suggests that the building was never restuccoed. Because of this physical evidence, it has been determined that Building 7 retains most of its original stucco.

Workmanship: **Workmanship is defined as the "physical evidence of the crafts of a particular culture or people during any given period in history or prehistory."**

Buildings 7 **does** retain sufficient integrity of workmanship to convey its significance. It still exhibits the craftsmanship common to the pre-and post-war periods. The physical evidence of the workmanship from these periods includes the wood framing and bowstring truss-supported roof, the steel sash windows, the poured concrete foundation, the exterior stucco, the corrugated steel paneled façade, and the horizontal sliding, steel, hangar doors and rail system.

Feeling: **Feeling is defined as the "property's expression of the aesthetic or historic sense of a particular period of time."**

Building 7 **does** retain a sufficient integrity of feeling to convey its significance. It is remarkably intact and expresses a strong historic sense of what both the building and the airport was like during the 1947 period of significance.

Association: **Association is defined as the "direct link between an important historic event or person and a historic property."**

Building 7 **does** retain a sufficient integrity of association to convey its significance. As is evidenced by the historic photos, it remains largely as it appeared when it was built by Buzz Gibbs for his airport in 1947. Because of this, the direct link remains between Building 7, Buzz Gibbs, and the airport.

Conclusion:

Building 7 is significant under HRB Criterion A with a period of significance of 1947 as it reflects a special element of Kearny Mesa's historical development. It has also been found to retain 7 out of the 7 aspects of integrity. Therefore, it has been determined eligible for listing in the San Diego Register of Historical Resources.

State of California The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code 5S1

Other Listings
Review Code | Reviewer | Date

*Resource Name or #: Building 8

P1. Other Identifier: N/A

***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted** ***a. County:** San Diego

***b. USGS 7.5' Quad:** La Jolla **Date:** 1996

c. Address: 3873 Kearny Villa Road City: San Diego Zip: 92123

d. UTM: Zone 11 S; 486003.35 mE/ 3630633.49 mN (G.P.S.)

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Legal Description

On east side of Kearny Villa Road at the west end of Montgomery-Gibbs Executive Airport, south of Building 7.

***P3a. Description:**

Building 8 is a steel-frame aircraft hangar with a box-like massing and a gable end roof that was reportedly custom built from surplus materials acquired by Buzz Gibbs. The gable end roof is composed of corrugated steel panels. Oriented eastward, the hangar's primary elevation faces towards the Montgomery-Gibbs Airport. *(Continued on page 3).*

***P3b. Resource Attributes:** HP39 - Other

***P4. Resources Present:** ☒Building ☐Structure ☐Object ☐Site ☐District ☐Element of District ☐Other (Isolates, etc.)

P5a. Photo or Drawing



P5b. Description of Photo:
¾ view showing east and north elevations. IS Architecture, 2019.

***P6. Date Constructed/Age:**
☒Historic ☐Prehistoric ☐Both
c. 1950

***P7. Owner and Address:**
City of San Diego
202 C Street
San Diego, CA 92101

***P8. Recorded by:**
IS Architecture
5645 La Jolla Boulevard
La Jolla, California 92037

***P9. Date Recorded:** April 2019

***P10 Survey Type:** Intensive/pedestrian

***P11. Report Citation:** None.

***Attachments:** ☐NONE ☐Location Map ☐Sketch Map ☒Continuation Sheet ☒Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☒Artifact Record ☐Photograph Record ☒Other (List): HRB Format Attachments

BUILDING, STRUCTURE, AND OBJECT RECORD

***Resource Name: Building 8** ***NRHP Status Code: 5S1**

B1. Historic Name: N/A
B2. Common Name: Building 8
B3. Original Use: Aircraft Hangar B4. Present Use: Aircraft Hangar
***B5. Architectural Style:** N/A
***B6. Construction History:**

A historic photograph from March 1947 shows that the reassembly of Building 6 was nearly completed by that time and that Building 7 was just getting underway. Although Building 8 does not appear in this photograph, another photograph from 1950 proves that it was built sometime between 1947 and 1950. Building 8, which is said to have been custom built by hand, was likely built from surplus materials acquired from the military.

***B7. Moved?** ☒**No** ☐**Yes** ☐**Unknown** **Date:** 1950 **Original Location:** Original location
***B8. Related Features:** N/A
B9a. Architect: N/A **b. Builder:** Bill Gibbs
***B10. Significance** **Theme:** Historical Development **Area:** Kearny Mesa
Period of Significance: 1947-1950 **Property Type:** Aircraft Hangar **Applicable Criteria:** A

HISTORIC CONTEXT

Prior to settlement, the community now known as Kearny Mesa was part of a large area solely occupied by the native Kumeyaay people. After the arrival of the Spanish explorers, the area was claimed by Spain for the Mission San Diego de Alcalá. After the Mission was secularized following Mexican independence in 1822, the land was parceled out as part of a massive tract known as Rancho Ex-Mission San Diego. By the end of the 19th century, the mesa north of Mission Valley had become known as the Linda Vista mesa and a few small farming settlements had developed around present-day University City and Miramar *(Continued on p.3).*

B11. Additional Resource Attributes:

***B12. References:** See endnotes.

B13. Remarks: None.

***B14. Evaluator:** IS Architecture

***Date of Evaluation:** April 2019

(This space reserved for official comments.)



P3a. Description: Continued

The primary elevation features a large, exterior, four panel, horizontal sliding hangar door system with a steel top track that extends out past the building at both ends of the elevation to vertical supports. Angled steel braces also appear to either side of building to provide additional support for the large door system. The sliding hangar door panels are composed of corrugated steel panels covered in failing paint. The exterior wall within the gable end above the hangar door is composed of the same corrugated steel panels and features a single, centered, light fixture The south elevation is composed entirely of uninterrupted corrugated steel panels covered in failing paint. The west, or rear, elevation also features a completely uninterrupted wall surface composed of corrugated steel panels; however, five, evenly spaced, light fixtures project from the exterior within the gable end. The north elevation features a mostly uninterrupted wall surface composed of corrugated steel panels covered in failing paint. A flush, outward swinging, steel door appears near the western corner of the north elevation.

***B10. Significance: Continued**

In 1891, a large swath of Ex-Mission land, which would come to include a major portion of the Montgomery-Gibbs Executive Airport, was surveyed, subdivided, as parceled out as part of the New Riverside subdivision (see appendix C.3, pg. 83). These parcels were sold to speculators but due to the complete lack of water, roads, and other improvements, the lots remained undeveloped.

The most significant development to occur on the mesa land by the turn of the 20th century was the creation of the Inland Highway. This road, which ran from San Diego's Old Town, across present-day Kearny Mesa, to the Old Poway Road and on to Los Angeles, was improved from what was likely an old trail from the Ex-Mission era.[209] The land on the Linda Vista mesa remained otherwise untouched until 1917 when the outbreak of World War I resulted in the explosive development of Camp Kearny near present-day Marine Corps Air Station (MCAS) Miramar. Camp Kearny was a large, completely self-sustaining military installation that brought improvements to the Ex-Mission lands for the first time. Although the end of the war in 1918 effectively halted any further inland development, the camp's influence was such that the entire mesa became commonly known as the Kearny mesa by the early 1920s.

The Kearny mesa's first residential subdivision, which was named "Chesterton," was developed by O.W. Cotton in 1927 and was located around the present-day community of Linda Vista. This development was only made possible, however, due to advancements in the city's water development and the creation of the Sixth Street Extension, which provided a through boulevard from the Kearny mesa to downtown San Diego. Despite the early improvements the military brought to the north, and those brought to the south by the city, the general lack of roadways, water, and other improvements in the heart of the Kearny mesa continued to make expanding development further inland impossible.

The inability to develop the land likely played a major role in its relative affordability. Looking for cheap land that would not flood, Bill Gibbs acquired 25 acres of land in the New Riverside subdivision on the Kearny mesa in 1937 with the dream of establishing his own aviation field and business.[210] During that time, the closest development to the north was Camp Kearny, which by then had been renamed Camp Holcomb. The Chesterton subdivision was located a few miles southwest. Grantville, one of San Diego's oldest communities, existed some miles southeast across Murphy Canyon

[209] "Highway 395," *City of Poway, California*, https://poway.org/188/Highway-395. Accessed April 12, 2019.
[210] Harrison, 2010.

Road. Other than the Inland Highway, no prior development is known to have existed in the immediately surrounding area. Therefore, the creation of Gibbs Field in 1937 was not only among the first developments to occur on the mesa north of Mission Valley, but it was also the first known development in the area now known as the community of Kearny Mesa.

In 1940, Gibbs Field was leased to the Ryan School of Aeronautics who used the airfield for its Army Air Corps pilot training program.[211] To better support its operation and to accommodate its growing enrollment, Ryan expanded the runways and likely added small ancillary buildings and barracks for the cadets in training.[212] As civilian aviation so close to the coast was banned following the onset of World War II, Bill Gibbs relocated to Tucson, Arizona where he continued work as a flight instructor.[213] With Gibbs in Arizona, the United States military took control of Gibbs Field and used the airport as a training ground for bombing exercises and simulated battles.[214]

Bill Gibbs returned to the airport shortly after the end of the war in 1945 and continued to provide flying lessons and other aviation related services.[215] Sometime in 1946 or early 1947, Gibbs acquired Building 6 and Building 7, which were likely sold as surplus buildings no longer needed by the Navy following the war. Although no direct evidence exists, it is believed that Building 7 was originally a women's gymnasium located on Coronado's NAS North Island, and that after being acquired, it was dismantled, ferried across the bay, and shipped to Gibbs Field where it was reassembled.[216] A historic photograph from early March 1947 shows that the reassembly of Building 6 was nearly completed by that time and that Building 7 was just getting underway.[217] Although Building 8 does not appear in this photograph, another photograph from 1950 proves that it was built sometime between 1947 and 1950. Building 8, which is said to have been custom built by hand, was likely built from surplus materials acquired from the military.[218] As is evidenced by the historic photos, a few ancillary buildings and trailers had also surrounded the three hangars at the time.

In October 1947, the City of San Diego purchased the airport from Bill Gibbs with plans to make it the City's only private flying field.[219] As part of the deal, Bill Gibbs was granted a lease on 15 acres of the field so that he could continue to operate his aviation business.[220] Almost immediately after acquiring the airport, the City began work on a major expansion and improvement project, which included moving ten former Navy buildings from Balboa Park to the center of the airport; grading the field; extending, surfacing, and lighting the runways; paving new taxiways and parking areas; updating telephone lines; installing water and sewer lines; and creating a new access road to the recently developed U.S. 395.[221] The new runway improvements were completed and officially approved in 1949.[222]

---

[211] "S.D. Air Corps Training School Doubles Classes," 1940.
[212] "Ryan's Classes Show 500% Gain," *San Diego Union*, August 5, 1940.
[213] Harrison, 2010.
[214] "House Navy Group Members See Amphibious Force Act," *San Diego Union*, May 26, 1942.
[215] Harrison, 2010.
[216] This information was provided during an interview with Buzz Gibbs of Gibbs Flying Service.
[217] The original negative from SDHC only lists the year, 1947, as the date. However, the same photograph was used for an article in the *San Diego Union* on March 9, 1947. See: "Flying for Fun," *San Diego Union*, March 9, 1947.
[218] This information was provided during an interview with Buzz Gibbs of Gibbs Flying Service.
[219] "New Plans for S.D.," 1947.
[220] "City in Control of Gibbs Airport," 1947.
[221] "C.A.A. Grants $20,547 To Aid Gibbs Airport," *San Diego Union,* March 16, 1948; "City to Open Airport Bids," *San Diego Union*, June 13, 1948; "Gibbs Airport Sale to City Near Conclusion," *San Diego Union,* August 3, 1947; "Gibbs Airport Area Annexing Urged," *San Diego Union*, September 24, 1947.
[222] "Officials Look Over Gibbs Field Maps," *San Diego Union*, August 9, 1949.

That same year, an ordinance was passed dedicating the public land required for new airport access roads named Aero Drive, East Aero Way (now John J. Montgomery Drive) and West Aero Way (now Glenn H. Curtiss Road.[223] As is shown in Figure 12, and supported in a bid notice from January 22, 1950, an early section of present-day Kearny Villa Road connecting Aero Drive to the Inland Highway was developed in 1950, as well.[224] Capping off all of this major development was Resolution No. 97985, passed by the City Council in May of 1950, which officially renamed the airport to Montgomery Field.[225]

Following the City's acquisition of the airport, Bill Gibbs continued to lease out Buildings 6 and 7 to various aviation-related businesses like Pacific Airmotive Corp. and Crownair Aviation. As his own business grew, Gibbs moved closer to the center of the airport and began to rent out spaces for aircraft in newly built T-type hangars.[226] As the airport attracted more aviation-related activities and businesses, so too did the surrounding area. One of the earliest examples was reported one month after the City's acquisition of the airport by the *San Diego Union,* which detailed the relocation plan of the Stinson Aircraft Tool & Engineering Corp. to a large plant just off U.S. 395 on Clairemont Mesa Road in Kearny Mesa.[227]

With the newly developed Linda Vista housing project on the southern end of the mesa and Miramar NAS to the north, the Navy's presence was also growing stronger. In reaction to the growth of both the Navy and the aerospace industry, the City began to forecast a major housing boom in the Kearny Mesa area around 1951.[228] In response to the proposed residential development, the Navy made it clear that it favored agricultural, recreational and light industrial zoning around Miramar NAS, and stated that no residences were to be built within a 12,000 foot, or 2.3 mile, radius of the installation's runway.[229] Large areas of Kearny Mesa land outside of the Navy's 12,000 foot radius, which had already been zoned for residential use, were also called to be recategorized as temporary holding zones while the zoning issue was debated. The reason stated by the *San Diego Union* was that "although outside the Miramar circle, the recently annexed land is opposite the city's Montgomery Field."[230]

The City viewed Montgomery Field as "essential to San Diego's development" and partnered with the Civil Aeronautics Administration in 1953 to prepare "building-height limits and zoning legislation for the Montgomery Field area."[231] The same was also sought in the area around Miramar NAS, which remained outside the city limits. Although the legality of instituting such building heights around Miramar NAS and Montgomery Field was debated, it was reported in June of 1953 that planning director Glenn A. Rick stated "We're proceeding with Montgomery, but we're 'held up' on Miramar."[232] It appears that it wasn't until 1960, though, that an official ordinance was adopted establishing the "Airport Approach Zones" and "Airport Turning Zones".[233] An ordinance that was adopted by City Council in 1953, however, put an end to some of the debate over land use within Kearny Mesa by rezoning 101 acres of land within the Navy's 12,000

[223] "Ordinance No. 4015," *San Diego Union*, April 7, 1949.
[224] "Notice Inviting Bids," *San Diego Union*, January 22, 1950.
[225] "Resolution No. 97985," *San Diego Union*, May 25, 1950.
[226] Harrison, 2010.
[227] "Stinson Aircraft Plans Expansion," *San Diego Union*, November 10, 1947.
[228] "Council May Act On Expansion Today," *San Diego Union,* February 1, 1951.
[229] "Owners Will Confer On Mesa Zoning," *San Diego Union*, December 17, 1953.
[230] "Council Delays Kearny Mesa Zoning Case," *San Diego Union*, December 16, 1953.
[231] "All Weather Field Called Vital Need," *San Diego Union*, July 11, 1953.
[232] "Height Limit Opinion Divided," *San Diego Union* June 4, 1953.
[233] "Ordinance No. 8310," *San Diego Union*, June 19, 1960.

foot radius for light industrial purposes.[234] The following month, the *San Diego Union* reported that, "moving to provide Kearny Mesa land for future industry, the City Council yesterday authorized City Mgr. Campbell to execute an agreement for the purchase of 180 acres northwest of Montgomery Field."[235] Shortly thereafter, in early 1954, the San Diego Chamber of Commerce approved a resolution establishing a light industrial zone for additional Kearny Mesa land within 12,000 foot radius of the center of the Miramar NAS runways.[236] This resolution not only took into account the proximity of Miramar NAS, but it "also asked that present and future needs of Montgomery Field be examined carefully so that the field's growth will not be stunted by residential building getting too close."[237]

Tensions over residential and industrial zoning continued throughout the early 1950s as new, and typically large, acreages of land around Montgomery Field were annexed by the City. Residential developments occurred mainly to the south and east of the airport, in communities now known as Serra Mesa, Linda Vista, and Clairemont. However, due to Miramar NAS to the north and Montgomery Field to the south and east, the land between the two, which today makes up the community of Kearny Mesa, was instead prioritized for industrial and commercial use.

Kearny Mesa was quickly recognized as "offering the city's best potential for future industry."[238] This was partly due to accessibility to U.S. 395. However, according to Stanley Grove, general manager of the San Diego Chamber of Commerce at the time, "the Kearny Mesa area, on Highway 395 beyond Linda Vista" was an especially attractive location for industrial development because "its proximity to Montgomery airport is important to manufacturers."[239] Recognizing the benefits of the area, a number of major aeronautical and defense-related companies, such as Ryan Aeronautical Co., Solar Aircraft Co., Consolidated Aircraft Corp., General Dynamics, and Rohr Aircraft Corp., began relocating to the area between 1954 and 1958. Other, more diversified, companies such as Cubic Corp, an electronics research firm, moved to the area as well.

Also beginning in the mid-1950s was an investigation to develop Montgomery Field into the City's primary airport.[240] The proximity of Montgomery Field to Miramar NAS proved to be too problematic, though, and, after the Navy outright rejected the idea, the proposition was no longer being considered by 1960.[241] Uncertain as to the future of the airport, the city began developing a master plan to recommend much needed upgrades and to help guide its future development.[242] It was reported that although "the plan is not intended as an answer to San Diego's search for a new jet-age municipal airport…development of the field is particularly needed because of the growth of private and business flying activity."[243] Among the work recommended by the master plan, which was approved in 1964, was a wider access road, expanded parking, a new administration building and a control tower.[244] Construction on the control tower began almost immediately and, following its completion in 1965, the City opened bids "on a repaving project for all runways, taxiways and aircraft parking areas at Montgomery Field."[245]

[234] "Kearny Mesa Zoning for Light Industry Adopted by Council," *San Diego Union,* September 23, 1953.
[235] "City Will Buy Mesa Land for New Industries," *San Diego Union*, October 16, 1953.
[236] "Chamber Asks End Of 2-Year Delay On Miramar Zoning," *San Diego Union*, January 14, 1954.
[237] Ibid.
[238] "Talk on Zoning Will Continue," *San Diego Union*, September 9, 1953.
[239] "Grove Says 9 New Industries," 1951.
[240] "Is Montgomery A Practical Airport Site?," *San Diego Union*, March 10, 1957.
[241] Martin, 1960.
[242] Roy C. Johns, "City Council Gets Montgomery Field Development Plan," *San Diego Union*, March 11, 1960.
[243] Ibid.
[244] "Montgomery Field Expansion Detailed," *San Diego Union*, February 23, 1964.
[245] "Bid Openings Scheduled On Airport Paving," *San Diego Union*, June 10, 1965.

Industrial development in Kearny Mesa continued well into the late-1960s and included an increasing number of industrial parks, such as San Diego City Industrial Park and Aetna Insurance Co.'s Kearny Industrial Park.[246] By 1969, however, most of the industrially zoned land in Kearny Mesa was occupied.[247] As large scale industrial development began to wane in the 1970s, the availability of smaller lots gave way to a wave of explosive commercial, retail, and office development.

Such as it had in the decades prior, Montgomery Field continued to shape the community's development into the 1980s. In 1978, the *San Diego Union* reported on the rapidly increasing popularity in private aviation, stating, "in numbers, San Diego's downtown airport is the least busy…[and that] Montgomery Field on Kearny Mesa is where the biggest increases in aviation are centered."[248] In fact, the popularity of private aviation paired with the increase in corporate traffic at the time had caused Montgomery Field to rank among the top 10 in the nation in numbers of aircraft based there and the 14th busiest airport overall.[249] To take advantage of this increased traffic the city authorized the construction of a hotel "designed to enable private pilots using Montgomery Field to taxi up to the lobby and check in before parking their airplanes."[250] Construction began in 1984[251] and the hotel and accompanying golf course was located immediately south of Buildings 6, 7, and 8 at the southwestern corner of the airport, along Aero Drive and Kearny Villa Road.

The traffic of Montgomery Field also brought increased attention from real estate developers and new companies looking to relocate. As was reported by the *San Diego Union* in 1982, "Montgomery Field, until a few years ago only the home of private airplanes for flying clubs and weekend pilots, has taken on a new role – as an emerging North City building site which is becoming a haven for high technology and insurance companies."[252] Although it was largely the surrounding area, which the airport helped to shape, that attracted many new companies, the airport itself did attract a number of new office space users.[253] In particular, new complexes on or immediately adjacent to airport grounds included the Montgomery Airport Plaza, the Viewpoint Plaza, the Dynamic Office Park**,** the Airport Plaza, the Aero Office Park, the Kearny Mesa Office Park, and the Crossroads Building.[254] Although improvements continued into the 1990s and 2000s, both Montgomery Field and Kearny Mesa appeared to be effectively built out by 1989. In 2016, City Council passed a resolution officially renaming the airport Montgomery-Gibbs Executive Airport in honor of Bill Gibbs and the original airfield he created.

CITY OF SAN DIEGO HISTORICAL SIGNIFICANCE CRITERIA

In order to be eligible for designation on the City of San Diego's Register of Historical Resources, a resource must both have significance under one or more of the City's Historical Significance Criteria *and* retain sufficient integrity to convey that significance in its current state. *What follows is an evaluation of significance only; see the following sections for an evaluation of integrity and for a final eligibility conclusion.*

[246] "Industrial Parks Lune Farsighted Businesses," *San Diego Union,* January 1, 1969.
[247] "EDC Attracts Firms," 1969.
[248] Hudson, 1978.
[249] Ibid.
[250] "City Authorizes Airport Hotel," *San Diego Union,* January 16, 1981.
[251] "Hotels," *San Diego Union*, November 13, 1983.
[252] "Montgomery Field is Building Up," *San Diego Union*, November 14, 1982.
[253] Ibid.
[254] Ibid.

Criterion 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.

Buildings 8 **is** significant under Criterion A because it reflects a special element of the Kearny Mesa's historical development. Specifically, it reflects the airfield created by Bill Gibbs, which was the earliest known development to have occurred in Kearny Mesa. As such, Building 8, along with the adjacent Building 6 and 7, influenced both the future development of the airport as Montgomery Field, presently named Montgomery-Gibbs Executive Airport, and by extension, influenced the development of the entire community of Kearny Mesa.

As was shown in the historic context, the development of Montgomery-Gibbs Executive Airport by both Bill Gibbs, from 1937-1947, and the City of San Diego, from 1947-1989 and later, was in large part responsible for the way in which the community of Kearny Mesa, itself, developed. Not only was the airfield the first development to have occurred in the area, but it also responsible for attracting new businesses, such as Bee Aviation Associates and Crownair, to the area. It also influenced the development of U.S. 395 (now SR-163) and was responsible for the creation of other roadways like Aero Drive. New aircraft safety zones created for both the airport and Miramar NAS further shaped the area, restricting residential development and zoning Kearny Mesa for light industrial and commercial uses. The combination of the industrial and commercial zoning, the proximity to the airport, and the accessibility of U.S. 395 then brought major aeronautical and technology companies to the area during the 1950s and 1960s. The layout of the airport's approach and turning zones also likely dictated the location of major industrial plants north of airport. Additionally, it is likely that these zones were partly responsible for slow development of the open lots located east and west of the airport, which did not develop in earnest until the 1970s. As private and corporate aviation grew in popularity, the airport continued to attract new businesses and real estate developers during the 1980s. As a result, a number of new office parks and plazas were built on airport grounds and within the immediate vicinity. A large hotel was also built on airport grounds to take advantage of the growing number of private aviators using the airport.

Criterion B: Is identified with persons or events significant in local, state or national history.

Buildings 8 **is not** significant under Criterion B, while it is associated with the lives of a significant person in our past, Bill Gibbs, there is not enough historical evidence to determine it is best associated and identified with Gibbs to establish a specific significance under Criterion B. The building was constructed by Bill Gibbs sometime between 1947 and 1950 for use as a hangar at the airport. Bill Gibbs is an important figure because he was responsible for developing the original airport in 1937 where he operated his business, Gibbs Flying Service. In 1940, he leased the airport to Ryan Aeronautical and was hired on to teach flying lessons during World War II. After the war, Gibbs returned to his airport and, in 1947, constructed Buildings 6 and 7. Building 8 was constructed sometime between 1947 and 1950. It was also in 1947 that Bill Gibbs sold the airport and surrounding land to the City. As part of the sale, Gibbs was provided a lease so that he could continue to operate his business at the airport. Bill Gibbs was also a philanthropist who supported the San Diego Air & Space Museum, the Salvation Army, and the San Diego Zoo.[255]

[255] "San Diego Air & Space Museum mourns the loss of Aviation Legend Bill Gibbs," *San Diego Air & Space Museum*, http://sandiegoairandspace.org/press/release/san-diego-air-space-museum-mourns-the-loss-of-aviation-legend-bill-gibbs. Accessed April 16, 2019.

In recognition of his legacy, Bill Gibbs was inducted into the International Air & Space Hall of Fame at the San Diego Air & Space Museum in 2011. On Gibbs's induction, Jim Kidrick, President and CEO of the San Diego Air & Space Museum stated that "Bill Gibbs lived through almost the entire history of aviation, and certainly through the history of aviation in San Diego."[256] When Bill Gibbs passed in 2016, the San Diego Air and Space Museum declared him "a significant part of the legacy of aviation in the San Diego region."[257] Therefore, Bill Gibbs's activities and contributions have been found to be demonstrably important enough to be considered a significant person under Criterion B.

According to the City's criteria guidelines, *"[p]ersons significant in our past refer to individuals associated with San Diego whose activities, achievements and contributions are demonstrably important within the City, state, or nation."* and *"Eligibility under Criterion B for significant person(s) involves first determining the importance of the individual, second ascertaining the length and nature of the individual's association with the resource under study and in comparison to other resources associated with the individual, and third determining if the resource is significant under HRB Criterion B as a resource that is best identified with a person(s) significant in local, state, or national history."*

There is minimal evidence to establish the length and nature of Bill Gibb's association with Buildings 8. While it is known that he built Building 8 between 1947 and 1950, he leased the Building to other various aviation-related businesses rather than using it himself, and by 1956 his business operations moved to the center of the airport to make use of other hangars. Therefore, Bill Gibbs' direct association with Building 8 is limited to the years of its construction.

Finally, there is insufficient historical evidence to determine which of the three buildings at Montgomery Field is best identified with Gibbs to establish a specific significance under Criterion B, or if a different resource outside the scope of this report is best associated with him. Bill Gibbs' association with Building 8 is only for the years of its construction, and there is not enough evidence to establish a stronger association for it over the others. Further, according to the City's criteria guidelines, "The best representatives are properties associated with the person's productive life." Thus, Bill Gibbs is best associated with a building or structure used in his career and aviation activities, neither of which applied to Building 8 which was used as a rental.

Thus, while Bill Gibbs is a significant person, there is not enough documentary evidence to determine which building is best identified and associated with his productive life. Therefore, Building 8 **is not** significant under Criterion B.

Building 8 **is not** significant under Criterion B because it could not be identified with events significant in local, state, or national history.

Criterion C: Embodies distinctive characteristics of style, type, period, or method of construction or is a valuable example of the use of indigenous materials or craftsmanship.

Building 8 **is not** significant under Criterion C at any level. It is a post-war era aircraft hangar that was custom built on site using surplus materials acquired by Bill Gibbs. It does not embody the distinctive characteristics of a style, type, period, or method of construction. Building 8 is not associated with a Master. It does not possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

[256] Ibid
[257] Ibid.

Criterion D: Is representative of the notable work of a master builder, designer, architect, engineer, landscape architect, interior designer, artist or craftsman.

Building 8 **is not** significant under Criterion D. It has not been found to be associated with an established Master. Therefore, it has not been found to be representative of the notable work of a master.

Criterion E: is listed or has been determined eligible by the National Park Service for listing on the National Register of Historic Places or is listed or has been determined eligible by the State Historic Preservation Office for listing on the California Register of Historic Resources.

Building 8 **is not** significant under Criterion E. It has not previously been listed or determined eligible for listing in the Nation Register of Historic Places or the California Register of Historic Resources.

Criterion 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 which 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.

Building 8 **is not** significant under Criterion F. It is not located within an identified, significant grouping, such as a historic district.

INTEGRITY EVALUATION

To be eligible for designation under any City of San Diego Historical Significance Criteria, a resource must retain integrity. According to the National Park Service (NPS), the integrity of a resource is determined by "the ability of a resource to convey its significance." In this case, Building 8 is significant under Criteria A as it reflects a special element of Kearny Mesa's historical development. In the context of Criterion A, each aspect of integrity share an equal weight of importance.

What follows is an evaluation of integrity only; see the preceding section for an evaluation of significance and the following section for a final eligibility conclusion.

Location: **Location is defined by the NPS as the "place where the historic property was constructed or the place where the historic event occurred."**

Building 8 **does** retain integrity of location. It has not been moved since being constructed by Bill Gibbs between 1947 and 1950.

Setting: **Setting is defined as the "physical environment of a historic property."**

Building 8 **does** retain a sufficient integrity of setting to convey its significance. Historic photos show that by 1950, the physical environment surrounding Building 8 was characterized as a small airfield on flat, open, graded terrain. Buildings 7 and 8 sat to the north. The site was bounded to the west by U.S. 395 (now SR-163) and an early section of what would become Kearny Villa Road. The airport runways and Aero Drive, to the south, had also been paved. Additionally, the airport had been expanded to what appears to be its current form and rededicated as Montgomery Field.

Although the airport has developed since 1950, the physical environment surrounding Building 8 has remained sufficiently intact and is still characterized as an airport. The hangar is situated on flat, open, graded terrain and is still bounded to the west by the same section of Kearny Villa Road and SR-163. The proximity of the hangar to Buildings 6 and 7, the roadways to the west and south, as well as the runways and the expanded part of the airport to the east, remains the same. Because of these factors, the physical environment immediately surrounding Buildings 6, 7, and 8 has been found to retain a sufficient degree of integrity of setting.

***Design*: Design is defined as the "combination of elements that create the form, plan, space, structure, and style of a property."**

Building 8 **does** retain sufficient integrity of design to convey its significance. Building 8 appears to have remained entirely intact since its construction sometime between 1947 and 1950. Historic photos show that the hangar has always had a box-like form, a rectangular plan, a gable roof, windowless exterior elevations, and a massive, east facing, horizontal sliding hangar door system.

***Materials:* Materials are defined as the "physical elements that were combined or deposited during a particular period of time and in a pattern or configuration to form a historic property."**

Building 8 **does** retain sufficient integrity of materials to convey its significance. Building 8 was constructed using corrugated steel panels for the exterior walls, the roof, and the hangar door. These materials remain intact today. Based of the historic photos, no alterations appear to have occurred.

***Workmanship:* Workmanship is defined as the "physical evidence of the crafts of a particular culture or people during any given period in history or prehistory."**

As Building 8 does not appear to have ever been altered since its original construction, the hangar still exhibits the craftsmanship of the period in which it was built. The physical evidence of this craftsmanship is evident in the use of corrugated steel panels for the exterior walls and the gable roof, as well as the exterior steel, horizontal sliding, hangar door system

***Feeling:* Feeling is defined as the "property's expression of the aesthetic or historic sense of a particular period of time."**

Building 8 **does** retain a sufficient integrity of feeling to convey its significance. It is remarkably intact and expresses a strong historic sense of what both the building and the site was like during its 1950 period of significance

***Association:* Association is defined as the "direct link between an important historic event or person and a historic property."**

Building 8 **does** retain a sufficient integrity of association. As is evidenced by the historic photos, it remains largely as it appeared when it was built by Buzz Gibbs in 1950. Because of this, the direct link remains between Building 8, Buzz Gibbs, and the airport.

Conclusion:

Building 8 is significant under HRB Criterion A as it reflects a special element of Kearny Mesa's historical development. It has also been found to retain 7 out of the 7 aspects of integrity. Therefore, it has been determined eligible for listing in the San Diego Register of Historical Resources.

Appendix E: Preparer's Qualifications

Ione Steigler, FAIA
Principle Architect
IS Architecture

Ione R. Stiegler, FAIA is the Principal Architect for IS Architecture. Her studio specializes in applying the Secretary of the Interior's Standards for the treatment of Historic Properties and have completed projects implementing all four approved treatments; Restoration, Preservation, Rehabilitation, and Reconstruction. Together Ione R. Stiegler, FAIA, and her studio have rehabilitated or restored more than 75 institutional historic structures, 18 adobe buildings, and more than 100 historic homes. In addition, the firm possesses an expertise in the technical, aesthetic, building code, Americans with Disability Act (ADA), structural and agency review aspects of architectural design for historic structures. Ms. Stiegler's qualifications exceed the requirements established by the National Park Service, for History, Architectural History, Architecture, and Historic Architecture, as published in the Code of Federal Regulations, 36 CFR Part 61.

Christopher Usler
Historic Preservation Specialist & Architectural Historian
IS Architecture

Mr. Usler holds a Master of Science degree in Architectural Conservation from the University of Edinburgh, where, as part of the Scottish Centre for Conservation Studies, he studied the historical and theoretical foundations of historic preservation; the techniques of recording and research; and the technologies of building repair. Mr. Usler has experience providing a full range of preservation services. Some of his projects include the repair and restoration of 19th century stone statuary at The Breakers mansion in Newport, Rhode Island; the preservation and maintenance of the Frederick Law Olmsted National Historic Site in Brookline, Massachusetts; a measured building survey of the Old Moray House of 1619 in Edinburgh, Scotland; as well as a National Register of Historic Places nomination for a Carnegie Library and numerous Determinations of Eligibility for buildings and structures around western Indiana. Mr. Usler's qualifications exceed the requirements established by the National Park Service, as published in the Code of Federal Regulations, 36 CFR Part 61 (Secretary of the Interior's Standards)

Peter Kempson, MAH, MARCH
Historic Preservation Specialist/Associate Project Manager
IS Architecture

Peter Kempson, MAH & MARCH is a Historic Preservation Specialist at IS Architecture. Mr. Kempson has project experience ranging from work on historic structure reports, historic resource evaluations, local historic nominations, building condition assessment reports, Section 106 Compliance, and historic architectural design projects. These projects have been at Local, State, and Nationally Historic Designated Sites. Mr. Kempson holds Master of Architectural History and Master of Architecture degrees from the University of Virginia and exceeds the requirements established by the National Park Service for Architectural History and Historic Architecture as published in the Code of Federal Regulations, 36 CFR Part 61.

Appendix D2

Historical Resources Technical Report
Peer Review Memo

HELIX Environmental Planning, Inc.
7578 El Cajon Boulevard
La Mesa, CA 91942
619.462.1515 tel
619.462.0552 fax
www.helixepi.com

October 20, 2026 01737.00004.005

Paul Cristilli, CCM, DBIA, LEED AP BD+C
Campus Project Manager, Kitchell Measure HH Region 2 (Miramar & Mesa)
San Diego Community College District
1450 Frazee Road, Suite 500
San Diego, CA 92108
T. 619.200.4697
E. pcristilli@sdccd.edu

Subject: **Peer Review Assessment Historical Resource Technical Report, Montgomery-Gibbs Executive Airport Building 6, Building 7 & Building 8, 2873 Kearny Villa Road, San Diego, California 92123**

Dear Mr. Cristilli,

The San Diego Community College District (District) retained HELIX Environmental Planning (HELIX) to prepare an Historical Resources Technical Report Peer Review Memorandum (memorandum) to support the environmental analysis of the Miramar College Aviation Instructional Center at Montgomery-Gibbs Executive Airport (project). The project, located on City-owned property leased by the District in the City of San Diego (City) in San Diego County (County), California, proposes demolishing the existing Miramar Hangar (Building 8) and constructing an expanded and modernized instructional center and supporting facilities. Building 8 was assembled on site between 1947 and 1950 using military surplus parts. The two buildings adjacent to Building 8, Building 6 and Building 7, were Navy-surplus buildings that were moved to their current location circa 1946/1947.

INTRODUCTION

The proposed project will impact Building 8 only; it does not include or have a physical impact on Building 6 or Building 7. However, in accordance with best practice, this HELIX memorandum provides a peer review of the entire *Historical Resources Technical Report of the Montgomery-Gibbs Executive Airport Building 6, Building 7, and Building 8* prepared by IS Architecture for the City of San Diego in June 2025 (*2025 HRTR*). Information in the report about Building 6 and Building 7 provides historical, physical, and regulatory context for the proposed project and is also relevant in terms of evaluating potential indirect impacts of the project on these adjacent resources. HELIX's peer review memorandum includes

the following: a summary of the *2025 HRTR*'s historic contexts and a review of the credibility of its sources, development chronologies, evaluation findings, impact findings, and mitigation measures.[1]

In summary, upon review of the original research and evaluation in the *2025 HRTR*, HELIX concurs with the findings and recommendations contained within the 2025 HRTR. HELIX concurs that 1) Building 6, Building 7, and Building 8 represent the early period of Montgomery-Gibbs Executive Airport (1947-1950), as the buildings housed businesses driving the development of the airport and the subsequent growth of Kearny Mesa as an industrial and then residential/commercial community, thus possessing significance at the local level. Therefore, HELIX concurs with the recommendation that the three buildings evaluated in the 2025 HRTR are individually eligible for listing in the National Register of Historic Places (NRHP) and the California Register of Historical Resources (CRHR) under Criteria A/1 and the San Diego Register of Historical Resources (SDRHR) under Criterion A. HELIX further concurs that 2) Building 6 represents the distinctive characteristics of the Quonset Hut in the postwar civilian era (1947, the year of location at the site) and thus possesses significance at the local level. Therefore, HELIX concurs with the recommendation that Building 6 is individually eligible for listing in the NRHP and CRHR under Criteria C/3 and SDRHR under Criterion C. Thus, Building 6, Building 7, and Building 8 are historical resources for the purposes of the California Environmental Quality Act (CEQA).

This memorandum is co-authored by HELIX Architectural Historians Nelson White, M.S.H.P. (primary author) and Stephanie Hodal, M.H.C., both of whom exceed the Secretary of the Interior's Professional Qualifications Standards for architectural history and history (as defined in 36 Code of Federal Regulations [CFR] Part 61).

REGULATORY SETTING

Federal Regulations

National Historic Preservation Act of 1966

The National Historic Preservation Act (NHPA) (16 USC 470), enacted in 1966, 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; it 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).

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 CFR Part 800. The Section 106 process involves the identification of historic properties within the Area of Potential Effect (APE); 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

[1] IS Architecture prepared the *2025 HRTR* in support of the Montgomery-Gibbs Executive Airport Master Plan Update and its Programmatic Environmental Impact Report (PEIR).

Section 106 review process, most prominently including the California State Historic Preservation Officer (SHPO) and Native American tribes.

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."[2] To assess integrity, the National Park Service 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;

[2] National Park Service. *National Register Bulletin 15: How to Apply the National Register Criteria for Evaluation* (Washington, D.C.: National Park Service, 2002).

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.

State Regulations

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) §5024.1.7.

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 §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 (PRC §5024.1(c)):

- 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;

- 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.

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.

As with the NRHP, the CRHR requires integrity for a resource to be eligible. 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.

Local Regulations

City of San Diego Historical Resources Regulations

The purpose of the City's Historical Resources Regulations (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, or historical objects, important archaeological sites, historical districts, historical landscapes, and traditional cultural properties.[3] These regulations are intended to ensure 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.

The regulations apply to proposed development when the following historical resources are present on the site, whether a Neighborhood Development Permit or Site Development Permit is required: designated historical resources, historical buildings, historical districts, historical landscapes, historical objects, historical structures, important archaeological sites, and traditional cultural properties. Where any portion of a premise contains historical resources, the regulations shall apply to the entire premises.

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), is to protect, preserve, and, where damaged, restore the historical resources of San Diego.[4] 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 guidelines 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.[5]

---

[3] City of San Diego, *Historical Resources Regulations*, adopted December 9, 1997 (City Council Ordinance No. O-18451, effective January 1, 2000; amended 1999, 2008, 2011, 2013, 2015, 2016, 2018), https://docs.sandiego.gov/MuniCodeChapter14/Ch14Art03Division02.pdf.

[4] City of San Diego, *Historical Resources Guidelines,* adopted September 28, 1999; amended April 30, 2001, by City Manager Document No. C-10912.

[5] 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 [National Park Service] 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 City's municipal code uses a 45-year threshold to review resources that may be adversely impacted 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 HRB 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.[6] The City has established baseline archaeological resource significance criteria based upon CEQA as follows:

> An archaeological site must consist of at least three associated artifacts/ecofacts (within a 50 square meter area) or a single feature and must be at least 45 years of age. Archaeological sites containing only a surface component are generally considered not significant, unless demonstrated otherwise. Such site types may include isolated finds, bedrock milling stations, sparse lithic scatters, and shellfish processing stations. All other archaeological sites are considered potentially significant. The determination of significance is based on a number of factors specific to a particular site including site size, type, and integrity; presence or absence of a subsurface deposit, soil stratigraphy, features, diagnostics, and datable material; artifact and ecofact- density; assemblage

[6] LDM Section II.D.5.

complexity; cultural affiliation; association with an important person or event; and ethnic importance.[7]

Non-significant resources are addressed in Section II.D.6 in the LDM as including sites with no subsurface component, such as isolates, lithic scatters, isolated bedrock milling stations, and shellfish processing stations.

Historic Districts

The City's historic preservation program provides for the designation of individually significant resources as well as historic districts.[8] A historic district is defined by the City's municipal code 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."[9]

IS Architecture: Historic Contexts and Development Chronologies

The *2025 HRTR* established the physical setting for the Montgomery-Gibbs Executive Airport and the surrounding Kearny Mesa area. It then presented an historic context for Kearny Mesa beginning in 1927, for aviation entrepreneur Bill Gibbs (lifespan), for the airport from its founding as Gibbs Field in 1937, for the installation of the subject buildings at the original section of the airfield between 1946 and 1950, and for the physical and economic development of the surrounding community in response to the airport's growth into the twenty-first century. A survey of Building 6, Building 7, and Building 8 determined a boundary for the study of the potential resources (eliminating any eligibility for a historic district); described the site surrounding the three buildings; and offered a comprehensive physical description of each building accompanied by survey photographs taken in 2019 and historical photographs recording the appearance of each building over time.

All research for the historic contexts was supported by the well-documented use of archival sources, including official information from the City; historical newspapers, maps, photographs, and aerial photographs; narratives available through the San Diego History Center and San Diego Public Library; and information provided by related businesses, including Gibbs Flying Service and Sorbi Aircraft Maintenance.

The *2025 HRTR* provided a development chronology for the physical development of the airfield, focusing on its importance as a catalyst for growth of the surrounding Kearny Mesa area between 1937 and 1989, and on the subject buildings as resources representing the earliest buildings at the geographical core of the original airfield. Milestones in this development are outlined as follows:

- 1927: Kearny Mesa's first residential subdivision, Chesterton, developed; community isolated by lack of water and roadway connections to San Diego

[7] City of San Diego, *Historical Resources Guidelines*.
[8] City of San Diego, *Historical Resources Guidelines*.
[9] San Diego Municipal Code §113.0103.

- 1937: Gibbs Field opened by William "Bill" Gibbs for private aviation and flight training; Kearny Mesa undeveloped except for Chesterton
- 1940-1945: Gibbs Field leased to Ryan Aeronautical Company, which expanded and upgraded the airfield for its Army Air Corps pilot training program; the U.S. military took control of Gibbs Field for bombing exercises and simulated battles; Gibbs relocated his business to Arizona
- 1945: Bill Gibbs returned to Gibbs Field and resumed private aviation and flight training business
- 1946-1947: Gibbs acquired Building 6 and Building 7, likely as Navy surplus
- 1947-1949: City of San Diego purchased Gibbs Field, annexed and expanded the facility, recentered the airport, paved runways, erected buildings and hangars, installed parking and infrastructure, and constructed access road to the newly developed U.S. Highway 395; Gibbs was granted a lease to continue operating his business; Gibbs began to lease out Building 6 and Building 7 to aviation-related businesses and moved his own business to the center of the airport
- 1947-1950: Gibbs built Building 8, likely assembled from surplus military materials
- 1950: Airport renamed Montgomery Field; new airport access roads built
- Late 1940s-early 1950s: Kearny Mesa's proximity to Montgomery Field drew light industrial development to an area with aircraft, aeronautical, and defense businesses
- 1965-1966: Construction of a modern control tower was completed, followed by construction of new administration buildings, runway and taxiway paving, and areas for aircraft and automobile parking
- 1951-1969: Industrial and residential development of Kearny Mesa fills most available land
- 1978: Increasing popularity of private aviation made Montgomery Field one of the busiest airports in the nation
- 1979-1980: Installation of modern instrument landing system
- 1984: City authorized construction of hotel and golf course to serve private pilots at site south of Building 6, Building 7, and Building 8
- 1970-1989: Remaining small parcels in Kearny Mesa developed with commercial, retail, and office uses
- 1989: Montgomery Field and Kearny Mesa effectively built out
- 2016: San Diego City Council passes a resolution renaming the airfield Montgomery-Gibbs Executive Airport in honor of Bill Gibbs and the original airfield he created.

The *2025 HRTR's* development chronology is well supported by an expanded history and documentation that clearly conveys the timeline for Building 6, Building 7, and Building 8 at the airfield and accurately situates their history relative to overall growth at the airport and region.

IS Architecture: Evaluation Findings

The *2025 HRTR* provided evaluations for Building 6, Building 7, and Building 8 under NRHP, CRHR, and SDRHR criteria. It recommended Building 6, Building 7, and Building 8 as eligible for individual listing in the NRHP and the CRHR, both at the local level, and the SDRHR.

NRHP/CRHR Criteria A/1; SDRHR Criterion A

The *2025 HRTR* determined that Building 6, Building 7, and Building 8 possess significance at the local level in the area/s of community planning and development, retain sufficient integrity to convey that significance, and therefore recommend the buildings to be eligible under NRHP and CRHR Criteria A/1 and under SDRHR Criterion A. The period of significance is from 1947 to 1950, reflecting their association with the historical development of Montgomery-Gibbs Executive Airport and, by extension, the entire community of Kearny Mesa.

The 2025 HRTR correctly states that the buildings represent both the period in which San Diego acquired, annexed, expanded, and renamed the airport between 1947 and 1950 and the use that informed Kearny Mesa's subsequent industrial and commercial zoning and growth. It inaccurately asserts that the buildings represent the first private development in the area; they represent the earliest private development in the post-World War II era.

NRHP/CRHR Criteria B/2; SDRHR Criterion B

The *2025 HRTR* determined that Building 6, Building 7, and Building 8 do not possess significance and therefore recommended that the buildings not to be eligible under NRHP and CRHR Criteria B/2 and SDRHR Criterion B.

The *2025 HRTR* accurately noted that, although the buildings were purchased and located on their site by Bill Gibbs, there is insufficient information linking Gibbs's success as an entrepreneur to these individual resources. Further, the *2025 HRTR* clarifies that, although Gibbs is a notable figure in San Diego aviation history, there are no specific events of note related to him other than his association with the founding of the airfield in 1937.

NRHP/CRHR Criteria C/3; SDRHR Criterion C

The *2025 HRTR* determined that Building 6 possesses significance at the local level in the area/s of architecture, retains sufficient integrity to convey that significance and, therefore, recommends the building to be eligible under NRHP and CRHR Criteria C/3 and SDRHR Criterion C. The period of significance is 1947, reflecting the year of assembly at the airfield.

The *2025 HRTR* accurately states that Building 6 embodies the distinctive characteristics of the Quonset Hut in the postwar civilian reuse era.

NRHP/CRHR Criteria D/4; SDRHR Criterion D

Building 6, Building 7, and Building 8 were correctly evaluated as not to be eligible under NRHP and CRHR Criteria D/1 and SDRHR Criterion D.

SDRHR Criteria E and F

Building 6, Building 7, and Building 8 were correctly evaluated not to be eligible under SDRHR Criteria E or F.

The *2025 HRTR* evaluation of integrity shows that the subject buildings retain all seven aspects, sufficient to support the recommendation of eligibility under NRHP, CRHR, and SDRHR Criteria A/1/C and Criteria C/3/C.

IS Architecture: Impact Findings and Mitigation Measures

Having established that Building 6, Building 7, and Building 8 are historical resources for the purposes of CEQA, the *2025 HRTR* addressed the potential for direct and indirect impacts to the buildings based on the scope of work outlined in the *Montgomery-Gibbs Executive Airport Master Plan Update (AMP)* and its accompanying *Programmatic Environmental Impact Report (PEIR)*. The *PEIR* project scope states that work is to consist only of "currently unplanned" maintenance, repairs, or stabilization, with no identified time frame; these activities are assumed by the *2025 HRTR* to only consist of historic preservation work to comply with the U.S. Secretary of the Interior's Standards for the Treatment of Historic Properties (Standards). Thus, the *2025 HRTR* concluded that maintenance, repair, or stabilization in compliance with the Standards would have a less than significant impact with mitigation (direct impact) and most likely be a Categorical Exemption from CEQA if analyzed separately; would have no anticipated indirect impacts; and would not result in any cumulative impacts to the resources. Additionally, the *2025 HRTR* noted that if no maintenance, repairs, or stabilization is undertaken, impacts would be avoided through a No Project alternative.

The *2025 HRTR* concluded with a recommended mitigation measure to avoid any unanticipated, potentially significant effects of unplanned work and to ensure that there would be no adverse impacts on the historic resources. The mitigation measure (MM-1: Secretary of the Interior's Standards for the Treatment of Historic Properties) stipulated that work be done in compliance with the Standards for Preservation 1 through 8 to be "considered as mitigated to a level of a less than significant impact" under the CEQA Guideline §15126.4[b][1]; and that a qualified historic architect and/or architectural historian be engaged (pursuant to the Secretary of the Interior's Professional Qualifications in 36 CFR Part 61) to consult on the project's development and analyze the final project scope for compliance with the Standards.

Finally, the *2025 HRTR* stated that alterations that would demolish any part of the buildings were different from the assumed project and should be evaluated as project alternatives, not as Standards' compliant mitigation measures. Because a CEQA alternative is meant to reduce impacts, any alternative that allows demolition would presumably increase impacts. Since the current project proposes demolition of the resources, different mitigation and alternatives than those contained in the *2025 HRTR* will have to be developed and applied before demolition can occur.

CONCLUSION

In conclusion, HELIX concurs that (1) Building 6, Building 7, and Building 8 represent the early period of Montgomery-Gibbs Executive Airport (1947-1950), as the buildings housed businesses driving the development of the airport and the subsequent growth of Kearny Mesa as an industrial and then residential/commercial community, thus possessing significance at the local level. Therefore, HELIX concurs with the recommendation that the three buildings are individually eligible for listing in the NRHP and CRHR under Criteria A/1 and SDRHR under Criterion A. HELIX further concurs that (2) Building 6 represents the distinctive characteristics of the Quonset Hut in the postwar civilian era (1947, the year of location at the site) and thus possesses significance at the local level. Therefore, HELIX concurs with the recommendation that Building 6 is individually eligible for listing in the NRHP and CRHR under Criteria C/3 and SDRHR under Criterion C. Thus, Building 6, Building 7, and Building 8 are *historical resources* for the purposes of the California Environmental Quality Act. Project impacts associated with the demolition of Building 8 were not assumed in the HRTR and will require a different mitigation and alternatives analysis than described in the *2025 HRTR*.

Sincerely,



Nelson White, M.S.H.P.
Senior Architectural Historian

Appendix E

Cultural Resources Technical Report

HELIX Environmental Planning

San Diego Miramar College Aviation Instructional Center at Montgomery-Gibbs Executive Airport Project

Cultural Resources Technical Report

October 2026 | 01737.00004.005

Submitted to:

San Diego Community College District
3375 Camino del Rio South, Suite 310
San Diego, CA 92108

Prepared by:

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

This page intentionally left blank

National Archaeological Database Information

Authors:	Stacie Wilson, M.S., RPA; Theodore G. Cooley, M.A., RPA; James Turner, M.A., RPA; and Yara Fisher, AICP
Firm:	HELIX Environmental Planning, Inc.
Client/Project:	San Diego Community College District/San Diego Miramar College Aviation Instructional Center at Montgomery-Gibbs Executive Airport Project
Report Date:	October 2026
Report Title:	Cultural Resources Technical Report for the San Diego Miramar College Aviation Instructional Center at Montgomery-Gibbs Executive Airport Project, San Diego, California
Submitted to:	San Diego Community College District
Type of Study:	Archaeological Resources Inventory
New Sites:	None
Updated Sites:	None
USGS Quad:	La Jolla 7.5' Quadrangle
Acreage:	Approximately 1.06-acre Area of Potential Effect (APE)
Key Words:	San Diego County; Township 16 South, Range 3 West; Mission San Diego Land Grant; City of San Diego; Montgomery-Gibbs Executive Airport; Gibbs; Kearny Mesa Community Plan area; Kearny Mesa; San Diego Community College District; San Diego Miramar College; no resources found.

This page intentionally left blank

TABLE OF CONTENTS

Section **Page**

EXECUTIVE SUMMARY ES-1

1.0 INTRODUCTION 1

1.1 Project Location 1
1.2 Project Description 1
1.3 Regulatory Framework 2
1.3.1 Native American Heritage Values 3
1.4 Area of Potential Effect 4
1.5 Project Personnel 4

2.0 PROJECT SETTING 4

2.1 Natural Setting 4
2.2 Cultural Setting 5
2.2.1 Precontact (Prehistoric) Period 5
2.2.2 Ethnohistory 7
2.2.3 Historical Background 8

3.0 METHODS 11

4.0 RESULTS 12

4.1 Records Search 12
4.1.1 Previous Studies 12
4.1.2 Previously Recorded Resources 14
4.2 Other Archival Research 17
4.3 Native American Contact Program 18
4.4 Survey Results 18

5.0 MANAGEMENT CONSIDERATIONS 20

5.1 Management Recommendations 20

6.0 REFERENCES 21

LIST OF APPENDICES

A Resumes of Key Personnel
B Records Search Results (Confidential, bound separately)
C Native American Correspondence (Confidential, bound separately)

TABLE OF CONTENTS (cont.)

LIST OF FIGURES

No.	Title	Follows Page
1	Regional Location	2
2	USGS Topography	2
3	Area of Potential Effect.	2

LIST OF TABLES

No.	Title	Page
1	Previous Studies Within One Mile of the Project APE	12
2	Previously Recorded Resources Within One Mile of the Project APE	15

ACRONYMS AND ABBREVIATIONS

AB	Assembly Bill
AIC	Aviation Instructional Center
AMSL	above mean sea level
APE	Area of Potential Effect
BCE	before common era
BP	before present
ca.	circa
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CHRIS	California Historical Resources Information System
City	City of San Diego
CRHR	California Register of Historical Resources
District	San Diego Community College District
FAA	Federal Aviation Administration
HELIX	HELIX Environmental Planning, Inc.
ISA	I.S. Architecture
M	meter(s)
MLD	Most Likely Descendant
MYF	Montgomery-Gibbs Executive Airport
NAHC	Native American Heritage Commission
NRHP	National Register of Historic Places
OHP	Office of Historic Preservation
PRC	Public Resources Code
project	San Diego Miramar College Aviation Instructional Center at Montgomery-Gibbs Executive Airport Project; Miramar College AIC Project

ACRONYMS AND ABBREVIATIONS (cont.)

SCIC	South Coastal Information Center
SDCCD	San Diego Community College District
SDUSD	San Diego Unified School District
SDRHR	San Diego Register of Historical Resources
sf	square feet/foot
SLF	Sacred Lands File
SR	State Route
TCP	Traditional Cultural Place
TCR	Tribal Cultural Resource
UCSB	University of California Santa Barbara
USGS	U.S. Geological Survey

EXECUTIVE SUMMARY

The San Diego Community College District (SDCCD; District) contracted HELIX Environmental Planning, Inc. (HELIX) to conduct a cultural resource assessment for the San Diego Miramar College Aviation Instructional Center at Montgomery-Gibbs Executive Airport Project (Miramar College AIC Project; project), located in the City of San Diego (City), California. The project proposes the demolition of the existing 6,300-square-foot (sf) hangar and the construction of a new approximately 18,000-sf Miramar College AIC and supporting facilities. The cultural resources study included a records search, a Sacred Lands File (SLF) search, a Native American contact program, a review of historic aerial photographs and maps, a review of existing documentation, and a pedestrian field survey. This report details the methods and results of the archaeological study and has been prepared to comply with the California Environmental Quality Act (CEQA).

The records search of the California Historical Resources Information System, on file at the South Coastal Information Center (SCIC), indicated that 47 previous cultural resources studies have been conducted, and a total of 15 cultural resources have been recorded within one mile of the Area of Potential Effects (APE). In addition, a precontact archaeological resource area recorded by Malcom Rogers in the 1920s (SDM-W-155) that includes an over 20-square-mile area of Kearny Mesa was identified during archival research conducted for the study.

A search of the Native American Heritage Commission (NAHC) Sacred Lands File was positive; the NAHC provided a list of tribes culturally affiliated with the study area that could be contacted for additional information; an informal contact program was conducted by HELIX, requesting any knowledge or information about cultural resources that the tribal representatives would be willing to share. On March 31, 2026, the Viejas Band of Kumeyaay Indians responded, noting that the project area may “contain many sacred sites to the Kumeyaay people” and requested that the sites be avoided with adequate buffer zones. Additionally, Viejas requested that all pertinent state and federal laws and regulations be followed, and to be informed of any project changes or inadvertent discoveries.

A pedestrian survey of the project APE was conducted by a HELIX archaeologist and a Kumeyaay Native American monitor on February 25, 2026. The results of the records search, SLF search, and field survey did not result in the identification of archaeological resources or Tribal Cultural Resources within the direct effects APE. As such, based on the results of the study, environmental factors, and the amount of modern development that has previously occurred within the airport boundaries, the archaeological sensitivity of the project APE is low. Therefore, no impacts to archaeological resources or Tribal Cultural Resources are anticipated, and no additional evaluation efforts and/or monitoring programs are recommended for the project.

Should the proposed project limits change to incorporate new areas of proposed disturbance, an archaeological survey of those areas will be required.

This page intentionally left blank

1.0 INTRODUCTION

HELIX Environmental Planning, Inc. (HELIX) was contracted by the San Diego Community College District (SDCCD; District) to provide cultural resources services for the San Diego Miramar College Aviation Instructional Center at Montgomery-Gibbs Executive Airport Project (Miramar College AIC; project) in the City of San Diego (City), San Diego County, California. The project proposes the demolition of the existing 6,300-square-foot (sf) hangar and the construction of a new approximately 18,000-sf Miramar College AIC and supporting facilities.

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, and 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 is located within Montgomery-Gibbs Executive Airport (MYF), which is located within the Kearny Mesa Community Plan area in the central portion of the City of San Diego, in San Diego County (Figure 1, *Regional Location*). The project is located within the unsectioned Mission San Diego Land Grant, 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 1.06-acre project is located within the western edge of the Airport, east of Kearny Villa Road and State Route (SR) 163, north of Aero Drive, and south of Balboa Avenue (Figure 3, *Area of Potential Effect*).

1.2 PROJECT DESCRIPTION

The project proposes the demolition of the existing 6,300-sf Miramar Hangar and the construction of an expanded and modernized instructional facility, referred to as the Miramar College AIC, and supporting facilities. The upgraded instructional facility would support the programs offered within the Aviation Operations Program at Miramar College, including the specific programs of Aircraft Maintenance, Pilot Training, and Air Traffic Control. The proposed Miramar College AIC would be approximately 18,000 sf and would be located in the same general location as the existing hangar in the northwestern portion of the project site. To accommodate this upgraded instructional facility and the needs of the Aviation Operations Program, the project would additionally involve the expansion of the existing 0.42-acre lease area to 1.06 acres.

The expanded instructional facility would allow for an additional 15 class sessions per week to occur (three class sessions per day), for a total of 28 class sessions per week. Each class session would contain an average of 23 students. The new Miramar College AIC would be two stories with a maximum height of 32 feet. Level 1 would include a lobby, a maintenance/hangar bay, two classrooms, offices, a custodial room, restrooms, and utility and storage rooms. In addition, trash enclosures, an air compressor, and a hazardous waste collection area would be located along the northern perimeter of level 1. Level 2 would include one classroom, four pilot debrief rooms, air traffic control tower and en route training facilities, a conference room, break room, and restrooms. The project would additionally include repaving of the existing open-air storage area and engine testing pad on the eastern portion of the project site and a

parking area on the southern portion of the site. Access would continue to be provided by the existing MYF Gate 4 east of Kearny Villa Road.

The project would include the construction of connections to existing City-owned utility lines located in Kearny Villa Road to the west of the project site, including water and fire water. The project would involve the installation of a new sewer lateral to connect to an existing on-site sewer main located west of the proposed Miramar College AIC. In addition, the project would involve coordination with San Diego Gas and Electric for new underground electric power lines that would connect to a new transformer, which would be installed on the western side of the proposed building. The project would not involve natural gas connections. The project would include the installation of a storm drain along the perimeter of the proposed building which would connect to a modular wetland system and underground vault located near the southwestern corner of the building. In addition, a storm drain would be constructed along the central portion of the parking lot which would connect to a modular wetland system and underground vault located in the western portion of the parking lot. Consistent with the District Sustainability Levels framework, the proposed project would be designed to achieve the level of Certified/ Coast Live Oak (Sustainable Performance) and would include high-efficiency low-flow plumbing fixtures and water-conserving appliances. The project does not propose the installation of any landscaping on the site.

Construction is anticipated to begin in September 2027 and be completed in September 2028, with District courses resuming in the new facility in the Fall 2028 semester. During construction of the project, the District would continue aviation instruction at a temporary location that is yet to be determined.

1.3 REGULATORY FRAMEWORK

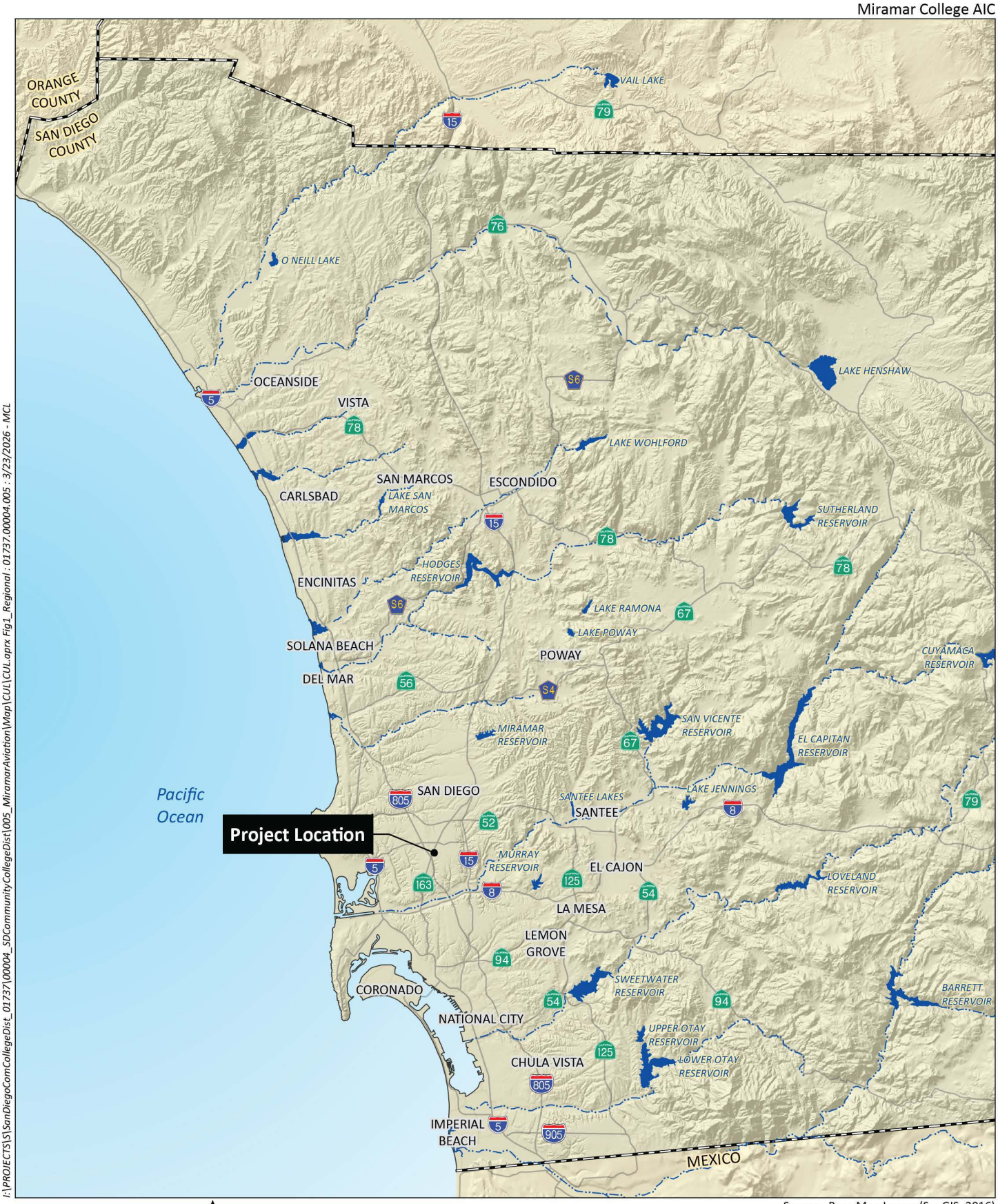
The CEQA Guidelines (Section 15064.5) address determining the significance of impacts to archaeological and historic resources. Cultural resources are defined as buildings, sites, structures, or objects, each of which may have historical, architectural, archaeological, cultural, and/or scientific importance (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]).

It is important to note under 14 CCR Section 15064.5(a)(4), a resource may also be considered an "historical resource" for the purposes of CEQA at the discretion of the lead agency, despite ineligibility recommendations.



I:\PROJECTS\S\SanDiegoComCollegeDist_01737\00004_SDCommunityCollegeDist\005_MiramarAviation\Map\CUL\CUL.aprx Fig1_Regional : 01737.00004.005 : 3/23/2026 - MCL

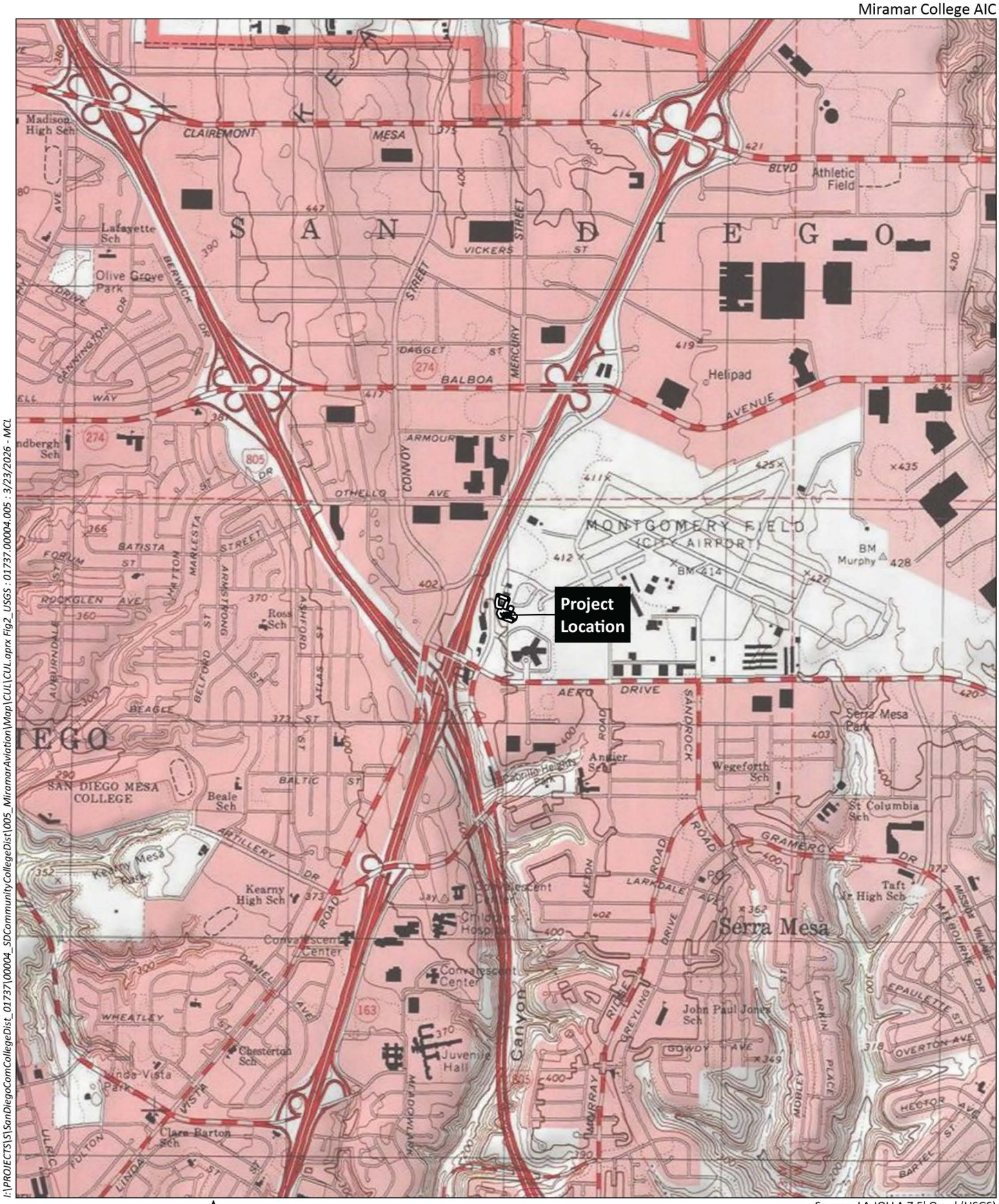
0 8 Miles

Source: Base Map Layers (SanGIS, 2016)

HELIX Environmental Planning

Regional Location

Figure 1



I:\PROJECTS\S\SanDiegoComCollegeDist_01737\00004_SDCommunityCollegeDist\005_MiramarAviation\Map\CUL\CUL.aprx Fig2_USGS : 01737.00004.005 : 3/23/2026 - MCL

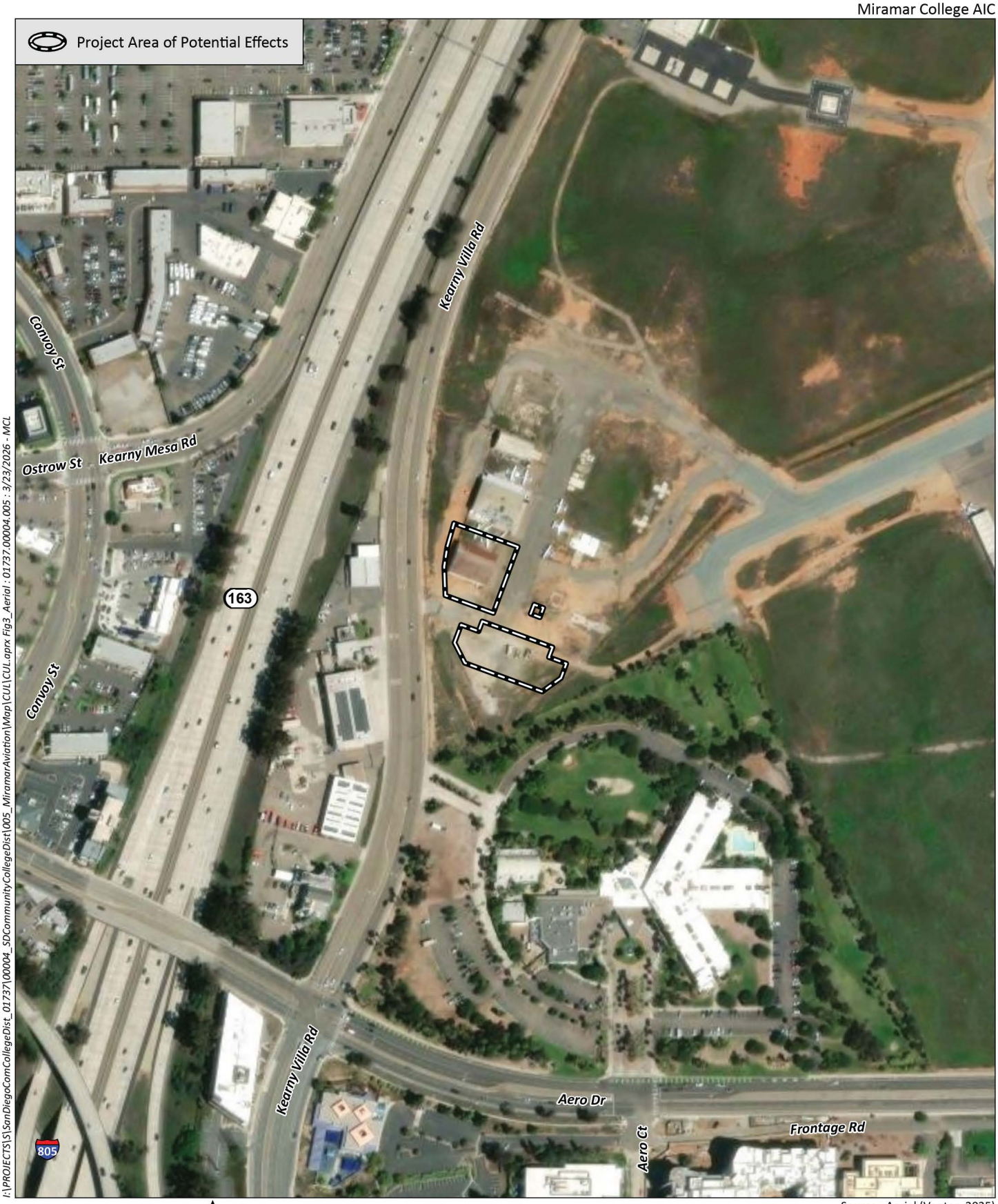
0 2,000 Feet

Source: LA JOLLA 7.5' Quad (USGS)

HELIX Environmental Planning

USGS Topography

Figure 2



I:\PROJECTS\S\SanDiegoComCollegeDist_01737\00004_SDCommunityCollegeDist\005_MiramarAviation\Map\CUL\CUL.aprx Fig3_Aerial : 01737.00004.005 : 3/23/2026 - MCL

0 300 Feet

Source: Aerial (Vantor, 2025)

HELIX Environmental Planning

Area of Potential Effect

Figure 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.

1.3.1 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 Place (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 AREA OF POTENTIAL EFFECT

Pursuant to 36 Code of Federal Regulations (CFR) 800.4(a)(1), the Area of Potential Effect (APE) is the geographic area within which an undertaking may directly or indirectly alter the character or use of historic properties. Likewise, the City's Historical Resources Guidelines define the APE as the geographic area (or areas) within which a project may cause changes in the character or use of historical resources. The APE for the project encompasses 1.06 acres and consists of the approximately 0.52-acre hanger facility, the 0.01-acre engine testing pad, and the approximately 0.53-acre staging/parking area (Figure 3).

1.5 PROJECT PERSONNEL

Stacie Wilson, M.S., RPA, served as principal investigator and provided overall project management support; Mary Robbins-Wade, M.A., RPA, provided senior technical review. James Turner, M.A., RPA, and Theodore Cooley, M.A., RPA, are report co-authors. Ms. Wilson, Ms. Robbins-Wade, Mr. Turner, and Mr. Cooley all meet the qualifications of the Secretary of Interior's Standards and Guidelines for Archaeology. George McMorrow, B.A., conducted the field survey. Additionally, Kumeyaay Native American monitor Cesar Welch from Red Tail Environmental, Inc. participated in the pedestrian survey. Resumes for key project personnel are presented in Appendix A.

2.0 PROJECT SETTING

2.1 NATURAL SETTING

The study area is located 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 airport property is situated on a wave-cut marine terrace along the coastal plain in the westernmost portion of the Peninsular Ranges geomorphic province of southern California (Hall 2007). The foothills of the peninsular range mountains lie within 10 miles to the east, and the San Diego River lies within three miles to the south. A small tributary to the river, the Murray Canyon drainage, lies less than a half mile to the west. The elevation of the project area ranges from approximately 400 to 403 feet above mean sea level (AMSL). The area containing the project area is characterized predominantly by airport and transportation infrastructure. Areas immediately surrounding the project area include transportation infrastructure and residential, commercial, and industrial development.

Geologically, the project area is underlain by sedimentary deposits of the Pleistocene-age Lindavista Formation. This formation consists of near-shore marine and nonmarine sediments deposited on a 10-kilometer-wide wave-cut terrace platform (Kennedy 1975:29). In eroded ravines in the nearby Murray Canyon to the west, Eocene-age sedimentary formations are exposed, including sandstone in the Mission Valley Formation and cobbles in Stadium Conglomerate Formation (Kennedy 1975:19). One natural soils series is mapped for the project area: the Redding series, consisting of well-drained cobbly loams and gravelly loams that have a subsoil of gravelly clay and very cobbly clay over a hardpan or cobbly alluvium (Bowman 1973:71). The soil at the site is the Redding gravelly loam, 2 to 9 percent slopes. This soil is undulating to gently rolling with slopes averaging three percent. The natural topography in the project area and vicinity is hummocky with the broad low hummocks locally known as mima mounds (Bowman 1973). Natural vegetation for this soils series is mainly chamise, flattop buckwheat, sumac, scrub oak, and annual grasses (Bowman 1973:71). Various well-watered drainages in

the vicinity, including the San Diego River, would have made fresh water easily accessible to native populations living in the area.

While historical and modern disturbance has eliminated the natural vegetation in the project area, before such disturbance, the natural vegetation in the project area and vicinity likely consisted mostly of coastal sage scrub (Diegan coastal sage scrub) and native grassland, along with chamise chaparral, baccharis scrub, southern willow scrub, and vernal pool communities. Plants of the coastal sage scrub community, such as California sagebrush (*Artemisia californica*), white sage *(Salvia apiana*), flattop buckwheat (*Eriogonum fasciculatum*), broom baccharis (*Baccharis sarothroides*), wild onion (*Allium haematochiton*), laurel sumac (*Malosma laurina*), San Diego sunflower (*Bahiopsis laciniata*), golden-yarrow (*Eriophyllum confertiflorum*), sawtooth goldenbush (*Hazardia squarrosa*), yucca (*Yucca schidigera*, *Hesperoyucca whipplei*), prickly pear cactus (*Opuntia* sp.), and scrub oak (*Quercus dumosa*), would likely have covered most of the mesa and canyons in the area, interspersed with areas of native grasslands (*Stipa* spp.*, Elymus* spp.*, Poa* spp.*, Muhlenbergia* spp.) (Beauchamp 1986; Munz 1974). Before historic and modern activities, adjacent major drainages such as the San Diego River contained extensive stands of the riparian community with plants such as western sycamore (*Platanus racemosa*), Fremont cottonwood (*Populus fremontii*), coast live oak (*Quercus agrifolia*) and willow (*Salix* sp.) (Beauchamp 1986; Munz 1974). Major wildlife species found in this environment before European contact were coyote (*Canis latrans*), mule deer (*Odocoileus hemionus*), grizzly bear (*Ursus arctos horribilis*), mountain lion (*Puma concolor*), desert cottontail (*Sylvilagus audubonii*), black-tailed jackrabbit (*Lepus californicus*), and various rodents, the most notable of which are the Botta's pocket gopher (*Thomomys bottae*), California ground squirrel (*Otospermophilus beecheyi*), and dusky-footed woodrat (*Neotoma fuscipes*) (Head 1972). Many of these plant and animal species naturally occurring in the area and vicinity are known to have been used by native populations for food, medicine, tools, ceremonial, and other uses (Christenson 1990; Hedges and Beresford 1986; Luomala 1978; Spier 1923).

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 southern California region spanning approximately 12,000 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 Precontact (Prehistoric) Period

In the San Diego area, the earliest well-documented archaeological sites belong to the San Dieguito Tradition, dating to circa (ca.) 10,000 years ago (Warren et al. 2008; Warren and Ore 2011). The San Dieguito Tradition has been documented mostly in the coastal and near coastal areas in San Diego County (Carrico et al. 1993; Rogers 1966; True and Bouey 1990; Warren 1966; Warren and True 1961), as well as in the southeastern California deserts (Rogers 1939, 1966; Warren 1967). Some evidence for the tradition, however, has also recently been proposed for a site in the mountains east of San Diego (Pigniolo 2005). The content of the earliest component of the C.W. Harris Site (CA-SDI-149/316/4935B), located along the San Dieguito River, approximately 15 miles to the north of the project area, formed

the basis upon which Warren and others (Rogers 1966; Warren 1966, 1967; Warren and Schneider 2026; Warren and True 1961) identified the "San Dieguito complex," which Warren later reclassified as the San Dieguito Tradition (1968). Recent calibrations of radiocarbon dates previously obtained from the site indicate that the San Dieguito assemblage at the site dates to circa 10,000 years Before Present (BP) (Warren et al. 2008; Warren and Ore 2011).The San Dieguito Tradition is thought by most researchers to have had an emphasis on the hunting of terrestrial game, with a lesser reliance on the gathering of vegetal resources and coastal marine resources that are characteristic of the subsequent Archaic Period (Warren 1967, 1968). Diagnostic material culture most associated with the San Dieguito Tradition includes large biface blades, leaf-shaped projectile points, scrapers, and crescents (Knell and Becker 2017; Rogers 1939, 1966; Warren 1966, 1967, 1968; Warren and Schneider 2026; Warren and True 1961).

In the southern coastal region, the traditional view of San Diego prehistory has the San Dieguito Tradition followed by the La Jolla/Pauma complexes of Warren's Encinitas Tradition (Warren 1968) and Wallace's (1955) "Early Milling Stone Horizon" during the Archaic Period, dating from circa 8600 BP to circa 1,300 BP (Warren 1968; Warren et al. 2008). Relative to the San Dieguito Tradition, a large number of Encinitas Tradition archaeological site assemblages dating to the Archaic Period have been identified at a range of coastal and inland sites in San Diego County (Warren et al. 2008). The Encinitas Tradition is generally characterized by site assemblages containing large numbers of milling stones (manos and metates), occurring in shell middens, located "often near sloughs and lagoons" (Moratto 1984:147). The content of these site assemblages indicates a shift from the putative hunting-focused subsistence pattern of the earlier San Dieguito Tradition to a more generalized economy with an increased emphasis on the gathering of seed resources, small game, and shellfish (Warren 2012; Warren et al. 2008). According to True (1958, 1980), sites of the La Jolla complex were located along the coast, and those of the Pauma complex in inland areas of the county. Not surprisingly, Pauma complex sites generally lack the shell that dominates in many of the La Jolla complex site assemblages located in proximity to the coast. In San Diego County, sites radiocarbon dated to the Archaic Period are most numerous along the coast, around estuaries and near-coastal valleys and, while less commonly occurring in inland foothill areas, some have been documented (e.g., Cooley 1995; Cooley and Barrie 2004; Raven-Jennings and Smith 1999). The La Jolla/Pauma complex tool assemblage includes, in addition to manos and metates, rough cobble tools, especially choppers, scrapers, and scraper planes; terrestrial and marine mammal faunal remains; flexed burials; doughnut stones; discoidals; stone balls; plummets; biface points; beads; and bone tools (True 1958, 1980; Moriarty 1966).

The relationship between the San Dieguito Tradition and the subsequent Archaic Period La Jolla/Pauma complexes of the Encinitas Tradition has been the focus of considerable debate centered on whether the San Dieguito Tradition and the Encinitas Tradition complexes might represent the same people using different subsistence techniques in different environments, or if they represent different, non-contemporaneous groups using different and distinct subsistence practices (e.g., Bull 1983, 1987; Ezell 1987; Gallegos 1987; Warren 1985, 1987). The onset of the following period, the Late Prehistoric Period (1,500 BP [or 450 Before Common Era (BCE)] to AD 1769), however, is demarcated in the archaeological record by an abrupt shift in subsistence and new tool technologies; the archaeological record indicates that the late Prehistoric Period is characterized by higher population densities and intensification of social and political systems, and by the introduction of new technological innovations. Perhaps the most significant of these new technological innovations was the first use of the bow and arrow and of ceramics.

In the northern portion of San Diego County, the Late Prehistoric Period is represented by the San Luis Rey complex (Meighan 1954), and in the southern portion, by the Cuyamaca complex (True 1970). The Late Prehistoric artifactual assemblages are typically characterized by small arrow-sized projectile points, Tizon Brown Ware 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, typologically, by the Cottonwood Triangular and Desert Side-notched points, but the Dos Cabezas Serrated type also occurs (McDonald and Eighmey 2008). Based on archaeological as well as ethnographic data, subsistence in the Late Prehistoric Period is thought to have been 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.

Based on ethnographic and archaeological data, at the time of contact, it is generally accepted that, as originally proposed by Meighan (1954) and True (1970), the archaeological San Luis Rey complex is associated with the ethnographic Luiseño and the archaeological Cuyamaca complex with the ethnographic Kumeyaay (Diegueño).

2.2.2 Ethnohistory

The Ethnohistoric Period, sometimes referred to as the ethnographic present, commences with the earliest European arrival in what is now San Diego and continued through the Spanish and Mexican periods and into the American period. Based on ethnographic data, at the time of European contact, the southern area of San Diego County is in the traditional territory of the Hokan-based Yuman-speaking people (Kumeyaay). The Kumeyaay people have also been known as Ipai-Tipai, or as the Diegueño (named for Mission San Diego de Alcalá). Agua Hedionda Creek is often described as the division between the territories of the Luiseño to the north and the Kumeyaay people to the south (Bean and Shipek 1978; Luomala 1978), although various ethnographers (e.g., Kroeber 1925) have defined slightly different boundaries. Traditional stories and songs of the Native people also describe the extent of traditional use areas.

The founding of Mission San Diego de Alcalá in 1769 brought about profound changes in the lives of the Kumeyaay (Carrico 1997, 2008; Connolly n.d.). The coastal Kumeyaay died from introduced diseases or were brought into the mission system. 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 the 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). The population of the Kumeyaay people in San Diego in 1770 was estimated by Kroeber (1925:883) to be 3,000, but Luomala (1978:596) believes it was likely double or triple that estimate, and Carrico (2018:12) indicates that it was around 20,000. At the time of Spanish contact, Kumeyaay bands occupied southern San Diego and southwestern Imperial counties, and northern Baja California. The Kumeyaay are a group of exogamous, patrilineal territorial bands that

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 1925; Luomala 1978). The people 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 *Nipaquay* located along the north side of the San Diego River at the second and final location of the San Diego Mission de Alcalá, approximately three miles southeast of the project area (Brodie 2013; Carrico 2008). Other nearby villages include *La Rinconada de Jamo* (Rinconada), located approximately 4.35 miles west where the Rose Canyon drainage enters into Mission Bay (Carrico 1977, 2008; Cooley et al. 1992; Winterrowd and Cardenas 1987); and 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 San Diego de Alcalá, approximately 4.3 miles south of the project area (Carrico 2008). Both of these latter two 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 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 such as *Nipaquay* and *Cosoy* at or near the locations of 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 and to the north of the river and the project area, including *Ystagua*, *Peñasquitos*, and *Pawai/Pawaii/Paguay* (Carrico 2018:12).

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 (Farris 1994). 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).

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.

Beginning in the late 1850s, John Murphy raised cattle and horses in the Mission Valley area. In 1871, what had become known as "Murphy's Canyon" was recognized by the San Diego County Board of Supervisors as a major traffic artery between the City of San Diego and Poway Valley and the northern areas of San Diego County. In the late 1870s, Murphy sold his land, which by that time had developed into a prosperous farm and cattle ranch (Carrico 1974).

In the late 1860s, Alonzo Horton initiated the development of New San Diego and began the shift of commerce and government centers from Old Town (Old San Diego) 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. By the end of the 1880s, many of the newcomers had left, although some remained to form the foundations of small communities based on dry farming, orchards, dairies, and livestock ranching. During the late nineteenth and early twentieth centuries, rural areas of San Diego County developed small agricultural communities centered on one-room schoolhouses.

By 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.

In 1914, the San Diego Community College District was established 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 Junior College classes were taught in San Diego High School; there were four instructors and 35 students in the first year of classes. By 1916, the faculty grew to 16 instructors, and all of the original students had graduated and entered the university as juniors.

The influence of military development, beginning in 1916 and 1917 during World War I, resulted in substantial development in infrastructure and industry to support the military and accommodate soldiers, sailors, and defense industry workers. In 1917, the U.S. Army established Camp Kearny on the site of what is now Marine Corps Air Station Miramar. Camp Kearny was named after Brigadier General Stephen W. Kearny, who was instrumental in the Mexican–American War. In 1943, Camp Kearny was commissioned as the Naval Auxiliary Air Station Camp Kearny; it continued to operate until 1946, when it was transferred to the United States Marine Corps.

Little development occurred within the City north of the San Diego River until the 1940s, when military housing was developed in Linda Vista (City of San Diego 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 (City of San Diego 2001). Established in 1937, the Montgomery-Gibbs Executive Airport was one of the first modern developments to occur within the area. The airport began as a private flying field owned and operated by William "Bill" Gibbs Jr. (Pourade 1977). Gibbs Field initially had one 1,200-foot runway; however, in 1939, three dirt landing strips were constructed. In 1940, the field was leased to the Ryan School of Aeronautics for Army Air Corps cadet training. The school expanded the runways at the field and likely constructed ancillary buildings and barracks for the cadets (Usler and Kempson 2025). During World War II, Gibbs temporarily moved to Arizona to continue working as a flight instructor, and Gibbs Field was used as a training ground for bombing exercises and simulated battles. After the war ended, Gibbs returned to San Diego and, by 1950, the airport had grown to include several airplane hangars (City of San Diego 2017; Pourade 1977).

In 1947, the City acquired 1,500 acres in Kearny Mesa, including Gibbs Field, and made several improvements to the runways and facilities, including two asphalt runways and taxiways. The City dedicated the field in 1950 as Montgomery Field in honor of John J. Montgomery who, in 1883, had made the first controlled wing flight in a "heavier-than-air" fixed-wing aircraft in the Otay Mesa area of the City (City of San Diego 2017; Pigniolo and Murray 2001). As part of the land acquisition, Gibbs was granted a lease of 15 acres, where he continued to operate his aviation business (Usler and Kempson 2025). Gibbs maintained his responsibilities as operator of the new airport until 1954 when the City took control of the field (Pourade 1977).

The 1950s saw the beginning of widespread industrial development within the study area. General Dynamics constructed facilities in the late 1950s to support research, development, and manufacture of the Atlas Missile for the United States Air Force, and several other aerospace, electronics, and other industrial companies constructed buildings in the community (City of San Diego 2025; Manley 1997). In 1948, the Cabrillo Parkway, now SR 163, was constructed as U.S. Highway 395 and between 1953 and

1964, a new two-lane highway was constructed in the present-day location of Interstate 15 (NETR Online 2026). Additional development within Montgomery Field occurred in the 1960s with the construction of an Air Traffic Control Tower in 1965 and a new parallel runway and administration building in 1969 (Pigniolo and Murray 2001). During the 1960s, the project vicinity saw huge increases in residential, commercial, and infrastructure development, which has been reflected into the present time.

On February 21, 1961, the Board of Education voted to rename San Diego Junior College to San Diego City College (Rhoades and Spoerer 2014). The 1960s also saw a boom in enrollment at City College which exceeded capacity of the existing facility. The San Diego Unified School District (SDUSD), which managed the junior college at the time, exchanged some unused city-center property with the City of San Diego for approximately 145 acres of vacant land in Kearny Mesa. This new college, the Kearny Mesa Junior College, now known as San Diego Mesa College, opened in 1962 with an enrollment of 1,400 students (Patrick 1991).

SDUSD acquired the location for the Miramar Campus, located on the 120-acre Navy Hourglass Field, as a surplus property donation from the City 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.; SDCCD 1989, 2018; San Diego Mesa College 2024). During this growth and expansion period, San Diego's community college system was administered by SDUSD. In 1972, the San Diego Community College District was formed and began administering the campuses.

In 1985, a hotel and golf course were constructed in the southwest corner of the airport property. Following the completion of the FAA Automated Flight Service Station in 1987, the airport has served more than 60 public airports in San Diego and Imperial Counties (Pigniolo and Murray 2001). The San Diego City Council passed a resolution on January 28, 2016, changing the name of the airport to Montgomery-Gibbs Executive Airport to honor Bill Gibbs. While the airport is unable to handle major jet-passenger airplanes due to safety concerns, it is now a very well-transited General Aviation airport and has been classified by the FAA as a reliever airport for San Diego International Airport-Lindbergh Field (City of San Diego 2017). The Gibbs family owned and operated the Gibbs Flying Service, providing aviation services at the airport (Gibbs Flying Service 2001). However, in 2020 the lease with the City of San Diego expired.

3.0 METHODS

HELIX conducted a record search of the CHRIS for the project APE and a one-mile radius at the South Coastal Information Center (SCIC) on January 22, 2026. Results of the records search are included as Appendix B (Confidential Appendices, bound separately). The NAHC was contacted for a Sacred Lands File search on January 22, 2026; following the receipt of the results, outreach letters were sent on March 27, 2026, to the Native American representatives and interested parties indicated by the NAHC. 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 APE was conducted on February 25, 2026, by HELIX archaeologist George McMorrow, with Kumeyaay Native American monitor Cesar Welch from Red Tail Environmental, Inc. The project area was walked in transects spaced approximately five meters (m) apart.

4.0 RESULTS

4.1 RECORDS SEARCH

4.1.1 Previous Studies

The records search results identified 47 previous cultural resource studies that have been conducted within one mile of project area (Table 1, *Previous Studies Within One Mile of the Project APE*). The majority of the studies included cultural resources studies and inventories, surveys and assessments, monitoring reports, and environmental documents. Two reports on file at the SCIC and two reports not on file at the SCIC overlap with the project APE—one details work conducted as part of the Montgomery Field Resource Management Plan, while three detail work conducted as part of the Montgomery Field Airport Master Plan Project and the 2025 Airport Master Plan Update.

Table 1
PREVIOUS STUDIES WITHIN ONE MILE OF THE PROJECT APE

Report Number (SD-)	Report Title	Author/Company, Report Year
00565	Archaeological Survey of Several Highway Route Alternatives in Kearny Mesa, San Diego, California	Carrillo and Crotteau, 1981
00817	Proposed Sound Barrier, San Diego, California 11-SD-805 P.M. 21.4 11212-183541	Goldberg, 1979
01137	A Report of Cultural Impact Survey Phase I Project: 11-SD-805-21.8 NE Quadrant of Route 805 and Balboa Avenue (RT. 274).	Loughlin, 1974
01203	Historical Property Survey Report for the Proposed State Route 52 11-SD-52 3.31/8.8, 11206-047070, 11206-047040, 11206-152361.	Carrillo, 1982
01656	Archaeological Survey of Montgomery Field, 30-Acre Runway Extension Area	Wade, 1987
03525	Historical and Architectural Inventory and Evaluation for Buildings and Structures at the Cabrillo Heights Housing Project, San Diego, California	Carrico, 1999
03548	Archaeological Survey of the Cabrillo Heights Family Housing Development, San Diego, California	Alter and Gross, 1999
03565	Cultural Resources Survey for the Proposed Children's Hospital Expansion Project, City Of San Diego, California	Case and McGinnis, 1999
03945	**Cultural Resource Constraint Study for the Montgomery Field Resource Management Plan City of San Diego, California**	**Gallegos, Phillips, and Kyle, 1996**
04571	Cultural Reconnaissance of a One Acre Site for the G&M Oil Company Service Station	Brown, 1997
04581	New Century Center Draft Program Environmental Impact Report Technical Appendices Volume II	Manley and Wade, 1997
05036	Cultural Resources Survey for Serra Mesa/Kearney Mesa Branch Library Project City of San Diego, California	Pigniolo, 2000

Report Number (SD-)	Report Title	Author/Company, Report Year
05251	Environmental Data Statement San Onofre to Encina 230 kV Transmission Line Addendum No. 3	WESTEC Services, 1979
06760	IT San Diego Loop F Overbuild, In San Diego County, PL Project Number 800-38	Holson, 2002
07414	**Cultural Resource Survey and Constraints Study for the Montgomery Field Airport Master Plan Project, City of San Diego, California**	**Pigniolo and Murray, 2001**
09514	Archaeological Resources Inventory for the Park View - Aero Court Project, San Diego, California	Robbins-Wade, 2005
09638	Cultural Resource Assessment/Evaluation for Cingular Wireless Site SD 422-01, San Diego, California	Kyle, 2001
09651	Cultural Resource Assessment/Evaluation for Cingular Wireless Site SD 517-01, San Diego, California	Kyle, 2001
10406	Biological and Cultural Resources Surveys for the Montgomery Field Runway Expansion Project	McGinnis and Nordby, 2006
10551	Cultural Resources Final Report of Monitoring and Findings for the Qwest Network Construction Project, State of California	Arrington, 2006
11101	Draft Montgomery Field Cultural Constraints Survey (Recon Number 4505a)	Zepeda-Herman, 2007
11588	Cultural Resource Records Search Results for Verizon Facility Candidate 61074166 (Kyocera), 8611 Balboa Avenue, San Diego, San Diego County, California	Bonner, Aislin-Kay, and Crawford, 2008
11826	Archaeological Resources Analysis for the Master Stormwater System Maintenance Program, San Diego, California Project. No. 42891	Robbins-Wade, 2008
12200	Draft Environmental Impact Report for the Master Storm Water System Maintenance Program (MSWSMP)	City of San Diego Developmental Services Department, 2009
13006	Master Storm Water System Maintenance Program - Draft Recirculated Program Environmental Impact Report	City of San Diego, 2011
13901	AT&T Site Sd0736 LTE Optimal Land Mark Centre 4550 Kearny Villa Road San Diego, San Diego County, California 92123	Loftus, 2012
14026	Negative Cultural Resources Survey for the Kearny High School Athletic Field Redevelopment, San Diego, California	Beker, 2012
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
15151	Cultural Resources Assessment of The Crown Castle/ Verizon Fiber PUC Project, San Diego, California (BCR Consulting Project No. Syn1404)	Brunzell, 2015
15542	Cultural Resources Records Search and Site Visit Results for T-Mobile West, LLC Candidate SD06477A (SD477 Serra Mesa Shopping) 3270 Greyling Drive, San Diego, San Diego County, California	Bonner, Williams, and Crawford, 2013
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

Report Number (SD-)	Report Title	Author/Company, Report Year
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
15729	Cultural Resource Records Search and Site Visit Results for Verizon Wireless Candidate 'East Clairemont', 7045 Forum Street, San Diego, San Diego County, California	Wills and Williams, 2015
16060	Cultural Resource Records Search and Site Survey AT&T Site SD0836 Kearny Villa Road & Century Park 4550 Kearny Villa Road San Diego, San Diego County, California 92123 CASPR# 3601700976	Loftus, 2014
17101	Cultural Resource Technical Report: Historic Significance Evaluation of Transmission Line 676, San Diego County, California	Mello, Foglia, and Cooley, 2017
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)	Brunzel, 2017
18104	Cultural Resources Records Search and Site Visit Results for AT&T Mobility, LLC (AT&T) Candidate SD0836 (Kearny Villa Rd & Century Park), 4550 Kearny Villa Road, San Diego, San Diego County, California, CASPR No. 3601700976	Bruce and Wills, 2018
18439	Archaeological Monitoring for the Tl676 Mission to Mesa Reconductor Project, San Diego County, California (SDG&E eTS# 29956, PanGIS Project #1402.07)	Foglia, 2019
18913	Historical Resources Survey for the San Diego Fire-Rescue Air Operations Hangar Project (WBS #B-15012.02.02)	Zepeda-Herman, 2019
19328	Results Of Historical Resources Survey of the 8225 Aero Drive Multi-Family Project, San Diego, California	Price, 2016
NOF	**Cultural Resources Technical Report for the Montgomery-Gibbs Executive Airport Master Plan Update, City of San Diego, California**	**Wilson and Cooley, 2025**
NOF	**Historical Resource Technical Report for the Montgomery-Gibbs Executive Airport Building 6, Building 7, & Building 8**	**Usler and Kempson, 2025**

NOF indicates reports not on file at SCIC; **Bold** indicates reports that overlap the APE

4.1.2 Previously Recorded Resources

Fifteen cultural resources have been identified within one mile of the project APE (Table 2, *Previously Recorded Resources Within One Mile of the Project APE*). Three of these resources are precontact archaeological sites, one is a precontact isolate, and 11 are built environment resources. The project APE encompasses one historic-era building, P-37-023980, which is described further below. Additionally, one of the precontact sites consists of a 'resource' recorded by Malcom Rogers in the 1920s (SDM-W-155) that includes an over 20-square-mile area of Kearny Mesa; this resource is described in further detail below.

Table 2
PREVIOUSLY RECORDED RESOURCES WITHIN ONE MILE OF THE PROJECT APE

Resource Number (P-37-)	Resource Number (CA-SDI-)	Age and Resources Present	Description	Recorder, Date
015823	--	Historic-Era Site	Industrial Complex constructed in the late 1950s to support research, development, and manufacture of the Atlas Missile for the United States Air Force; General Dynamics Kearny Mesa Astronautics Division.	Manley, 1997
017136	15128	Precontact Site	The resource consists of a scatter of shell (*Chione* spp.) The shell may have been imported with fill derived from coastal areas or it may represent an archaeological site.	Alter, 1999
019277	15926	Precontact Site	Site consists of a large flake scatter with a possibly associated shell concentration. Multiple lithic material types are represented, including metavolcanics, volcanics, quartzite, and quartz. Shell is mostly *Donax* but one *Tivela* fragment was also noted.	Pigniolo and Murray, 2000
023980*	**--**	**Historic-Era Building**	**Corrugated, metal hangar with a gable roof and no windows. Likely constructed between 1947 and 1950.**	**Murray et al., 2001**
023981*	--	Historic-Era Building	Off-white, airplane hangar with the name "Spiders Aircraft" over the hangar door. Likely constructed between 1940 and 1946.	Murray et al., 2001
023982*	--	Historic-Era Building	Large, off-white, Quonset hut/airplane hangar with a rectangular façade on the west side. Likely constructed between 1940 and 1946.	Murray et al., 2001
023983*	--	Precontact Isolate	Two secondary quartzite flakes.	Murray et al., 2001
033557	--	Historic-Era Structure	The historic alignment of old Highway 395, dating to the early 1910s.	Tift, 2013; ASM Affiliates, 2015; Chasteene, 2017; Foglia and Keckeisen, 2017; Stringer-Bowsher, 2018; ASM Affiliates, 2021
035150	--	Historic-Era Building	One-and-two story, asymmetrical, irregular shaped, Modern style, shopping center located on a main commercial artery in the Serra Mesa area of the City of San Diego.	Crawford, 2013

Resource Number (P-37-)	Resource Number (CA-SDI-)	Age and Resources Present	Description	Recorder, Date
035176	--	Historic-Era Building	One story, asymmetrical rectangular Modern style commercial office building built in 1965.	Crawford, 2013
035179	--	Historic-Era Building	Multi-story, multilevel, asymmetrical, irregular shaped, Modern style, public utility building, located on a major commercial artery in the Serra Mesa area of the City of San Diego.	Crawford, 2013
035932	--	Historic-Era Building	CP Kelco Lab building constructed in 1957.	Price, 2016
036319	--	Historic-Era Structure	San Diego Gas & Electric transmission line constructed to transmit power distribution to communities in San Diego County. Constructed in 1917; 1940-1974.	Mello, 2017
036804	--	Historic-Era Building	Industrial complex containing five steel-frame warehouse buildings, two concrete building pads, and a large gantry crane. Constructed ca. 1963.	Tinsley Becker, 2016; HDR, Inc., 2019
040628	--	Historic-Era Building	Kearny High School, consisting of 16 buildings constructed in 1954, 1955, and 1963, as well as numerous ancillary buildings constructed between 1992 and 2014.	Yates, 2019
--*	**--**	**Precontact Site**	**SDM-W-155; recorded by Malcom Rogers as the entirety of the Kearny Mesa region; dispersed highland winter camps with scattered artifacts and cobble hearths.**	**Rogers, n.d.**

Bold indicates resources within Project APE
* Indicates resources not mapped at the SCIC

4.1.2.1 P-37-023980

P-37-023980, initially recorded in 2001 by Tierra Environmental Services, is a corrugated metal hangar with a gabled roof and no windows built between 1947 and 1950 (I.S. Architecture 2019; Murray et al. 2001). In 2025, I.S. Architecture (ISA) completed a Historical Resources Technical Report in support of the Montgomery-Gibbs Executive Airport Master Plan Update and its Programmatic Environmental Impact Report. At this time, ISA evaluated P-37-023980 for eligibility for listing in the NRHP, the CRHR, and the San Diego Register of Historical Resources (SDRHR; Usler and Kempson 2025).

The results of ISA's study indicated that P-37-023980 is significant under NRHP, CRHR, and SDRHR Criterion A/1/A due to its association with the historical development of Montgomery-Gibbs Executive Airport and the development of the community of Kearny Mesa (Usler and Kempson 2025). Additionally, ISA found that P-37-023980 retains all seven aspects of integrity recognized by the NRHP criteria. ISA

concluded that P-37-023980 is eligible for listing in the SDRHR, CRHR, and NRHP. A separate letter report is being prepared to address this resource (White 2026).

4.1.2.2 SDM-W-155

SDM-W-155 was recorded by Malcom Rogers of the San Diego Museum of Man in the 1920s as the entirety of Kearny Mesa, including the Linda Vista, Clairemont, University City, Kearny Mesa, and Miramar community areas, and was described as dispersed highland winter camps with scattered artifacts and cobble hearths (Rogers n.d., 1966:178-181). In 1980, Ken Hedges, curator of the Museum of Man, indicated the boundaries of the site as "Mission Valley on the south, Mission Bay and Rose Canyon on the west and north, Carroll Canyon on the north, and the Poway Hills and Murphy Canyon on the east" (Hedges 1980). According to Hedges, the locations of the loci associated with the resource were provided on a map compiled by Rogers in approximately 1930; based on the map and Rogers' notes, Hedges identified 13 specific loci for SDM-W-155, primarily indicated as hearths; however, as he notes, "the boundaries for these loci consist of contours defining the high points of the mesa-top terrain; these indicate areas within which we have no specific locational data for individual features or artifact finds. This area may contain site loci not represented on this list" (Hedges 1980).

In 1995, one of the loci recorded by Rogers and mapped by Hedges was attributed by Brian F. Smith & Associates to a resource, P-37-014216 (CA-SDI-14048), located in the community of Linda Vista (Pierson 1995). Consequently, SDM-W-155 has been documented at the SCIC as being associated with only that resource number. While some of the individual loci have possibly been documented as separate sites, no other trinomial or primary numbers have been assigned to SDM-W-155 by the SCIC. As such, no information delineating the extent and the locations of the 13 loci attributed to SDM-W-155 is currently available to address what elements may have existed within or adjacent to the project APE.

4.2 OTHER ARCHIVAL RESEARCH

Various additional archival sources were consulted, including historic topographic maps and aerial imagery. These include historic aerials from 1941 to 2022 (NETR Online 2026; University of California Santa Barbara [UCSB] Digital Library 2026) and several historic USGS topographic maps, including the 1903 and 1930 *La Jolla* (1:62,500), the 1943 *La Jolla* (1:31,680), and the 1953, 1967, and 1975 *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.

On the 1903 map, a series of roads generally travelling north-south are indicated within and near the airport property. A cluster of structures labelled "Rosedale" is recorded along what is now the eastern boundary of the airport. Three buildings or residences are shown as Rosedale; two of the buildings are located to the northeast of the airport and one appears to have potentially been located at the end of what is now the east of the airport runway. According to newspaper classified ads from the early 1900s, Rosedale was a ranch located "4 miles north of Mission valley, Escondido road" (*The San Diego Sun* 1905). Similar roads are shown on the 1943 *La Jolla* map; however, Rosedale is no longer on the map and a "Landing Field" is indicated in the west-central portion of what is now the airport boundary. On the 1953 map, only a few roads are still present but they are more linear (both north-south and east-west) than on the earlier maps. Highway 395 (now SR 163) is shown as a two-lane highway to the west of the airport, and a circular "Race Track (abdn'd)" is depicted north of the airport. The airport is labelled "Montgomery Field (City Airport)," and the runways and several structures are shown within the area. The subsequent maps depict the development of the surrounding area and the construction of SR 163 to

the west. While approximately fewer than 20 buildings or residences are shown on the 1953 *La Jolla* map, by 1967, the map shows a substantially larger degree of industrial development, structures, and roads, including Clairemont Mesa Boulevard and Balboa Avenue, as well as several other named streets. The 1975 revised version of the 1967 topographic map shows the amount of modern development as having substantially increased, and a small portion of the Kearny Mesa community along the western border is indicated as a generalized urban area.

The earliest available aerial photograph, from 1941, depicts cleared dirt landing strips and Highway 395 to the west (UCSB Digital Library 2026). A single structure, likely built by the Ryan School of Aeronautics, is present just southwest of the runways, while Highway 395 is present to the west. A dirt road and an artificial pond or reservoir are visible to the south and east of the landing strips, and a small ranch or farm and a grid of dirt roads are visible to the south. The 1953 aerial photograph shows newly paved runways, one of which is marked "Montgomery," and a series of aircraft hangers within the project APE. The 1953 aerial photograph depicts the beginning of the development of the community of Serra Mesa to the south. Specifically, it depicts the construction of the United States Navy's Cabrillo Heights housing project, and the completion of the realignment of Highway 395 (NETR Online 2026; UCSB Digital Library 2026). The acceleration of development seen within the study area vicinity in the topographic maps is also reflected in the aerial photographs from the 1960s and 1970s (NETR Online 2026). The photographs from 1964 and 1966 show the development of the Kearny Mesa area, as well as the areas to the north and south of the airport. By the time the 1972 aerial photograph was taken, the construction of Interstate 805 through the area was completed and several new roads were in use in the area. This photograph also shows the expansion of the facilities at the airport itself, with numerous new buildings located between the runways and Aero Drive. The subsequent aerial photographs show few major changes in the area, though photographs from the 1980s show the construction of the hotel to the south of the project area (NETR Online 2026).

4.3 NATIVE AMERICAN CONTACT PROGRAM

HELIX contacted the NAHC on January 22, 2026, for a Sacred Lands File (SLF) search and list of Native American contacts for the project area. The NAHC indicated in a response dated February 9, 2026, that the results of the search were positive and to contact the Viejas Band of Kumeyaay Indians for more information. Letters were sent on March 30, 2026, to Native American representatives and interested parties identified by the NAHC. To date, one response has been received. On March 31, 2026, the Viejas Band of Kumeyaay Indians noted that the project area may "contain many sacred sites to the Kumeyaay people" and requested that the sites be avoided with adequate buffer zones. Additionally, Viejas requested that all pertinent state and federal laws and regulations be followed, and to be informed of any project changes or inadvertent discoveries. Native American correspondence is included as Appendix C (Confidential Appendices, bound separately).

4.4 SURVEY RESULTS

Visibility within the project APE was excellent; much of the area was cleared of vegetation but had been heavily disturbed by grading and vehicle activity (Plates 1 and 2). Gravel and small cobbles covered portions of the project area, specifically in the areas used as roads or parking; vegetation, such as low-cut grasses and non-native weeds, was observed throughout the southern portion of the project. Observed soil consisted of tan and gray-tan silty sand.

No archaeological resources were identified during the pedestrian survey.



Plate 1. Overview of project APE, view to the northwest.



Plate 2. Overview of project APE, view to the east.

5.0 MANAGEMENT CONSIDERATIONS

A study was undertaken to identify cultural resources that are present in the project APE and to determine the direct effects of the project on historical resources as defined in CEQA. The results of the records search, Native American contact program, and pedestrian field survey did not identify any archaeological resources within the project APE. As such, no impacts to archaeological resources are anticipated as a result of the proposed project. The archaeological sensitivity of the entire project APE is low based on the results of the study, environmental factors, and the amount of modern development that has previously occurred for the entire Montgomery-Gibbs Executive Airport. The SLF search was positive for tribal cultural resources in the project vicinity, but no specific resources have been identified within the project area. If responses to the tribal outreach program identify TCRs within the project area, these will be addressed through consultation between the consulting tribe(s) and SDCCD.

5.1 MANAGEMENT RECOMMENDATIONS

Based on the results of the current study, no archaeological resources will be affected by the project, and no mitigation measures are recommended for the project.

In the event that human remains are discovered during any project activities associated with development of the AIC, the San Diego County Medical Examiner shall be contacted. If the remains are determined to be of Native American origin, the Medical Examiner shall contact the NAHC, who shall determine and notify the Most Likely Descendant (MLD). The MLD, as identified by the NAHC, will work with SDCCD to determine proper treatment and disposition of the remains. All requirements of Health & Safety Code Section 7050.5 and PRC Section 5097.98 shall be followed.

Should the proposed project limits change to incorporate new areas of proposed ground disturbance, an archaeological survey of these areas will be required.

6.0 REFERENCES

Bean, Lowell J., and Florence C. Shipek
1978 Luiseño. In *California*, edited by Robert F. Heizer, pp. 550–563. Handbook of North American Indians, Vol. 8, William C. Sturtevant, series editor. Smithsonian Institution, Washington, D.C.

Beauchamp, R. Mitchell
1986 *A Flora of San Diego County, California*. Sweetwater River Press, National City, California.

Bowman, Roy H.
1973 *Soil Survey: San Diego Area*. United States Department of Agriculture, Beltsville, Maryland.

Brodie, Natalie
2013 The San Diego River: An Archaeological, Historical, and Applied Anthropological Perspective. Master of Arts Master's Thesis, Department of Anthropology, San Diego State University, San Diego, California.

Bull, Charles S.
1983 Shaking the Foundations: The Evidence for San Diego Prehistory. *Casual Papers: Cultural Resource Management* 1(3):15-64. Cultural Resource Management Center, San Diego.

1987 A New Proposal: Some Suggestions for San Diego Prehistory. In *San Dieguito-La Jolla: Chronology and Controversy*, edited by Dennis R. Gallegos. San Diego County Archaeological Society, Research Paper 1.

Carrico, Richard L.
1974 *Archaeological/Historical Survey of Naval Regional Medical Center*. Unpublished report on file at the County of San Diego.

1977 Portolá's 1769 Expedition and Coastal Native Villages of San Diego County. *Journal of California Anthropology* 4(1):30–41.

2008 Ethnohistoric Period. In *Prehistoric and Historic Archaeology of Metropolitan San Diego: A Historic Properties Background Study.* Prepared for the Metropolitan Wastewater Department, City of San Diego, by ASM Affiliates, Encinitas, California.

2017 Clans and *Shimulls*/Sibs of Western San Diego County. *Proceedings of the Society for California Archaeology* 31:9–16.

2018 *Strangers in a Stolen Land: Indians of San Diego County from Prehistory to the New Deal*. Sunbelt Publications, San Diego, California

Carrico, Richard L., Theodore G. Cooley, and Joyce M. Clevenger
1993 *Archaeological Excavations at the Harris Site Complex, San Diego County, California.* Report prepared by Ogden Environmental and Energy Services, and on file at the South Coastal Information Center, San Diego State University.

Christenson, Lynne E.
1990 *The Late Prehistoric Yuman People of San Diego County, California: Their Settlement and Subsistence System*, Department of Anthropology, Arizona State University, Tempe, University Microfilms, Ann Arbor.

City of San Diego
2001 Historical Resources Guidelines. Adopted September 28, 1999, Amended April 30, 2001 by City Manager Document No. C-10912.

2017 *Montgomery-Gibbs Executive Airport History*. Electronic resource available at: https://www.sandiego.gov/airports/montgomery. Accessed January 21, 2026.

2025 *Community Profiles: Kearny Mesa*. Electronic resource available at https://www.sandiego.gov/planning/community-plans/kearny-mesa. Accessed January 21, 2026.

Cline, Lora L.
1984 *Just Before Sunset*. J and L Press, Jacumba, California

Connolly, Mike
n.d. *Kumeyaay - Spanish Contact*. Electronic resource available at https://www.kumeyaay.com/kumeyaay-spanish-contact.html. Accessed January 21, 2026.

Cooley, Theodore G.
1995 Early Period Results from Data Recovery Conducted on a Portion of Stratified Prehistoric Site SDI-9243, San Diego County, California. *Proceedings of the Society for California Archaeology* 8:227–238.

Cooley, Theodore G., and Laura J. Barrie
2004 Archaeological Excavation at the Village of *Pa'Mu*, Ramona Valley, California. *Proceedings of the Society for California Archaeology* 17:43–56.

Cooley, Theodore G., A. George Toren, and Andrew R. Pigniolo
1992 *Report of Test Results of a Cultural Resource Testing Program for the Crown Point and Rose Creek Area of the Mission Bay Sewage Interceptor System, Phase V City of San Diego, California Dep No. 90-0540*. Report on file at South Coastal Information Center, San Diego State University.

Ezell, Paul H.
1987 The Harris Site – An Atypical San Dieguito Site, or Am I Beating a Dead Horse? In *San Dieguito–La Jolla: Chronology and Controversy*, edited by Dennis Gallegos, pp. 23–34. San Diego County Archaeological Society Research Paper Number 1. San Diego.

Farris, Glenn J.
1994 José Panto, Capitan of the Indian Pueblo of San Pascual, San Diego County. *The Journal of California and Great Basin Anthropology* 16(2):149–161.

Gallegos, Dennis R.
1987 A Review and Synthesis of Environmental and Cultural Material for the Batiquitos Lagoon Region. In *San Dieguito-La Jolla: Chronology and Controversy*, edited by Dennis Gallegos, pp. 23–34. San Diego County Archaeological Society Research Paper No. 1.

Gibbs Flying Service
2001 *Introduction*. Gibbs Flying Service. Electronic resource available at https://web.archive.org/web/20170930152942/http:/www.gibbsflyingservice.com/. Accessed January 21, 2026.

Hall, Clarence A. Jr
2007 *Introduction to the Geology of Southern California and its Native Plants*. University of California Press, Berkeley, California

Harrington, John P.
1925 *The Papers of John Peabody Harrington in the Smithsonian.* In *Volume 3 Reel 169; Diegueno, U. S. Fieldnotes 1925-1927. Frames 494, 496, 547, 549, 329, 562, 468, 19, 59, 571, 578, 588, 590, 597, 598, 601, 602, 632, 634, 642, 741, 766*. National Anthropological Archives, Washington, D.C.

Head, W.S.
1972 *The California Chaparral: An Elfin Forest*. Naturegraph Publishers, Healdsburg, California

Hedges, Ken
1980 Site Record for SDM-W-155, Attached to Department of Parks and Recreation Site Record for P-37-014216 (CA-SDI-14048). On file at the South Coastal Information Center, San Diego State University.

Hedges, Ken, and Christina Beresford
1986 *Santa Ysabel Ethnobotany*. In San Diego Museum of Man Ethnic Technical Notes No. 20.

I.S. Architecture
2019 Department of Parks and Recreation Site Record Update for P-37-023980. On file at the South Coastal Information Center, San Diego State University.

Kennedy, Michael P.
1975 Geology of the Eastern San Diego Metropolitan Area (La Jolla, Point Loma, and Del Mar 7.5' quadrangles). In *Geology of the San Diego Metropolitan Area*, pp 9-38. California Division of Mines and Geology Bulletin No. 200, Sacramento.

Knell, Edward J., and Mark S. Becker
2017 Early Holocene San Dieguito Complex Lithic Technologies at the C.W. Harris Site, San Diego County, California. *Journal of California and Great Basin Anthropology* 37(2):183–201.

Kroeber, Alfred L.
1925 *Handbook of California Indians*. Bureau of American Ethnology of the Smithsonian Institution. Republished lithographed edition 1970 ed. Fulmer Brothers Press Taylor & Taylor, San Francisco, California.

Luomala, Katherine
1978 Tipai-Ipai. In *California*, edited by Robert F. Heizer, pp. 592–609. Handbook of North American Indians, Vol. 8, William C. Sturtevant, series editor. Smithsonian Institution, Washington, D.C.

Manley, William R.
1997 Department of Parks and Recreation Site Record for P-37-015823. On file at the South Coastal Information Center, San Diego State University.

McDonald, Meg, and James D. Eighmey
2008 Late Period Prehistory in San Diego. In *Prehistoric and Historic Archaeology of Metropolitan San Diego: A Historic Properties Background Study*, pp. 109–168. Prepared for the Metropolitan Wastewater Department, City of San Diego by ASM Affiliates, Encinitas, California.

Meighan, Clement W.
1954 The Late Complex in Southern California Prehistory. *Southwestern Journal of Anthropology* 10(2):215–227.

Mira Mesa Recreation Council
n.d. *Miramar College and Hourglass Field Community Park History*. Mira Mesa Recreation Council. Electronic resource. Available at https://miramesarecreationcouncil.org/miramar-college-and-hourglass-field/. Accessed January 21, 2026.

Moratto, Michael J.
1984 *California Archaeology*. Academic Press, Orlando

Moriarty, James R., III
1966 Cultural Phase Divisions Suggested by Typological Change Coordinated with Stratigraphically Controlled Radiocarbon Dating in San Diego. *The Anthropological Journal of Canada* 4(4): 20–30.

Munz, Philip A.
1974 *A Flora of Southern California*. University of California Press, Berkeley, California

Murray, Stephanie, Andrew R. Pigniolo, and Carmen Zepeda-Herman
2001 Department of Parks and Recreation Site Record for P-37-023980. On file at the South Coastal Information Center, San Diego State University.

NETR Online
2026 *Historic Aerials*. Nationwide Environmental Title Research, LLC. Electronic resource available at http://www.historicaerials.com. Accessed 2025.

Office of Historic Preservation (OHP)
1995 *Instructions for Recording Historical Resources*. California Office of Historic Preservation, Sacramento, California.

Parker, Patricia L., and Thomas F. King
1998 *Guidelines for Evaluating and Documenting Traditional Cultural Properties*. National Park Service, Washington, D.C.

Patrick, Charles W.
1991 *The San Diego City College Story: A Presentation to the Scholia Club of San Diego*. Report on file at San Diego History Center Archives.

Pierson, Larry
1995 Department of Parks and Recreation Site Record for P-37-014216 (CA-SDI-14048). On file at the South Coastal Information Center, San Diego State University.

Pigniolo, Andrew R.
2005 A Different Context: San Dieguito in the Mountains of Southern California. *Proceedings of the Society for California Archaeology* 18:247–254.

Pigniolo, Andrew R., and Stephanie Murray
2001 *Cultural Resources Survey and Constraints Study for the Montgomery Field Airport Master Plan Project, City of San Diego, California*. Prepared for Shutt Moen Associates, by Tierra Environmental. Report on file at City of San Diego.

Pourade, Richard F.
1977 *The History of San Diego: v.7 City of the Dream*. Copley Press, San Diego, California

Pryde, Philip R.
2004 *San Diego: An Introduction to the Region*. 4th ed. Sunbelt Publications

Raven-Jennings, Shelly, and Brian F. Smith
1999 *Report of Excavations at CA-SDI-4608: Subsistence and Technology Transitions during the Mid-to-Late Holocene in San Diego County*. Prepared for City of Poway, by Brian F. Smith and Associates, Poway, California. Report on file at South Coastal Information Center, San Diego State University.

Rhoades, Amanda and Torrey Spoerer
2014 "City's First Century: 100 Years of Students, Education and Construction." *City Times*. May 14. Available at https://sdcitytimes.com/top-stories/2014/05/14/citys-first-century-100-years-of-students-education-and-construction/. Accessed February 15, 2026.

Rogers, Malcom J.
1939 *Early Lithic Industries of the Lower Basin of the Colorado River and Adjacent Desert Areas*, San Diego Museum of Man Papers No. 3, San Diego Museum of Man.

1966 *Ancient Hunters of the Far West*, edited by Richard F. Pourade. Copley Press, La Jolla, California.

n.d. Site Record for SDM-W-155. On file at the San Diego Museum of Us (Formerly San Diego Museum of Man).

San Diego Community College District (SDCCD)
1989 *A Look at the Past: 1914-1989*. San Diego Community College District, San Diego, California. On file at The San Diego Mesa College Archives

2018 *How Miramar College has come of age*. San Diego Community College District. Electronic resource available at https://www.sdccd.edu/departments/communications/newscenter/articles/2018/miramar-college-50th-anniversary.aspx. Accessed January 21, 2026.

San Diego Mesa College
2024 *Timeline*. San Diego Mesa College. Electronic resource available at https://www.sdmesa.edu/about-mesa/60th-anniversary/index.shtml. Accessed January 21, 2026.

San Diego Sun, The
1905 "Wanted - Male Help." December 14, 1905:6. San Diego, California.

Spier, Leslie
1923 Southern Diegueño Customs. *University of California Publications in American Archaeology and Ethnology* 20(16):295–358.

True, D. L.
1958 An Early Complex in San Diego County, California. *American Antiquity* 23(3):255–263.

1970 *Investigation of a Late Prehistoric Complex in Cuyamaca Rancho State Park, San Diego County, California*. Monograph 1. Archaeological Survey, University of California, Los Angeles.

1980 The Pauma Complex in Northern San Diego County: 1978. *Journal of New World Archaeology* 3(4):1–30. Institute of Archaeology, University of California, Los Angeles

True, D. L., and Paul D. Bouey
1990 Gladishill: A Probable San Dieguito Camp near Valley Center, California. *Journal of New World Archaeology* VII(4):1–28.

University of California Santa Barbara (UCSB) Digital Library
2026 *UCSB Framefinder*. University of California, Santa Barbara Digital Library. Electronic resource available at https://mil.library.ucsb.edu/ap_indexes/FrameFinder/. Accessed 2025.

Usler, Christopher and Peter Kempson
2025 *Historic Resources Technical Report: Montgomery-Gibbs Executive Airport - Buildings 6, 7, & 8*. Prepared for HELIX Environmental Planning, by I.S. Architecture.

Van Wormer, Stephen
2006 *Historical Background Study and Significance Assessment for the City College Master Plan*. Prepared for Kyle Consulting.

Wallace, William J.
1955 A Suggested Chronology for Southern California Coastal Archaeology. *Southwestern Journal of Anthropology* 11:214-230.

Warren, Claude N.
1967 The San Dieguito Complex: A Review and Hypothesis. *American Antiquity* 32:168–185.

1968 Cultural Tradition and Ecological Adaptation on the Southern California Coast. In *Archaic Prehistory in the Western United States*, edited by C. Irwin-Williams. Eastern New Mexico Contributions in Anthropology 1(3), Portales, New Mexico.

1985 Garbage about the Foundations: A Comment on Bull's Assertions. *Casual papers: Cultural Resources Management* 2(1):82–90.

1987 The San Dieguito and La Jolla: Some Comments. In *San Dieguito – La Jolla: Chronology and Controversy*, edited by Dennis R. Gallegos. San Diego County Archaeological Society Research Paper No. 1.

2012 Environmental Stress and Subsistence Intensification: La Jolla on the San Diego Coast (3000 B.C. to A.D. 500). *California Archaeology* 4(1): 39-54

Warren, Claude N. (Editor)
1966 *The San Dieguito Type Site: M. J. Rogers' 1938 Excavation on the San Dieguito River*. San Diego Museum Paper No. 6, San Diego, California

Warren, Claude N., and H.T. Ore
2011 The Age of the San Dieguito Artifact Assemblage at the C.W. Harris Site. *Journal of California and Great Basin Anthropology* 31(1):81–97.

Warren, Claude N., and Joan S. Schneider
2026 C.W. Harris Site (CA-SDI-149): Claude N. Warren's 1965 and 1967 Excavations–Historical and Contextual Settings. *Pacific Coast Archaeological Society Quarterly* 57(3/4):5–88.

Warren, Claude N., Gretchen Siegler, and Frank Dittmer
2008 Paleoindian and Early Archaic Periods. In *Prehistoric and Historic Archaeology of Metropolitan San Diego: A Historic Properties Background Study*, pp. 13–108. Prepared for the Metropolitan Wastewater Department, City of San Diego by ASM Affiliates, Encinitas, California.

Warren, Claude N., and D. L. True
1961 The San Dieguito Complex and Its Place in San Diego County Prehistory. In *Archaeological Survey Annual Report, 1960–1961*, pp. 246–291. University of California, Los Angeles.

Weber, David
1992 *The Spanish Frontier in North America*. Yale University Press, New Haven, CT

White, Nelson
2026 *Peer Review Assessment, Historical Resource Technical Report, Montgomery-Gibbs Executive Airport Building 6, Building 7 & Building 8, 2873 Kearny Villa Road, San Diego, California, 92123*. Prepared for San Diego Community College District, by HELIX Environmental Planning.

Winterrowd, Cathy L., and D. Seán Cárdenas
1987 *An Archaeological Indexing of a Portion of the Village of La Rinconada de Jamo SDI-5017 (SDM-W-150)*. Prepared for City of San Diego Planning Department, by RBR and Associates. Report on file at South Coastal Information Center, San Diego State University.

Appendix A

Resumes of Key Personnel

EDUCATION

Master of Science, Applied Geographical Information Science, Northern Arizona University, 2008

Bachelor of Arts, Anthropology, University of California, San Diego, 2001

Bachelor of Science, Biological Psychology, University of California, San Diego, 2001

REGISTRATIONS/ CERTIFICATIONS

Registered Professional Archaeologist No. 16436

County of Riverside, Approved Cultural Resources Consultant

County of San Diego, Approved CEQA Consultant for Archaeological Resources

PROFESSIONAL AFFILIATIONS

Society for California Archaeology

STACIE WILSON, RPA

Senior Cultural Resources Project Manager II



Ms. Wilson has been professionally involved in cultural resources management for 21 years and has extensive experience in both archaeology and Geographic Information Systems (GIS). She has served as principal investigator on numerous cultural resources management projects, and regularly coordinates with local, state, and federal agencies and Native American tribal representatives. She is skilled in project management, archaeological inventories and excavation, and report documentation and has broad experience on private, municipal, federal, utility, and renewable energy projects. Her years of experience also encompass an understanding of California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) compliance regulations. She is proficient at creating, organizing, and analyzing GIS data, using ArcGIS 10.4, and serving as a spatial and geostatistical analyst. Ms. Wilson is a Registered Professional Archaeologist (RPA) and meets the U.S. Secretary of the Interior's Professional Qualifications for prehistoric and historic archaeology.

Bridge Preventative Maintenance Project No. 6. Principal Investigator for maintenance work on the Mount Helix Drive crossing, Wildwood Glen Lane Bridge, and Lilac Road Bridge. Managed a records search, field survey, and the preparation of bridge evaluations by a qualified architectural historian for compliance with Section 106 of the National Historic Preservation Act (NHPA). Prepared an Area of Potential Effects (APE) Map, an Archaeological Survey Report (ASR), and a Historic Property Survey Report (HPSR), consistent with Caltrans format and content requirements. Work performed for the County of San Diego and completed for Caltrans review.

Imperial Avenue Bikeway Technical Studies. Archaeological Principal Investigator for the cultural resources study for the proposed development of bike paths within the community of Southeastern San Diego along Imperial Avenue. The approximately 3.2-mile-long project will provide roadway and pedestrian improvements along Imperial Avenue between 17th Street and 47th Street in the City of San Diego. Responsibilities included contacting the Native American Heritage Commission (NAHC) to request a search of its Sacred Lands File (SLF), obtaining a records search for the project from the South Coastal Information Center, oversight and coordination of an intensive pedestrian survey of the project alignment, and preparation of an APE Map, an ASR, and an HPSR consistent with Caltrans format and content requirements for compliance with Section 106 of the NHPA. Work performed as a subconsultant to Kimley-Horn & Associates, Inc., with SANDAG as the CEQA lead agency and Caltrans as the federal lead agency.

Palomar Station Pedestrian Bridge. Archaeological Principal Investigator for a pedestrian overcrossing at the main entrance to Palomar College in San Marcos. Provided NEPA support to Caltrans Local Assistance (on behalf of the Federal Highway Administration) for a proposed pedestrian bridge that would span over West Mission

Road, the SRINTER rail line, and the Inland Rail Trail to connect the Palomar College Transit Center with the Palomar Station mixed-use development in San Marcos. Oversaw cultural resources survey and preparation an APE Map, an ASR, and a HPSR, consistent with Caltrans format and content requirements. Responsibilities included the completion of a records search and Native American consultation prior to the property being surveyed. The results of the cultural resources survey of the property resulted in the identification of a portion of the circa 1887 San Diego Central Railroad, which was then evaluated for significance and found to be not eligible for listing in the NRHP. No archaeological or Tribal cultural resources were identified by the study. Work performed as a subconsultant to Kleinfelder, Inc., with the City of San Marcos as the lead agency, and completed for Caltrans review and oversight for the completion of the environmental review process.

Buckman Springs Road Bridge Widening Technical Studies. Principal Investigator for the rehabilitation and widening of the existing Buckman Springs Road Bridge, located in eastern San Diego County. The project proponent was the County of San Diego (County) Department of Public Works (DPW), with local assistance funding from the Federal Highway Administration. Conducted a records search and field survey and prepared an APE Map, an ASR, and an HPSR, consistent with Caltrans format and content requirements. Work performed for the County of San Diego and completed for Caltrans review and oversight for the completion of the environmental review process.

Kelly Drive and Park Drive Complete Street Improvements. Senior Archaeologist for the Multi-Use Trail project that proposes to create a balanced multi-modal transportation network, providing trail linkage from El Camino Real to Agua Hedionda Lagoon in coordination with the City Trails system. Duties included oversight of excavations to assess potential project impacts to a portion of a significant resource and preparation of a technical report in compliance with the Carlsbad Tribal, Cultural, and Paleontological Resource Guidelines. Work performed for GHD, Inc., with City of Carlsbad as the lead agency.

Southwest Neighborhood Park Services. Project Manager/Principal Investigator for cultural resources survey for the proposed Southwest Neighborhood Park located within the Otay Mesa-Nestor Community Plan area of the City of San Diego. Oversaw archival research and conducted a survey of the 11.5-acre park site. Prepared an Archaeological Resources Report Form, consistent with the City of San Diego Historical Resources Guidelines. Work performed for the City of San Diego Public Works Department (PWD), Project Implementation Division.

Friars Road Improvements. Principal Investigator for improvements to the Interstate 15 (I-15)/Friars Road interchange that proposed reconfiguration of the I-15 northbound loop off-ramp and southbound loop on-ramp. Managed a records search and conducted Native American outreach and a pedestrian field survey. Prepared a Project Area limits (PAL) Map, an ASR, and a Historical Resources Compliance Report (HRCR), consistent with Caltrans format and content requirements. Work performed as a subconsultant to Sudberry Development, Inc., with Caltrans as the lead agency under CEQA.

Sycuan/Sloane Canyon Trail IS/MND. Principal Investigator for the County of San Diego Department of Parks and Recreation's (DPR) Sycuan/Sloane Canyon Trail project, an approximately 5-mile multi-use, non-motorized trail located in the unincorporated community of Crest-Dehesa in the inland foothills of San Diego County. The proposed trail is situated along the Sweetwater River Valley and would primarily be located within public (County) right-of-way and on Sycuan Band of the Kumeyaay Nation (Sycuan) and Kumeyaay Diegueño Land Conservancy lands. Duties included the oversight and coordination of a records search, Sacred Lands File search, a review of historic aerial photographs and maps, and an intensive pedestrian survey of the project Area of Potential Effect (APE). Prepared a Cultural Resources Inventory and Assessment Report complying with CEQA and Section 106 of the NHPA, as amended. Work performed for the County of San Diego DPR, Resource Management Division.

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
Bachelor of Arts, Anthropology, San Diego State University, 2021

CERTIFICATIONS
HAZWOPER 40-Hour Course

GEORGE MCMORROW

Staff Archaeologist



Mr. McMorrow has four years of professional cultural resource management experience in California including studies of both historic and precontact resources. He has served as Crew Chief on multiple cultural resource management survey efforts and regularly works with Native American Tribal representatives. His experience includes surveys, data recovery projects, excavations, site evaluations, and monitoring performed in San Diego, Orange, Los Angeles, Riverside, Kern, and Tuolumne Counties. Mr. McMorrow has prepared survey and monitoring reports, site overviews, and background summaries. He has prepared site documentation, conducted archaeological inventories of, and cataloguing in, archaeological laboratories, as well as identifying historic and prehistoric artifacts. Mr. McMorrow has experience utilizing GIS, including ArcGIS applications and Trimble devices. Mr. McMorrow has completed the 40-hour HAZWOPER, has been trained in human osteological analysis, and has mortuary archaeology volunteer experience.

One Alexandria Square Environmental Consulting (2022). Archaeological technician for the data recovery program prior to construction of One Alexandria Square in the La Jolla area of the City of San Diego, San Diego County. Participated in data recovery excavation and recording. Work performed for Alexandria Real Estate Equities, Inc.

One Alexandria Square Cultural Resources Data Recovery and Monitoring (2022 - 2025). Archaeological monitor for the construction of the One Alexandria Square development in the La Jolla area of the City of San Diego, San Diego County. Work performed for Alexandria Real Estate Equities, Inc.

Science Village R&D Park CEQA Consistency Evaluation (2022 - 2025). Staff archaeologist for the development of the Science Village Research & Development Park in the La Jolla area of the City of San Diego, San Diego County. Conducted archaeological survey of the project area and participated in report preparation. Work was performed for Alexandria Real Estate Equities, Inc.

San Diego County Bayshore Bikeway Segment 6A Public Outreach/ Education & Environmental (2022 - 2023). Staff archaeologist for the development of a public bike path in the city of National City, San Diego County. Participated in an archaeological survey of the project area. Work performed for Alta Planning + Design, Inc.

Elsinore Valley Municipal Water District Water Reclamation Facility (2023 - 2024). Archaeological monitor for various infrastructure improvements to the Elsinore Valley Municipal Water District water treatment plant in the City of Lake Elsinore, Riverside County. Work performed for Arcadis U.S., Inc.

UU854 Block 2BB Pacific Beach (Crown Point) Cultural Resources Support (2023 - Present). Staff archaeologist for a San Diego Gas and Electric (SDG&E) underground utility system project in the City of San Diego, San Diego County. Conducted

archaeological monitoring of excavation activities. Work performed for the City of San Diego.

UU 667 Block 8R (Egger Highlands) Archaeological and Native American Monitoring (2023 - 2026). Staff Archaeologist for a San Diego Gas and Electric (SDG&E) underground utility system project in the City of San Diego, San Diego County. Conducted archaeological monitoring of trenching and boring activities. Produced artifact tables for and participated in writing the Archaeological Monitoring Work Plan. Work performed for the City of San Diego.

Smugglers Gulch Environmental and Permitting Support (2023). Archaeological monitor for a geotechnical study within the Tijuana River Valley, San Diego County. Conducted construction monitoring of augering and excavation activities. Work performed for the County of San Diego.

TRVRP Cultural Resources Surveys and Report and Vegetation Management Plan (2023). Archaeological technician for the San Diego County Department of Parks and Recreation cultural resources survey inventory of the Tijuana River Valley Regional Park, San Diego County. Participated in an archaeological survey of the study area. Work performed for the County of San Diego.

Star Ranch Preserve Biological and Cultural Consulting (2023 - Present). Staff archaeologist for cultural resources inventory for the San Diego County Department of Parks and Recreation preserve project in Campo, San Diego County. Participated in archaeological survey and prepared site documentation and reports. Work performed for the County of San Diego.

Ramona Grasslands Preserve – Trail Reroute (2023 - Present). Staff archaeologist for the development of a public trail in Ramona Grasslands County Preserve in Ramona, San Diego County. Conducted archaeological monitoring of trail construction activity. Work performed for the County of San Diego.

Sycamore Phase 1 Trail Construction Monitoring (2023 - Present). Staff archaeologist for the development of a public trail in Sycamore Canyon/Goodan Ranch County Preserve in Poway, San Diego County. Prepared the archeological monitoring memo report. Work performed for the County of San Diego.

Oceanpointe Residential Archaeological and Tribal Monitoring (2023). Archaeological monitor for a proposed residential development Oceanside, San Diego County. Conducted archaeological monitoring of over-excavation and trenching activities. Work performed for Lennar Communities, with City of Oceanside as lead agency.

Oceanpointe Construction Monitoring and 5 Yr Habitat Monitoring (2023 - 2025). Staff archaeologist for a habitat restoration project in Oceanside, San Diego County. Conducted archaeological monitoring of irrigation trenching and the replanting of native plants. Work performed for Lennar Communities, with City of Oceanside as lead agency.

River Walk Village Cultural Resources Services (2023 - 2024). Archaeological monitor for a residential development project in Menifee, Riverside County. Conducted archaeological monitoring of trenching and grading activities. Work performed for Richmond American Homes.

Edwards AFB Main Base ADP (2024 - 2025). Staff archaeologist for the Main Base Area Development Plan Improvements Project for Edwards Air Force Base, Kern County, CA. Conducted archaeological testing excavation and archaeological survey. Work performed for the Argonne National Laboratory.

8519 Sugarman Drive Storm Drain Emergency (2024 - 2023). Archaeological monitor for an emergency storm drain pipeline project in La Jolla in the City of San Diego, San Diego County. Conducted archaeological monitoring of vegetation-clearing and excavation activities. Work performed for Orion Construction Corporation.

East County Advanced Water Purification Package 1-4 Project Level CEQA Coordination and Support (2023 - 2024). Staff archaeologist for a multi-phase utility pipeline project extending from Lakeside to San Diego, San Diego County. Conducted archaeological inventory and cataloguing of recovered artifacts and served as archaeological monitor during construction. Work performed for Carollo Engineers, Inc. with the Joint Powers Authority serving as the lead agency.

SERAL Phase 3 Fuel Breaks Flagging and SERAL Phase 3 Fuel Reduction Units Flagging and Monitoring (2023 - 2025). Archaeological technician for a wildfire management project for the Stanislaus National Forest in Tuolumne County. Participated in archaeological survey of the project areas. Work performed for Tuolumne County.

SERAL 2.0 Social and Ecological Resilience Across the Landscape (SERAL) Fire Management Features (FMF) Cultural Resources. Archaeological technician for a wildfire management project for the Stanislaus Forest in Tuolumne County. Participated in archaeological survey of the project areas. Work performed for Tuolumne County.

Oak Valley Town Center (2023 - 2025). Archaeological Technician for the data recovery and testing programs at archaeological sites encountered during construction monitoring of Oak Valley Town Center, a proposed mixed use development in the City of Calimesa, Riverside County. Participated in data recovery excavation and recording, and served as archaeological monitor during construction grading. Work performed for the Terra Verde Group.

Rancho Highlands Construction Biological and Archaeological (2023 - 2025). Archaeological monitor for a residential project in Temecula, Riverside County. Conducted archaeological monitoring of excavation activities. Work performed for TK Consulting, Inc.

USFS Wildfire Crisis Strategy – Heritage Support and Section 106 Compliance, Award #1 Angeles National Forest (2025 - Present). Staff archaeologist for a wildfire risk reduction project in the Angeles National Forest, Los Angeles County. Conducted archaeological survey of proposed fuel breaks and defensible zones. Work performed for GeomorphIS, with the U.S. Forest Service serving as lead agency.

Appendix B

Records Search Results
(Confidential, Bound Separately)

Appendix C

Native American Correspondence
(Confidential, Bound Separately)

Appendix F

Preliminary Geotechnical Investigation

PRELIMINARY GEOTECHNICAL INVESTIGATION
PROPOSED MIRAMAR COLLEGE AVIATION INSTRUCTIONAL CENTER
3750 JOHN J. MONTGOMERY DRIVE
SAN DIEGO, CALIFORNIA

Prepared for:

San Diego Community College District
3375 Camino Del Rio South
San Diego, California 92108

Prepared By:

UES Professional Solutions, Inc.
1441 Montiel Road, Suite 115
Escondido, California 92026

July 7, 2026
UES Job No. A26165.00082

TABLE OF CONTENTS

1.0 INTRODUCTION AND SCOPE OF SERVICES 1
1.1 Introduction 1
1.2 Scope of Services 1
2.0 SITE DESCRIPTION 2
3.0 FIELD INVESTIGATION AND LABORATORY TESTING 2
3.1 Field Investigation 2
3.2 Laboratory Testing 3
3.3 Percolation Testing 3
3.4 Seismic Refraction Field Evaluation 4
3.4 Seismic Refraction 5
3.4 Refraction Microtremor (ReMi) 5
4.0 GEOLOGY 6
4.1 General Setting 6
4.2 Geologic Conditions 6
4.2.1 Quaternary Previously Placed Fill 7
4.2.2 Quaternary Very Old Paralic Deposits, Unit 8 7
4.3 Groundwater Conditions 7
4.4 Geologic Hazards 8
4.4.1 Surface Fault Rupture 8
4.4.2 Local and Regional Faulting 9
4.4.3 Liquefaction and Seismic Settlement Evaluation 10
4.4.4 Landsliding 11
4.4.5 Tsunamis and Seiche Evaluation 11
4.4.6 Flooding 11
4.4.7 Compressible and Expansive Soils 11
4.4.8 Corrosive Soils 12
5.0 CONCLUSIONS AND RECOMMENDATIONS 13
5.1 General 13
5.2 Site Preparation 13
5.2.1 Stripping and Clearing 14
5.2.2 Building Pad Grading 14
5.2.3 Pavement & Hardscape Area Grading 15
5.3 Site Excavation 15
5.4 Fill Placement and Compaction 17
5.5 Fill Materials 18
5.6 Temporary Construction Slopes 18
5.7 Foundation and Slab Recommendations 19
5.7.1 New Conventional Spread Footing Foundations and Bearing Values 20
5.7.2 Foundation Settlement 21
5.7.3 Foundation Setback 21
5.7.4 Interior Concrete Slabs-On-Grade 22
5.8 Seismic Design Criteria 23
5.9 Lateral Resistance and Earth Pressures 24

5.10 Exterior Flatwork 26
5.11 Pavements 26
5.12 Drainage 27
5.13 Slopes 28
5.14 Controlled Low Strength Materials (CLSM) 29
5.15 Plan Review 29
5.16 Construction Observation 30
6.0 LIMITATIONS OF INVESTIGATION 30

FIGURES

FIGURE 1	SITE LOCATION MAP
FIGURE 2	GEOLOGIC/ EXPLORATION LOCATION MAP
FIGURE 2A	SEISMIC REFRACTION TOMOGRAPHY PROFILE
FIGURE 3	GEOLOGIC MAP
FIGURE 4	REGIONAL FAULT AND SEISMICITY MAP
FIGURE 5	CONCEPTUAL RETAINING WALL DETAIL

APPENDICES

APPENDIX A	REFERENCES
APPENDIX B	FIELD EXPLORATION METHODS AND LOGS
APPENDIX C	LABORATORY METHODS AND RESULTS
APPENDIX D	STANDARD GRADING SPECIFICATIONS
APPENDIX E	PERCOLATION TO INFILTRATION CALCULATIONS, FIELD DATA AND CITY OF SANDIEGO WORKSHEET C.4-1
APPENDIX F	SHEAR WAVE VELOCITY REPORT

1.0 INTRODUCTION AND SCOPE OF SERVICES

1.1 Introduction

This report presents the results of the geotechnical investigation, performed by UES Professional Solutions, Inc. (UES), and provides preliminary conclusions and recommendations for the proposed improvements at the subject site located at 3750 John J. Montgomery Drive in San Diego, California. This geotechnical investigation was performed in general accordance with the terms of UES proposal No. A26165.00082, dated February 12, 2026.

UES understands that the existing hangar is to be demolished, and a new two-story 20,000 square-foot airplane hangar/instructional center building is proposed. Preliminary recommendations for excavations, fill placement, and foundation design for the proposed improvements are presented in this report. Additionally, UES performed percolation testing for infiltration suitability. Reviewed documents are referenced in Appendix A. Boring logs are provided in Appendix B. Laboratory results are provided in Appendix C. Standard specifications for grading are provided in Appendix D. (UES provided a preliminary recommendations letter dated February 27, 2026. The recommendations in this report supersede those previously provided in the preliminary letter and Appendix D, where conflict exists. Calculated storm water infiltration rates based on site-specific percolation tests are provided in Appendix E. Results of the ReMi geophysical survey are provided in Appendix F.

1.2 Scope of Services

The scope of services provided included:

- Review of readily available geologic and soils reports.

- Coordination of utility mark-out and location through USA DigAlert services.
- Acquiring the required FAA permit required for the borings.
- Private utility location for borehole clearance.
- Performance of one seismic refraction p-wave evaluation.
- Performance of one refraction microtremor (ReMi) shear wave evaluation.
- Excavation of six exploratory borings and soil sampling utilizing a truck-mounted drill rig.
- Excavation of two percolation test holes for infiltration testing at the proposed infiltration basins.
- Laboratory testing of selected soil samples.
- Description of the site geology and evaluation of potential geologic hazards.
- Engineering and geologic analysis.
- Preparation of this preliminary geotechnical investigation report.

2.0 SITE DESCRIPTION

The project site is located at 3750 John J. Montgomery Drive in San Diego, California (Figure 1). The site is bounded by Kearny Villa Road to the west, a hotel/golf course and Aero Drive to the south, aircraft hangars to the north, and airport taxiways and runways to the east. An existing airplane hangar is currently at the site. Based on reconnaissance and review of general site topography, the overall improvement area is relatively flat lying with an elevation of approximately 404 feet above mean sea level (msl). Approximate site elevations are based on Google Earth Satellite Imagery (2025). The proposed site improvement area is depicted in Figure 2.

3.0 FIELD INVESTIGATION AND LABORATORY TESTING

3.1 Field Investigation

UES conducted a field investigation and infiltration testing at the site on June 3rd and June 4th, 2026. The fieldwork consisted of site reconnaissance and excavation of six exploratory soil borings. The borings were

advanced to a maximum depth of approximately 20.0 feet below the ground surface (bgs) with a CME-85 truck-mounted drill rig equipped with eight-inch-diameter, hollow-stem augers. Bulk samples were collected from the cuttings, and relatively undisturbed samples were collected by driving Standard Penetration Test (SPT) and Modified California (CAL) samplers. Additionally, two percolation test holes were excavated to a maximum depth of 5.0 feet bgs. The approximate boring locations are shown in Figure 2.

The soils were logged in the field by a UES Geologist and were visually classified in general accordance with the Unified Soil Classification System (USCS). The field descriptions have been modified, where appropriate, to reflect laboratory test results. The boring logs, including descriptions of the soils encountered, are included in Appendix B.

3.2 Laboratory Testing

Laboratory tests were conducted on selected soil samples for classification purposes, and to evaluate physical properties and engineering characteristics. Laboratory tests included:

- Expansion Index (ASTM D4829),
- Gradation (ASTM D6913),
- R-value
- Chemical Characteristics (CTM 417, 422, and 643).

Test descriptions and laboratory results for the selected soils are included in Appendix C.

3.3 Percolation Testing

Two percolation tests were performed within the proposed BMP infiltration areas on June 4th, 2026. The percolation test holes were excavated to approximate depths ranging from 58 to 60.0 inches bgs. The

attached Figure 2 shows the approximate percolation test locations. The percolation test holes were filled with water to initiate the presoak period. Percolation testing was performed the following day in accordance with Riverside County – Low Impact Development BMP Design Handbook (2011) guidelines, which is an accepted method per Appendix D of the City of San Diego Storm Water Standards (2020). Field data and percolation to infiltration calculations are included in Appendix E. Results of the percolation testing are provided in Table 3.3 below.

TABLE 3.3
RESULTS OF PERCOLATION TESTING WITH 2.0 FACTOR OF SAFETY APPLIED

TEST LOCATION	TEST DEPTH (inch)	CASE	SOIL TYPE (USCS CLASSIFICATION)	PERCOLATION RATE (inch/hour)	INFILTRATION RATE (inch/hour)	INFILTRATION RATE WITH FS OF 2 APPLIED (inch/hour)
P-1	60	Sandy	SM ($Qvop_8$)*	0.750	0.032	0.016
P-2	58	Sandy	SM ($Qvop_8$)*	1.00	0.050	0.025

NOTES: Water level was measured from a fixed point at the top of the hole.
Weather was sunny during percolation testing.
*$Qvop_8$ = Quaternary Very Old Paralic Deposits, Unit 8
The test holes were eight inches in diameter.

Results indicate a “No Infiltration” condition which is anticipated in this soil unit in this area of San Diego.

3.4 Seismic Refraction Field Evaluation

UES conducted a seismic evaluation on March 30th, 2026. The seismic evaluation consisted of performing one seismic refraction p-wave velocity array (SR-1) and one refraction microtremor (ReMi) shear wave velocity array (R-1). The approximate locations and orientations of the two seismic arrays are shown on Figure 2.

3.4 Seismic Refraction

The seismic refraction array was performed in an east-west orientation in the open adjacent lot adjacent north of the existing building. Array SR-1 was recorded with a geophone spacing of approximately 6 feet with a total array length of approximately 150 feet. Data were acquired using a Geometrics Geode 24-channel seismograph utilizing 14-hertz (Hz) vertical geophones. A 16-lb sledgehammer striking an aluminum plate was used as a seismic energy source to generate the seismic signal. Shots were performed at five locations across the geophone array. A total of at least ten (10) shot records were acquired and stacked for each shot point.

Seismic refraction data are presented as plots of the 2-dimensional P-wave tomographic inversion results in Figure 2A. The results are presented as a velocity section with elevation (in feet) along the vertical axis and distance (in feet) along the horizontal. Seismic refraction and rippability results of the findings are presented in Section 5.3.

3.4 Refraction Microtremor (ReMi)

Refraction Microtremor (ReMi) is a surface-wave seismic method for estimating in-situ Rayleigh-wave (shear-wave) velocities down to depths of approximately 100 feet with 5 percent to 15 percent accuracy, with the accuracy decreasing with depth. Data were acquired using a Geometrics Geode 24-channel seismograph utilizing 4-Hz vertical geophones. Geophone spacing was approximately 10-feet, for a total array length of 230-feet. The seismic source consists of ambient seismic “noise”, or microtremors, which are constantly generated by anthropogenic and natural sources. In addition to the passive source noise, seismic “noise” was induced with active sources by striking a sledgehammer off the end of the geophone array during acquisition. The

data acquisition procedure consists of obtaining at least fifteen 30-second seismic noise records at a sample interval of 2 milliseconds. The result is a 1-D image of the subsurface shear-wave layering below the center of the geophone array. Unlike the p-wave refraction method, ReMi can detect velocity inversions.

ReMi analysis results are displayed as a 1-dimensional plot of shear-wave velocity versus depth below the existing ground surface at the center of the geophone spread. A plot of the ReMi dispersion curve and results are presented in the attached Appendix F. The weighted-average shear-wave velocity and Seismic Site Classification designation based on ASCE 7-22 are presented in Section 5.8.

4.0 GEOLOGY

4.1 General Setting

The site area is located within the Peninsular Ranges physiographic province that is characterized by northwest-trending mountain ranges, intervening valleys, and predominantly northwest trending regional faults. The San Diego Region can be subdivided into the coastal plain area, central mountain–valley area and eastern mountain valley area. The project site is located within the central coastal plain area that is characterized by a locally eroded basement surface consisting of Jurassic and Cretaceous crystalline rocks overlain by Tertiary and Quaternary sedimentary deposits.

4.2 Geologic Conditions

Based on regional geologic mapping by Kennedy and Tan (2008), the near surface geologic unit underlying the site area consists of Quaternary Very Old Paralic Deposits, Unit 8, (Qvop8) as shown in Figure 3.

According to the recent explorations, Previously Placed Fill (Qppf) was observed overlying the Very Old Paralic Deposits. Descriptions of the geologic units encountered during the investigation are presented below and in Appendix B. Surficial geologic materials are depicted in Figure 2.

4.2.1 Quaternary Previously Placed Fill

Quaternary Previously placed fill (fill) was observed near the ground surface in the exploratory borings and was observed to extend to depths ranging from approximately 1.0 to 5.5 feet bgs. Where observed, this material generally consists of very loose to dense, dry, brown to reddish brown, fine- to medium-grained, silty to clayey sand.

4.2.2 Quaternary Very Old Paralic Deposits, Unit 8

Quaternary Very Old Paralic Deposits, Unit 8 (paralic deposits) were observed beneath the previously placed at all boring locations. As encountered, the paralic deposits consist of dense to very dense, dry, grey to orangish brown, fine- to coarse-grained, silty to clayey sand, or clay, extending to the maximum exploration depth of approximately 20.0 feet bgs.

4.3 Groundwater Conditions

Groundwater was not encountered during the recent subsurface investigation to the maximum explored depth of approximately 20.0 feet bgs. Groundwater conditions may vary with seasonal precipitation, irrigation, and other site-specific factors. Based on the conditions encountered, groundwater is not anticipated to adversely affect shallow construction activities or the proposed improvements, provided the recommendations presented in this report are implemented. However, seepage or perched groundwater may be locally encountered during grading or excavations, especially following periods of sustained precipitation or irrigation.

4.4 Geologic Hazards

Based on the City of San Diego Seismic Safety Study (2008), the site is located within geologic hazard category 51 - "Level mesas-underlain by terrace deposits and bedrock, nominal risk".

Geologic hazards considered to have potential impacts to site development were evaluated based on field observations, literature review, and laboratory test results. It appears that geologic hazards at the site are primarily limited to those caused by shaking from earthquake-generated ground motions. The following paragraphs discuss the geologic hazards considered and their potential risk to the site.

4.4.1 Surface Fault Rupture

In accordance with the Alquist-Priolo Earthquake Fault Zoning Act, (ACT), the State of California has established Earthquake Fault Zones around known active faults. The purpose of the ACT is to regulate the development of structures intended for human occupancy near active fault traces in order to mitigate hazards associated with surface fault rupture. According to the California Geological Survey (Special Publication 42, Revised 2018), a fault that has experienced surface displacement within the last 11,700 years is defined as a Holocene-active fault and is either zoned or considered for zonation in accordance with the ACT. Other definitions of fault activity that are used for dams, power plants, and other critical facilities, and some agencies may designate faults older than Holocene (last 11,700 years) but younger than late Quaternary (1.6 million years) as potentially active faults subject to local jurisdiction regulations.

Based on the site reconnaissance and review of referenced geologic literature and fault hazard mapping, the site is not located within a State-designated Earthquake Fault Zone. In addition, no known active or potentially active fault traces are mapped crossing the site. Therefore, the potential for surface fault rupture at the subject site is considered low.

4.4.2 Local and Regional Faulting

The United States Geological Survey (USGS), with support from State Geological Surveys and published research by various investigators, has developed a Quaternary Fault and Fold Database of faults and associated folds believed to be potential sources of earthquakes with magnitudes greater than 6.0 during the Quaternary Period (the past 1.6 million years). Faults in the database have been categorized into four Classes (Class A-D) based on the level of evidence confirming that a Quaternary fault is of tectonic origin and whether the structure is exposed for mapping or inferred from fault related deformational features. Class A faults have been mapped and categorized based on age of documented activity ranging from Historical faults (activity within last 150 years), Latest Quaternary faults (activity within last 15,000 years), Late Quaternary (activity within last 130,000 years), to Middle to late Quaternary (activity within last 1.6 million years). Class A faults are considered to have the highest potential to generate earthquakes and/or surface rupture, and the earthquakes and surface rupture potential generally increases from oldest to youngest. The evidence for Quaternary deformation and/or tectonic activity progressively decreases for Class B and Class C faults. When geologic evidence indicates that a fault is not of tectonic origin it is considered to be a Class D structure. Such evidence includes

joints, fractures, landslides, or erosional and fluvial scarps that resemble fault features, but demonstrate a non-tectonic origin.

The nearest known Class A fault is the Murphy Canyon Fault (Undifferentiated Quaternary), which is located approximately 2.0 miles east of the site. Regional faults and seismicity with respect to the subject site are shown on Figure 4.

4.4.3 Liquefaction and Seismic Settlement Evaluation

Liquefaction occurs when saturated, relatively loose granular soils and non-plastic silts lose their strength during earthquake-induced shaking and temporarily behave as a fluid. Liquefaction potential varies with groundwater level, soil type, grain-size distribution, relative density, and the intensity and duration of ground shaking. Seismic settlement can occur with or without liquefaction and generally results from densification of loose granular soils during earthquake shaking.

The existing structure and proposed improvement areas are underlain at shallow depths by dense to very dense Very Old Paralic Deposits. In addition, groundwater was not encountered in the recent site explorations to a maximum explored depth of approximately 20.0 feet bgs. Based on the noted subsurface conditions, the potential for liquefaction and significant seismic settlement at the site is considered low.

4.4.4 Landsliding

According to mapping by Kennedy and Tan (2007), no landslides are mapped at the site. In addition, evidence of landsliding or slope instability was not observed during our field exploration or site reconnaissance of the relatively flat-lying site. Based on these findings, landsliding is not considered a significant geologic hazard at the subject site.

4.4.5 Tsunamis and Seiche Evaluation

According to California Geological Survey Tsunami Hazard Area Map, the site is not located within a tsunami inundation zone based on distance from the coastline and elevation above sea level. Damage resulting from oscillatory waves (seiches) is considered unlikely due to the absence of nearby confined bodies of water.

4.4.6 Flooding

Based on the FEMA Flood Map Service Center, the site area is mapped as "Zone X: Area of Minimal Flood Hazard". Therefore, the site has a very low risk of flooding, typically having less than 0.2% annual chance of being flooded.

4.4.7 Compressible and Expansive Soils

Loose, disturbed, or undocumented near-surface soils and fills may generally be considered potentially compressible. However, based on field data, site observations, and laboratory test results, the underlying Very Old Paralic Deposits are not anticipated to be significantly compressible under the proposed improvement loads.

Based on recent laboratory testing of representative near-surface soils, the site materials are generally anticipated to exhibit Low expansion potential (Expansion Index of 50 or less). As such, expansive soils are not anticipated to present significant adverse impacts to the proposed improvements. Additional evaluation of near-surface soils should be performed following grading activities, where appropriate, to verify the expansion potential of soils exposed at finish subgrade elevations.

4.4.8 Corrosive Soils

Testing of representative site soils was performed to evaluate the potential corrosive effects of site soil on concrete foundations and buried metallic utilities. Soil environments detrimental to concrete generally have elevated levels of soluble sulfates and/or pH levels less than 5.5. According to the American Concrete Institute (ACI) Table 318 4.3.1, specific guidelines have been provided for concrete where concentrations of soluble sulfate (SO_4) in soil exceed 0.10 percent by weight. These guidelines include low water: cement ratios, increased compressive strength, and specific cement type requirements. A minimum resistivity value less than approximately 5,000 ohm-cm and/or soluble chloride levels in excess of 200 ppm generally indicate a corrosive environment for buried metallic utilities and untreated conduits.

Based on laboratory test results, shown in Appendix C, near-surface soils at the site generally present a mild corrosion potential for Portland cement concrete. It is also interpreted that site soils will have a mild corrosive potential to buried metallic improvements. UES recommends that buried utilities utilize plastic piping and/or conduits, where feasible. However, UES does not

practice corrosion engineering. Therefore, a corrosion engineer or other qualified consultant could be contacted if site specific corrosivity issues are of concern.

5.0 CONCLUSIONS AND RECOMMENDATIONS

5.1 General

Based on analysis of the presented data and geotechnical information, UES concludes that the proposed improvements at the site are feasible from a geotechnical standpoint, provided the recommendations in this report are incorporated into the design and construction of the project. Recommendations for the proposed earthwork and improvements are included in the following sections and Appendix D. Should conflicts exist, recommendations in the text of this report supersede those presented in Appendix D, as well as the referenced preliminary geotechnical letter (UES, 2026). UES should be provided grading and structural foundation plans for review for conformance with our geotechnical recommendations, prior to the start of construction.

5.2 Site Preparation

The following recommendations are provided to prepare the site subgrade for support of the aircraft hangar building and other associated surface improvements. We understand that the proposed improvements will be supported on shallow spread foundations or grade beams that are deepened to bear entirely on competent dense native materials, where needed.

5.2.1 Stripping and Clearing

Prior to grading activities, areas to receive improvements should be cleared of any existing debris and/or deleterious materials. Objectionable materials, such as construction or demolition debris and vegetation not suitable for structural backfill should be properly disposed of off-site.

5.2.2 Building Pad Grading

In building pad areas, the fill and paralic deposits should be over excavated to a minimum depth of two feet below existing or proposed subgrade elevations and to competent dense native formational materials, whichever is deeper. We anticipated removals up to approximate five to six feet or deeper could be locally required to reach competent dense native formation materials.

Following proper removals, competent subgrade materials should be proof rolled or scarified, moisture conditioned to a minimum two percent above optimum, and recompacted an additional nine to 12 inches. Excavations should extend horizontally at least five feet outside the perimeter of building footprint or to a distance equal to the adjacent vertical overexcavation depth, whichever is greater. Excavation bottoms should be observed and verified for competency by a UES geotechnical representative prior to the placement of fill.

5.2.3 Pavement & Hardscape Area Grading

Pavement and hardscape areas should be overexcavated to a minimum depth of two feet below existing or proposed grades, and to competent existing materials, whichever is deeper. Excavation bottoms should be observed and verified for competency by a UES geotechnical representative prior to the placement of fill. The bottoms of excavations should be proof rolled or scarified to a minimum depth of nine inches, moisture conditioned to a minimum of two percent above optimum moisture content and compacted as recommended herein.

5.3 Site Excavation

Based on UES observations and experience with similar soils, shallow excavations at the site should generally be feasible using well-maintained heavy-duty construction equipment run by experienced operators. However, excavations within the fill and shallow paralic deposits could encounter zones that are sensitive to caving and/or erosion and may not effectively remain standing vertical or near-vertical, even at shallow or minor heights and for short periods of time. Additionally, excavation into the paralic deposits is anticipated to increase in difficulty with depth.

A seismic refraction survey was performed at the site to evaluate the rippability/excavatability characteristics of the underlying subsurface materials. In general, seismic wave velocities can be correlated to material densities and/or rock hardness. The relationship between rippability/excavatability and seismic velocity is empirical and assumes a homogeneous mass. Localized areas of differing composition, texture, and/or structure may affect both the measured data and the actual rippability of the mass.

The terms rippability and excavatability refer to general degree of difficulty for conventional heavy duty grading equipment to perform routine excavations and is dependent on numerous physical characteristics of the subsurface material to be excavated. Rippability has been empirically correlated to refraction seismic velocities by Caterpillar Inc. (as noted in the Caterpillar Performance Handbook, Edition 48, June 2018). According to the referenced handbook, granitic rock becomes marginally rippable near 7,200 ft/s; and non-rippable at about 8,500 ft/s for a D10T2 dozer. These estimations are based on the lowest values for granitic rocks on the CAT chart; however, site geology and variation in the paralic deposits may cause some variations of these values. The Caterpillar Chart of Ripper Performance should be considered as being only one indicator of rippability.

The relationship between seismic velocity and rippability/excavatability is dependent on the site subsurface conditions, type of equipment, and operator ability/experience. The following Table 5.3 is intended to be used as a basis for preliminary evaluation of the general excavation characteristics of the site. The rippability of the rock is classified on a scale of "Easy" to "Blasting/Breaking Generally Required".

TABLE 5.3
SEISMIC VELOCITY VS. ANTICIPATED RIPPABILITY/EXCAVATIBILITY

Seismic P-wave Velocity	Rippability
0 to 2,000 ft/sec	Easy
2,000 to 3,500 ft/sec	Moderate
3,500 to 5,000 ft/sec	Difficult, Possible Local Breaking/Blasting
5,000 to 7,000 ft/sec	Very Difficult, General Breaking/Blasting Required
Greater than 7,000 ft/sec	Blasting/Breaking Generally Required

The approximate location of the seismic refraction survey is displayed in Figure 2. The results of the seismic refraction survey are summarized on the tomographic model displayed in Figure 2A.

The field investigation and seismic refraction survey revealed that the site subsurface consists of varying materials within the paralic deposits at the site. The tomographic model indicates that excavation difficulty will be "easy" to "moderate" ranging within approximately the upper five feet bgs, and that excavation difficulty will be "moderate" to "difficult" at depths ranging from 10 feet to 30 feet bgs. Please note that the grading contractor should be responsible for their own independent assessment of the site excavatability characteristics, including means and methods.

5.4 Fill Placement and Compaction

Following the recommended overexcavation and removal of loose or disturbed soils, areas to receive fills should be proof rolled or scarified, moisture conditioned to a minimum two percent above optimum, and properly compacted. Fill and backfill should be compacted to a minimum relative compaction of 90 percent (95 percent for the upper foot of pavement subgrades and aggregate base layer) of the laboratory maximum at a minimum two percent above optimum moisture content, as evaluated by ASTM D1557. The optimum lift thickness for fill soil depends on the type of compaction equipment used. Generally, backfill should be placed in uniform, horizontal lifts not exceeding eight to twelve inches in loose thickness. Fill placement and compaction should be conducted in conformance with local ordinances and should be observed and tested by a UES geotechnical representative.

5.5 Fill Materials

Properly moisture conditioned, low expansion potential soils derived from the on-site materials are considered suitable for reuse on the site as compacted fill. If used, these materials should be screened of organics and materials generally greater than three inches in maximum dimension and thoroughly mixed and blended prior to placement. Irreducible materials greater than three inches in maximum dimension should not generally be used in shallow fills within three feet of proposed grades. In utility trenches, adequate bedding should surround pipes.

If utilized, imported fill beneath structures and flatwork should have an Expansion Index of 30 or less (ASTM D 4829). Imported fill soils for use in structural or slope areas should be evaluated by the geotechnical engineer a minimum of two weeks before being transported to the site.

If retaining walls are proposed, backfill located within a 45-degree wedge extending up from the heel of the foundation of the wall should consist of soil having an Expansion Index of 20 or less (ASTM D 4829) with less than 30 percent passing the No. 200 sieve. The upper 12 to 18 inches of wall backfill should consist of lower permeability soils, in order to reduce surface water infiltration behind walls. The project structural engineer and/or architect should detail proper wall backdrains, including gravel drain zones, fills, filter fabric and perforated drainpipes. A conceptual wall drainage detail that may be appropriate for the subject site is provided in Figure 5.

5.6 Temporary Construction Slopes

The following recommended slopes should be relatively stable against deep-seated failure but may experience localized sloughing. On-site soils are considered Type B and Type C soils with recommended

slope ratios as set forth in Table 5.6.

TABLE 5.6 RECOMMENDED TEMPORARY SLOPE RATIOS		
SOIL TYPE	SLOPE RATIO (Horizontal: vertical)	MAXIMUM HEIGHT
B (Very Old Paralic Deposits)	1:1 (OR FLATTER)	5 Feet
C (Previously Placed Fill)	1.5:1 (OR FLATTER)	5 Feet

According to Cal-OSHA regulations, actual field conditions and soil type designations must be verified by the contractors' "competent person" while excavations exist. In addition, the above sloping recommendations do not allow for surcharge loading at the top of slopes by vehicular traffic, equipment or materials. Appropriate surcharge setbacks must be maintained from the top of all unshored slopes.

5.7 Foundation and Slab Recommendations

The following recommendations are for preliminary design purposes only. These foundation recommendations should be re-evaluated after reviewing the project grading and foundation plans, and after completion of rough grading of the building pad area(s). Upon completion of rough pad grading, the Expansion Index of near surface soils should be further evaluated, and these recommendations should be updated, as necessary. Lightly loaded upright structures such as flagpoles and other supports may be designed in accordance with current California Building Code or applicable standards assuming code minimum design values or as per the recommendations provided herein.

5.7.1 New Conventional Spread Footing Foundations and Bearing Values

Foundation recommendations presented herein are based on the generally anticipated low expansion potential of properly compacted and moisture conditioned site soils (Expansion Index of 50 or less).

Following the recommended preparatory grading, UES understands that the proposed hangar building will be supported on new conventional spread foundations and grade beams that are deepened, where necessary, to bear entirely in competent dense native materials at a minimum of two feet below the lowest adjacent rough grade elevations. However, footings will require additional embedment in some areas in order to bear entirely upon competent dense native materials at depth. Footings bearing a minimum 24 inches below grade should be designed based on a 4,000 pound per square foot allowable bearing pressure for minimum 24-inch-wide foundations. However, the allowable bearing value may be increased by an additional 250 psf per each additional six inches of depth and each additional six inches of width, up to a maximum value of 6,000 psf. A 1/3 increase to the bearing values recommended herein is also allowable for short duration loads such as those from wind or seismic loads. Where it is necessary to deepen footings beyond the structural design to bear in competent native materials, they could be backfilled with minimum two-sack cement/sand slurry or Controlled Low Strength Materials (CLSM) back to design foundation depth, if desired, in lieu of structural concrete to the full deepened depth.

If elastic design is utilized, an uncorrected 130-pci subgrade modulus is considered suitable for the anticipated deepened spread foundations. Subgrade materials should be maintained at a

minimum of two percent above optimum moisture content until slab underlayment and concrete are placed. Presoaking of bottom of foundation excavations may be recommended following rough grading or during construction.

UES recommends that continuous footings be reinforced using a minimum of four No. 5 reinforcing bars, with two placed near the top and two near the bottom. If deemed by the structural engineer to be appropriate, a different reinforcing steel layout may be designated. These reinforcing recommendations are provided as a minimum to reduce the potential for cracking and/or distress. The project structural engineer should design all and detail all footing reinforcement.

5.7.2 Foundation Settlement

Following site preparation, the maximum total static settlement are expected to be on the order of 1-inch and the maximum differential static settlement is expected to be on the order of ½ inch over a distance of 40 feet or across the width of the building, whichever is shorter. Due to generally dense nature of underlying native materials, dynamic settlement is not expected to adversely affect the proposed improvements.

5.7.3 Foundation Setback

Footings for structures should be designed such that the horizontal distance from the face of adjacent slopes to the outer edge of footings is at least 10 feet. In addition, footings should be founded beneath a 1:1 plane extended up from the nearest bottom edge of adjacent parallel

trenches and/or excavations. Deepening of affected footings may be a suitable means of attaining the prescribed setbacks.

5.7.4 Interior Concrete Slabs-On-Grade

Interior concrete slabs-on-grade for traffic areas (small planes) should be a minimum of eight (8.0) inches thick, or slabs should be designed and detailed for the proposed loads per recommendations of the project structural engineer. Minimum reinforcement for slabs should consist of #5 reinforcing bars placed on maximum 18-inch centers, each way, at or above mid-slab height, but with proper cover, or as per the recommendations of the project structural engineer. Slabs subjected to heavier traffic loads would require thicker slab sections and/or increased reinforcement.

In moisture-sensitive traffic floor areas, a suitable vapor retarder of at least 15-mil thickness (with all laps or penetrations sealed or taped) overlying a four-inch layer of consolidated natural aggregate base or gravel should be installed. An optional maximum two-inch layer of similar material may be placed above the vapor retarder to help protect the membrane during steel and concrete placement. This recommended protection is generally considered typical in the industry. If proposed floor areas or coverings are considered especially sensitive to moisture emissions, additional recommendations from a specialty consultant could be obtained. UES is not an expert at preventing moisture penetration through slabs. A qualified architect or other experienced professional should be contacted if moisture penetration is a more significant concern.

A 115-pci subgrade modulus is considered suitable for elastic design of minimally embedded improvements such as slabs-on-grade. Subgrade materials should be maintained at a minimum of two percent above optimum moisture content until slab underlayment and concrete are placed.

5.8 Seismic Design Criteria

The seismic ground motion values listed in the table below were derived in accordance with the ASCE 7-22 Standard that is incorporated into the 2025 California Building Code. This was accomplished by establishing a Site Class (Table 20.2-1, ASCE 7/22) designation of CD, based on ReMi collected shear wave velocities (V_s100) in the upper 100-feet soil profile (1,023 ft/s). Site coefficients and parameters were calculated utilizing the SEA/OSHPD Seismic Design Maps. Seismic ground motion values are based on the approximate site coordinates of 32.8129° latitude and –117.1498° longitude. These values are intended for the design of structures to resist the effects of earthquake ground motions.

TABLE 1
SEISMIC GROUND MOTION VALUES (CODE-BASED)
2025 CBC AND ASCE 7-22

PARAMETER	VALUE	2025 CBC/ASCE 7-22 REFERENCE
Site Class	CD	ASCE 7-22, Chapter 20
Mapped Spectral Response Acceleration Parameter, S_S	1.25	Figure 1613.2.1 (1)
Mapped Spectral Response Acceleration Parameter, S_1	0.38	Figure 1613.2.1 (2)
MCE Spectral Response Acceleration Parameter, S_{MS}	1.39	Section 1613.2.3
MCE Spectral Response Acceleration Parameter, S_{M1}	0.77	Section 1613.2.3
Design Spectral Response Acceleration, Parameter S_{DS}	0.92	Section 1613.2.5(1)

Design Spectral Response Acceleration, Parameter S_{D1}	0.51	Section 1613.2.5 (2)
Peak Ground Acceleration PGA_M	0.58	ASCE 7-22, Equation 11.8-1-3

5.9 Lateral Resistance and Earth Pressures

Lateral loads acting against retaining walls may be resisted by friction between the footings and the supporting engineered fill soil or passive pressure acting against structures. If frictional resistance is used, an allowable coefficient of friction of 0.30 (total frictional resistance equals the coefficient of friction multiplied by the dead load) is recommended for concrete cast directly against compacted fill. A design passive resistance value of 250 pounds per square foot per foot of depth (with a maximum value of 2,000 pounds per square foot) may be used. The allowable lateral resistance can be taken as the sum of the frictional resistance and the passive resistance, provided the passive resistance does not exceed two-thirds of the total allowable resistance.

If proposed, retaining walls up to approximately eight feet high and backfilled using approved granular soils (EI of 30 or less) may be designed using the equivalent fluid weights given below.

TABLE 5.9
EQUIVALENT FLUID UNIT WEIGHTS, G_h
(pounds per cubic foot)

WALL TYPE	LEVEL BACKFILL	SLOPING BACKFILL 2:1 (HORIZONTAL: VERTICAL)
CANTILEVER WALL (YIELDING)	50	70
RESTRAINED WALL	70	95

Lateral pressures on cantilever retaining walls (yielding walls) due to earthquake motions may be

calculated based on work by Seed and Whitman (1970). The total lateral thrust against a properly drained and backfilled cantilever retaining wall above the groundwater level can be expressed as:

$$P_{AE} = P_A + \Delta P_{AE}$$

For non-yielding (or "restrained") walls, the total lateral thrust may be similarly calculated based on work by Wood (1973):

$$P_{KE} = P_K + \Delta P_{KE}$$

Where P_A/b = Static Active Earth Pressure = $G_h H^2/2$

P_K/b = Static Restrained Wall Earth Pressure = $G_h H^2/2$

$\Delta P_{AE}/b$ = Dynamic Active Earth Pressure Increment = $(3/8)\ k_h\ \gamma H^2$

$\Delta P_{KE}/b$ = Dynamic Restrained Earth Pressure Increment = $k_h\ \gamma H^2$

b = unit length of wall (usually 1 foot)

k_h = 1/2* PGA_m (PGA_m given previously Table 5.8)

G_h = Equivalent Fluid Unit Weight (given previously Table 5.9)

H = Total Height of the retained soil

γ = Total Unit Weight of Soil ≈ 135 pounds per cubic foot

The static and increment of dynamic earth pressure in both cases may be applied with a line of action located at H/3 above the bottom of the wall (SEAOC, 2013).

These values assume non-expansive backfill and free-draining conditions. Measures should be taken to prevent moisture build up behind all retaining walls. Drainage measures should include free-draining backfill materials and sloped, perforated drains. These drains should discharge to an appropriate off-site location. A conceptual detail for retaining wall drainage that may be suitable for the project is attached

as Figure 5. Waterproofing should be as specified by the project architect or the waterproofing specialty consultant.

5.10 Exterior Flatwork

Lightly loaded exterior flatwork for non-traffic areas should measure a minimum 5.0 inches in thickness for geotechnical purposes and be installed with crack-control joints at appropriate spacing as designed by the project architect to reduce the potential for cracking in exterior flatwork caused by minor movement of subgrade soils and concrete shrinkage. Additionally, it is recommended that flatwork be installed with at least No. 4 reinforcing bars at 18-inch centers, each way, at or above mid-height of slab, but with proper concrete cover, or with other reinforcement per the applicable project designer. Flatwork that should be installed with crack control joints, includes sidewalks, and architectural features. All subgrades should be prepared according to the earthwork recommendations previously given before placing concrete. Positive drainage should be established and maintained next to all flatwork. Subgrade materials should be maintained at a minimum of two percent above optimum moisture content until the time of concrete placement.

5.11 Pavements

Pavement sections provided in Table 5.11 are based on the laboratory determined Resistance "R"-Value of 20, estimated traffic indices for the site, and the assumption that the upper foot of compacted fill subgrade and overlying aggregate base materials are properly compacted to a minimum 95% relative compaction at a minimum of two percent above optimum moisture content for soils (three percent for clayey soils). Beneath proposed pavement areas, loose or otherwise unsuitable soils are to be removed to the depth of competent underlying material as recommended in Section 5.2. Actual R-Value should be

determined following grading of subgrade areas and the pavement sections should be modified, as appropriate.

TABLE 5.11
RECOMMENDED AC AND PCC PAVEMENT SECTIONS

Traffic Area	Assumed Traffic Index	Preliminary Subgrade "R"-Value	Asphalt Pavement		Portland Cement Concrete Pavement on Subgrade (inch)
			Asphalt Concrete (inch)	Class II or Crushed Miscellaneous Aggregate Base (inch)	
Auto Parking and Light Traffic	5.0	20	3.0	8.0	7.0
Moderate Traffic	6.5	20	4.0	11.0	8.0

Asphalt paved areas should be designed, constructed, and maintained in accordance with, for example, the recommendations of the Asphalt Institute, or other widely recognized authority. Concrete paved areas should be designed and constructed in accordance with the recommendations of the American Concrete Institute or other widely recognized authority, particularly with regard to thickened edges, joints, and drainage. The Standard Specifications for Public Works construction ("Greenbook"), Caltrans, or City of San Diego Standard Specifications may be referenced for pavement materials specifications.

5.12 Drainage

Surface runoff should be collected and directed away from improvements by means of appropriate erosion-reducing devices, and positive drainage should be established around proposed improvements. Positive drainage should be directed away from improvements and slope areas at a minimum gradient of two percent for a distance of at least five feet. In general, landscape areas adjacent to or in close proximity to

buildings or improvements should be avoided or at least minimized. The project civil engineer should evaluate on-site drainage and make necessary provisions to keep surface water from affecting the site.

Generally, UES recommends against allowing water to infiltrate building pads or adjacent to slopes and improvements. However, it is understood that some agencies are encouraging the use of stormwater cleansing devices. Therefore, if storm water cleansing devices must be used, it is generally recommended that they be underlain by an impervious barrier, and that infiltrate be collected via subsurface piping and discharged off site. If infiltration must occur, water should infiltrate as far away from structural improvements as feasible. Bioretention basin calculated infiltration rates and associated geotechnical conclusions and recommendations are provided in Appendix E of this report.

5.13 Slopes

Based on observed conditions and anticipated soil strength characteristics, cut and fill slopes, if proposed at the site, should be constructed at ratios of 2:1 (horizontal: vertical) or flatter. These fill slope inclinations should exhibit factors of safety greater than 1.5.

Although properly constructed slopes on this site should be grossly stable, the soils may be susceptible to erosion. Therefore, runoff water should not be permitted to drain over the edges of slopes unless that water is confined to properly designed and constructed drainage facilities. Erosion-resistant vegetation should be maintained on the face of all slopes. Typically, soils along the top portion of a fill slope face will creep laterally. UES recommends against building distress-sensitive hardscape improvements within 10 feet of slope crests.

5.14 Controlled Low Strength Materials (CLSM)

Where approved, Controlled Low Strength Materials (CLSM) may be used in deepened footing excavation areas, building pads, and/or adjacent to retaining walls or other structures, provided the appropriate following recommendations are also incorporated. Minimum overexcavation depths recommended herein beneath slabs, flatwork, and other areas may be applicable beneath CLSM if/where CLSM is to be used, and excavation bottoms should be observed by UES prior to placement of CLSM. Prior to CLSM placement, the excavation should be free of debris, loose soil materials, and water. Once specific areas to utilize CLSM have been determined, UES should review the locations to determine if additional recommendations are appropriate. CLSM should consist of a minimum three-sack cement/sand slurry with a minimum 28-day compressive strength of 100 psi (or equal to or greater than the maximum allowable short term soil bearing pressure provided herein, whichever is higher) as determined by ASTM D4832. If re-excavation is anticipated, the compressive strength of CLSM should generally be limited to a maximum of 150 psi per ACI 229R-99. Where re-excavation is required, two-sack cement/sand slurry may be used to help limit the compressive strength. The allowable soils bearing pressure and coefficient of friction provided herein should still govern foundation design. CLSM may not be used in lieu of structural concrete where required by the structural engineer.

5.15 Plan Review

UES should be authorized to review the project grading and foundation plans, prior to commencement of earthwork as necessary for conformance with these geotechnical recommendations, as applicable.

5.16 Construction Observation

The recommendations provided in this report are based on preliminary design information for the proposed construction and the subsurface conditions observed in the exploration areas. The interpolated subsurface conditions should be confirmed by UES during construction with respect to anticipated conditions. Upon completion of precise grading, if necessary, soil samples will be collected to evaluate the as-built Expansion Index. Foundation recommendations may be revised upon completion of grading, and as-built laboratory tests results. Additionally, soil samples should be taken in pavement subgrade areas upon rough grading to refine pavement recommendations as necessary.

Recommendations provided in this report are based on the understanding and assumption that UES will provide the observation and testing services for the project. All earthwork should be observed and tested in accordance with recommendations contained within this report. UES should evaluate footing excavations before reinforcing steel placement.

6.0 LIMITATIONS OF INVESTIGATION

The field evaluation, laboratory testing, and geotechnical analysis presented in this report have been conducted according to current engineering practice and the standard of care exercised by reputable geotechnical consultants performing similar tasks in this area. No other warranty, expressed or implied, is made regarding the conclusions, recommendations and opinions expressed in this report. Variations may exist and conditions not observed or described in this report may be encountered during construction. The recommendations presented herein have been developed in order to reduce the potential adverse effects of soil expansion or settlement. However, even with the design and construction precautions provided, some post-construction movement and associated distress may occur.

The findings of this report are valid as of the present date. However, changes in the conditions of a property can occur with the passage of time, whether they are due to natural processes or the works of man on this or adjacent properties. In addition, changes in applicable or appropriate standards may occur, whether they result from legislation or the broadening of knowledge. Accordingly, the findings of this report may be invalidated wholly or partially by changes outside our control. Therefore, this report is subject to review and should not be relied upon after a period of three years.

UES's conclusions and recommendations are based on an analysis of the observed conditions. If conditions different from those described in this report are encountered, UES should be notified and additional recommendations, if required, will be provided subject to UES remaining as authorized geotechnical consultant of record. This report is for use of the project as described. It should not be utilized for any other project.

UES appreciates this opportunity to be of service on this project. If you have any questions regarding this report, please do not hesitate to contact the undersigned.

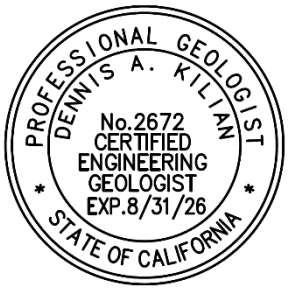
Respectfully,

UES Professional Solutions, Inc.

Colm J. Kenny, GE #3201
Senior Geotechnical Engineer

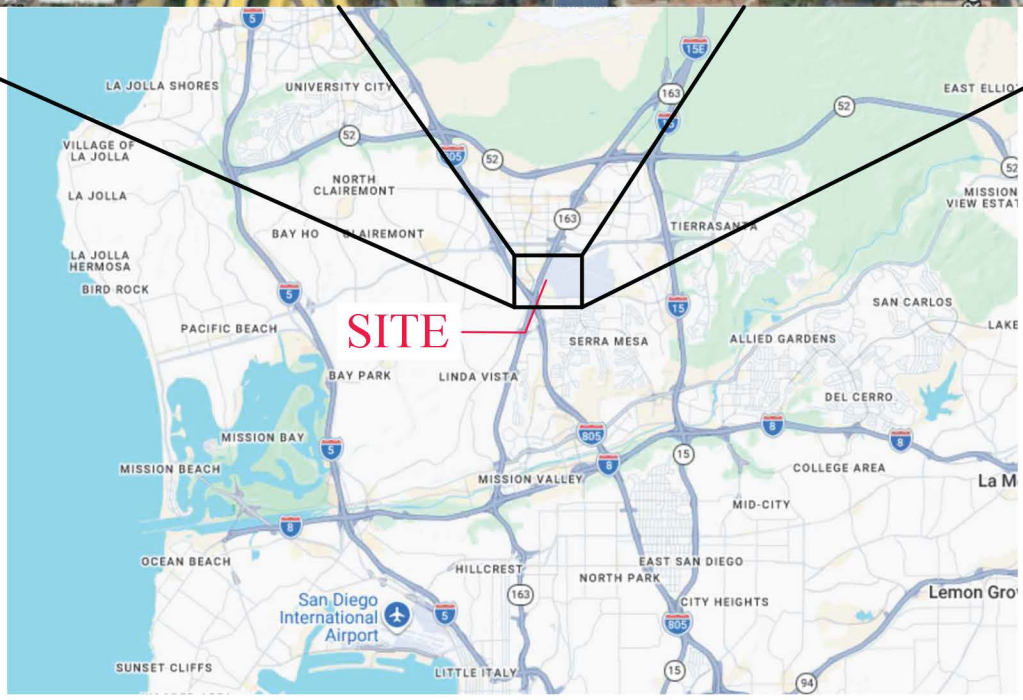


Dennis A. Kilian, CEG #2672
Senior Engineering Geologist



DAK/CJK/DTM;amc

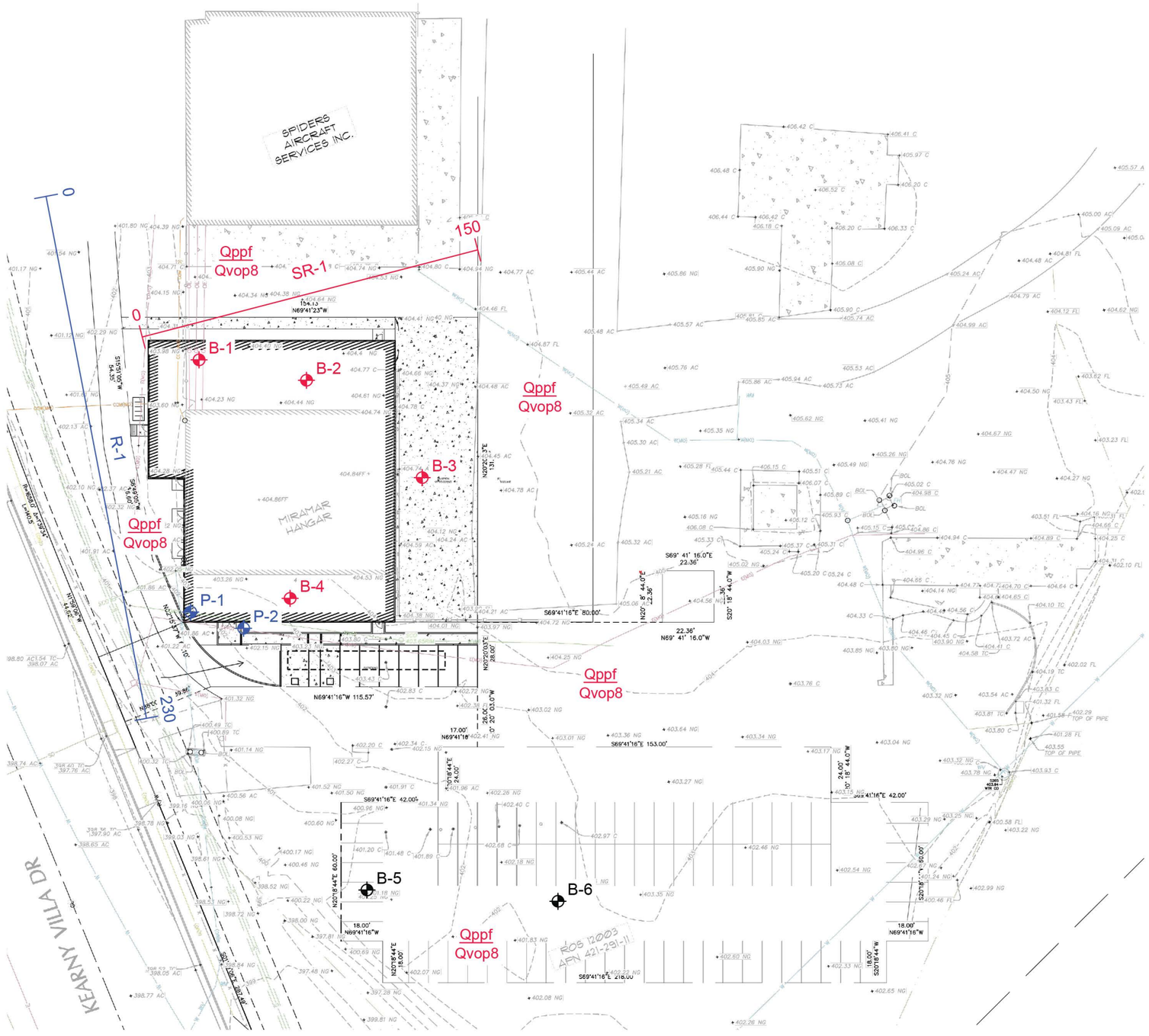




UES™	**SITE INDEX MAP** MIRAMAR COLLEGE AVIATION INSTRUCTIONAL CENTER 3750 JOHN J. MONTGOMERY DRIVE SAN DIEGO, CALIFORNIA	SCALE: AS SHOWN	DATE: 6/26
		UES JOB NO.: A26165.00082	FIGURE: 1

EXPLANATION

- B-6 — APPROXIMATE BORING LOCATION
- P-2 — APPROXIMATE PERCOLATION TEST LOCATION
- Qppf — PREVIOUSLY PLACED FILL
- Qvop8 — QUATERNARY VERY OLD PARALIC DEPOSITS UNIT 8
- SR-1 — APPROXIMATE SEISMIC REFRACTION ARRAY LOCATION
- R-1 — APPROXIMATE REMI ARRAY LOCATION



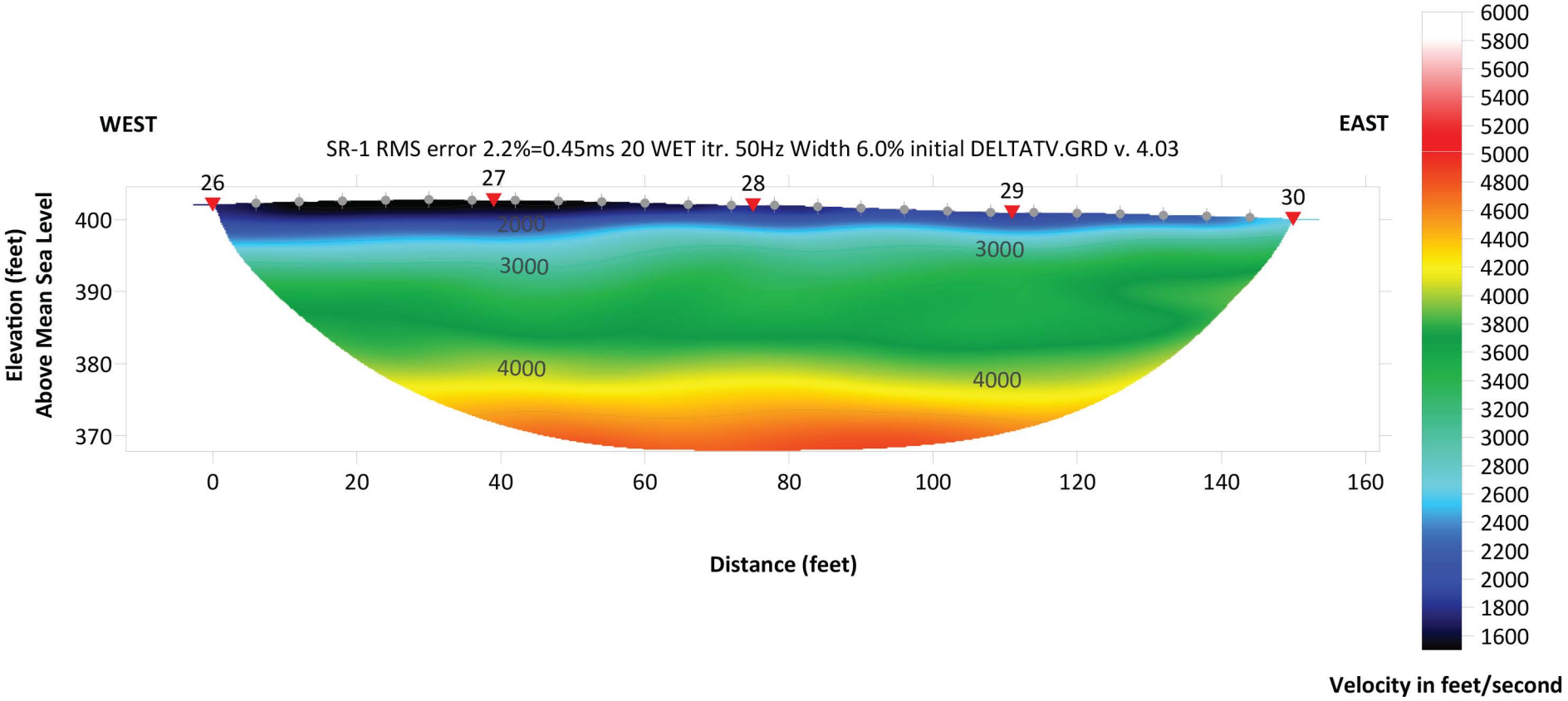
50' 0 25' 50'

1 inch = 50 ft.

UES	EXPLORATION LOCATION MAP MIRAMAR COLLEGE AVIATION INSTRUCTIONAL CENTER 3750 JOHN J. MONTGOMERY DRIVE SAN DIEGO, CALIFORNIA	UES JOB NO: A26165.00082 SCALE: 1" ~ 50' DATE: 6/26 FIGURE: 2

S:\Projects\A26165 Projects 2026\GEO\A26165.00082.000 Miramar College Aviation Bldg\DWG\Figure 2 (Exploration Map) 11x17.dwg

SR-1



UES

SEISMIC REFRACTION TOMOGRAPHY: SR-1
MIRAMAR COLLEGE AVIATION BUILDING
3750 JOHN J. MONTGOMERY DRIVE
SAN DIEGO, CALIFORNIA

UES JOB NO:	A26165.00082
SCALE:	Scale Provided
DATE:	5/26
FIGURE:	2a



EXPLANATION

Qvop8	QUATERNARY VERY OLD PARALIC DEPOSITS UNIT 8
Qvop8a	QUATERNARY VERY OLD PARALIC DEPOSITS UNIT 8A
Tmv	TERTIARY MISSION VALLEY FORMATION

UES

GEOLOGIC MAP

MIRAMAR COLLEGE AVIATION INSTRUCTIONAL CENTER
3750 JOHN J. MONTGOMERY DRIVE
SAN DIEGO, CALIFORNIA

UES JOB NO:	A26165.00082
SCALE:	No Scale
DATE:	6/26
FIGURE:	3

S:\Projects\A26165 Projects 2026\GEO\A26165.00082.000 Miramar College Aviation Bldg\DWG\Figure 3 (Geo Map).dwg

LEGEND

12 0 6 12

1 inch = 12 mi.

HISTORIC FAULT DISPLACEMENT (LAST 200 YEARS)

HOLOCENE FAULT DISPLACEMENT (DURING PAST 11,700 YEARS)

LATE QUATERNARY FAULT DISPLACMENT (DURING PAST 700,000 YEARS)

QUATERNARY FAULT DISPLACEMENT (AGE UNDIFFERENTIATED)

PREQUATERNARY FAULT DISPLACEMENT (OLDER THAN 1.6 MILLION YEARS)

PERIOD	1800-1868	1869-1931	1932-2010
MAGNITUDE ≥ 7.0			
6.5-6.9			
5.5-5.9			
5.0-5.4			

40 LAST TWO DIGITS OF M ≥ 6.5 EARTHQUAKE YEAR

APPROXIMATE SITE LOCATION

NOTES: FAULT ACTIVITY MAP OF CALIFORNIA, 2010, CALIFORNIA GEOLOGIC DATA MAP SERIES MAP NO. 6;
EPICENTERS OF AND AREAS DAMAGED BY M≥5 CALIFORNIA EARTHQUAKES, 1800–1999 ADAPTED AFTER TOPPOZADA, BRANUM, PETERSEN, HALLSTORM, CRAMER, AND REICHLE, 2000, CDMG MAP SHEET 49
REFERENCE FOR ADDITIONAL EXPLANATION; MODIFIED WITH CISN AND USGS SEISMIC MAPS

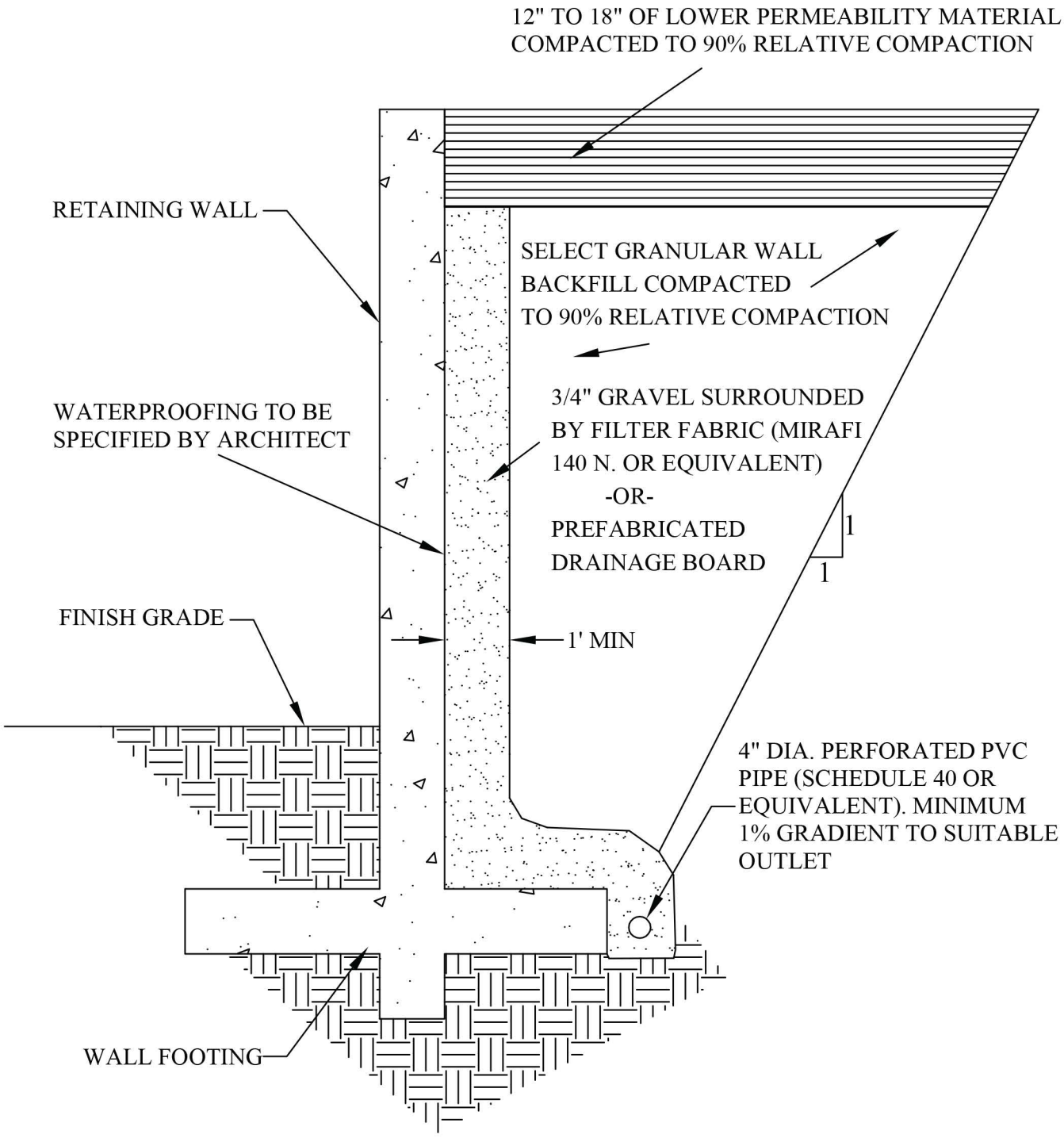
UES

REGIONAL FAULT AND SEISMICITY MAP

MIRAMAR COLLEGE AVIATION INSTUCTIONAL CENTER
3750 JOHN J. MONTGOMERY DRIVE
SAN DIEGO, CALIFORNIA

UES JOB NO:	
A26165.00082	
SCALE: 1 inch = 12 miles	
DATE: 6/26	FIGURE: 4

S:\Projects\A26165 Projects 2026\GEO\A26165.00082.000 Miramar College Aviation Bldg\DWG\Figure 4 (Regional Fault).dwg



*CONCEPTUAL DRAWING

UES™	CONCEPTUAL RETAINING WALL DRAINAGE DETAIL MIRAMAR COLLEGE AVIATION INSTRUCTIONAL CENTER 3750 JOHN J. MONTGOMERY SAN DIEGO, CALIFORNIA	SCALE: NO SCALE	DATE: 6/26
		UES JOB NO.: A26165.00082	FIGURE: 5

APPENDIX A

REFERENCES

REFERENCES

1. American Society for Civil Engineers, 2022, “Minimum Design Loads for Buildings and Other Structures,” ASCE/SEI 7-22.

2. ASTM, 2002, “Test Method for Laboratory Compaction Characteristics of Soil Using Modified Effort,” Volume 04.08.

3. California Building Code, 2022, “California Code of Regulations, Title 24, Part 2, Volume 2 of 2,” California Building Standards Commission, published by ICBO, June.

4. California Division of Mines and Geology, CD 2000-003 “Digital Images of Official Maps of Alquist-Priolo Earthquake Fault Zones of California, Southern Region,” compiled by Martin and Ross.

5. California Geological Survey, 2022, “Tsunami Hazard Area Map,” Department of Conservation.

6. City of San Diego, 2008, “Seismic Safety Study: Geologic Hazards and Faults,” Development Services Department, Grid Tile 2, dated April 3.

7. FEMA, 2012, “FEMA Flood Map Service Center,” Department of Homeland Security, Map No. 06073C2166G, dated May 16.

8. Hart, Earl W., Revised 2018, “Fault-Rupture Hazard Zones in California, Alquist Priolo, Special Studies Zones Act of 1972,” California Division of Mines and Geology, Special Publication 42.

9. Jennings, Charles W., 1994, “Fault Activity Map of California and Adjacent Areas” with Locations and Ages of Recent Volcanic Eruptions.

10. Kennedy, M.P., and Tan, S.S., 2008, “Geologic Map of the San Diego 30’ x 60’ Quadrangle, California,” California Geological Survey, Regional Geologic Map RGM-3.

11. SEAOC, Blue Book-Seismic Design Recommendations, “Seismically Induced Lateral Earth Pressures on Retaining Structures and Basement Walls,” Article 09.10.010, October 2013.

12. Tan, S. S., and Giffen, D. G., 2007, “Landslide Hazards in the Southern Part of the San Diego Metropolitan Area, San Diego County, California, Relative Landslide Susceptibility and Landslide Distribution Map, La Jolla Quadrangle,” Map No. 33, Plate 33A.

13. UES Professional Solutions, Inc., 2026, Preliminary Geotechnical Recommendations, Proposed Miramar College Aviation Instructional Center, 3750 John J. Montgomery Dr., San Diego, California 92123, UES Job No.: A26165.00082, Dated February 27, 2026.

14. United States Geological Services (USGS) Seismic Deaggregation Unified Hazard Tool, 2014 (Update) (v4.2.0), https://earthquake.usgs.gov /hazards/interactive/

15. Wood, J.H. 1973, Earthquake-Induced Soil Pressures on Structures, Report EERL 73-05. Pasadena: California Institute of Technology.

APPENDIX B

FIELD EXPLORATION METHODS AND LOGS

Sampling			Water Level		Field Tests	
	SPT or SS	Standard Penetration Test or Split Spoon		Water During Drilling	N or SPT	Standard Penetration Test
	MC	Modified California Sampler		Water Level After a Specific Time Period	PP	Pocket Penetrometer (in tsf)
	ST	Shelby Tube Sampler		Water Level After a Specific Time Period	DCP	Dynamic Cone Penetrometer
	AS	Auger Sample		Stabilized	T	Torvane (in tsf)
	BS	Bulk Sample	Water levels indicated on the soil boring logs are the levels measured in the borehole at the times indicated. Groundwater level variations will occur over time. In low permeability soils, accurate determination of groundwater levels is not possible with short term water level observations.		UC	Unconfined Compressive Strength
	TCP	Texas Cone Penetrometer			PID	Photo-Ionization Detector
	Other	Other sampler as noted			OVA	Organic Vapor Analyzer

CONSISTENCY & RELATIVE DENSITY

Consistency of Fine Grained Soils (Silts & Clays)			Relative Density of Coarse Grained Soils (Gravels & Sands)	
Consistency	Standard Penetration or N-Value (bpf)	Unconfined Compressive Strength Qu (tsf)	Relative Density	Standard Penetration or N-Value (bpf)
Very soft	0 to 2	Less than ¼	Very Loose	0 to 4
Soft	2 to 4	¼ to ½		
Firm	4 to 8	½ to 1	Loose	4 to 10
Stiff	8 to 15	1 to 2		
Very Stiff	15 to 30	2 to 4	Medium Dense	10 to 30
Hard	30 to 50	Over 4	Dense	30 to 50
Very Hard	Over 50		Very Dense	Over 50

Notes

- This Geotechnical Exploration Log Symbols & References sheet, along with the applicable report are considered an integral part of the exploration logs. All data, information and interpretations within the logs are subject to explanations and limitations stated within the applicable report.
- Lines separating the strata or soil descriptions on the logs represent approximate boundaries only.
- No warranty is provided regarding the continuity of soil or rock conditions between individual sample locations and depths.
- The exploration logs represent general soil and/or rock conditions observed at the point of exploration on the date indicated.
- When sampler is not able to advance at least 6-inches, then 50/X indicates number of blows require to drive the identified sampler X-inches, with 50 blows of a 140 pound hammer falling 30-inches, unless otherwise noted.

Soil Descriptions

Soil descriptions on the exploration logs are in general accordance with the Unified Soil Classification System (USCS). ASTM D2488 "Description and Identification of Soils (Visual-Manual Procedure)" is used as the initial basis. When sufficient laboratory data exists, descriptions are modified based on ASTM D2487 "Classification of Soil for Engineering Purposes". Variations to these methods are applied because of local practice and/or professional engineering judgement.

GRAIN SIZES

BOULDERS	COBBLES	GRAVEL		SAND			SILTS and CLAYS
		COARSE	FINE	COARSE	MEDIUM	FINE	
12"	3"	¾"		#4	#10	#40	#200
CLEAR SQUARE SIEVE OPENING				U.S. STANDARD SIEVE SIZE			

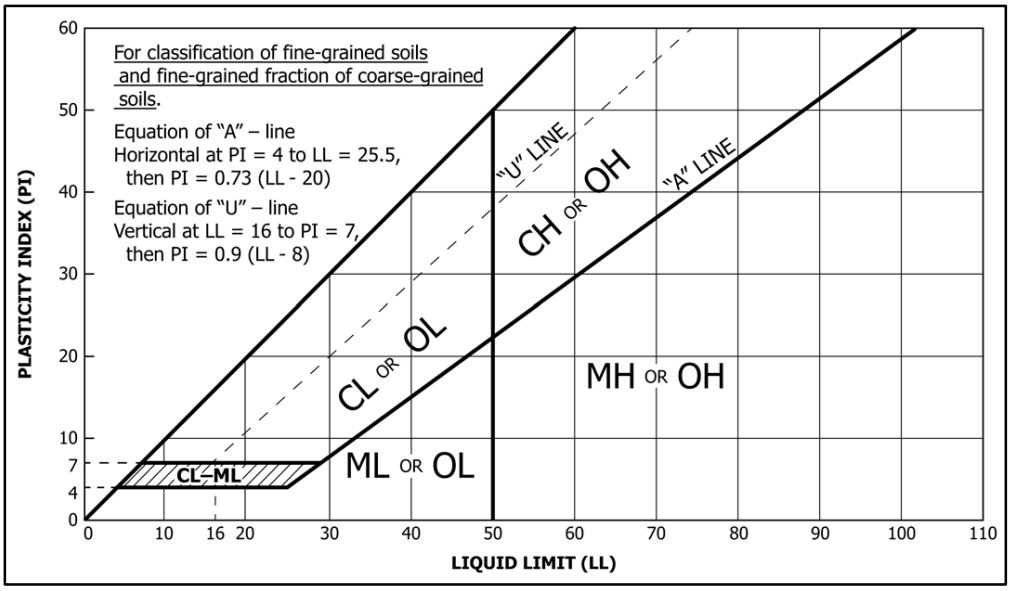
Information Relevance

Exploration locations shown within the appendix figures and as noted on the exploration logs in the form of Latitude and Longitude are approximate. The surface elevation was approximately determined from topographic maps of the area or other sources. See report and appendix for methods used to locate and determine the approximate surface elevations. The exploration logs contained within this document are intended for specific application to project described herein.

Unified Soil Classification System

Criteria for Assigning Group Symbols and Group Names Using Laboratory Tests[A]					Soil Classification	
					Group Symbol	Group Name[B]
COARSE-GRAINED SOILS: More than 50% retained on No. 200 sieve	**GRAVELs:** (> 50% of coarse fraction retained on #4 sieve)	**Clean Gravels**: less than 5% fines[C]	Cu ≥ 4 and 1 ≤ Cc ≤ 3[D]		GW	Well-graded GRAVEL[E]
			Cu < 4 and/or 1 > Cc > 3		GP	Poorly graded GRAVEL
		Gravels with Fines: more than 12% fines	Fines classify as ML or MH		GM	Silty GRAVEL
			Fines classify as CL or CH		GC	Clayey GRAVEL
	SANDs: (50% or more of coarse fraction passes # 4 sieve)	**Clean Sands:** less than 5% fines	Cu ≥ 6 and 1 ≤ Cc ≤ 3		SW	Well-graded SAND
			Cu < 6 and/or 1 > Cc > 3		SP	Poorly graded SAND
		Sands with Fines: More than 12% fines	Fines classify as ML or MH		SM	Silty SAND
			Fines classify as CL or CH		SC	Clayey SAND
FINE-GRAINED SOILS: 50% or more passes the No. 200 sieve	**SILTs & CLAYs** Liquid limit less than 50	Inorganic	PI > 7 & plots on/or above "A" line		CL	Lean CLAY
			PI < 4 or plots below "A" line		ML	SILT
		Organic	LL – oven dried / LL – not dried	< 0.75	OL	Organic Clay[K, L, M, N] / Organic Silt[K, L, M, O]
	SILTs & CLAYs Liquid limit 50 or more	Inorganic	PI plots above "A" line		CH	Fat CLAY
			PI plots below "A" line		MH	Elastic SILT
		Organic	LL – oven dried / LL – not dried	< 0.75	OH	Organic Clay[K, L, M, N] / Organic Silt[K, L, M, O]
HIGHLY ORGANIC SOILS:		Primarily organic matter, dark in color, and organic odor			PT	Peat
FILL		Artificially placed fill materials			FILL	Fill

[A]Based on the material passing the 3-in. (75-mm) sieve.
[B]If field sample contained cobbles or boulders, or both, add "with cobbles or boulders, or both" to group name.
[C]Gravels with 5 to 12 % fines require dual symbols: GW-GM well-graded gravel with silt, GW-GC well-graded gravel with clay, GP-GM poorly graded gravel with silt, GP-GC poorly graded gravel with clay
[D]$CCCC = \frac{DD_{60}}{DD_{10}}$ $\quad CCCC = \frac{(DD_{30})}{DD_{10} XXDD_{60}}$
[E]If soil contains ≥15 % sand, add "with sand" to group name.
[F]If fines classify as CL-ML, use dual symbol GC-GM, or SC-SM.
[G]If fines are organic, add "with organic fines" to group name.
[H]Sands with 5 to 12 % fines require dual symbols: SW-SM well-graded sand with silt, SW-SC well-graded sand with clay, SP-SM poorly graded sand with silt,SP-SC poorly graded sand with clay
[I]If soil contains $15 % gravel, add "with gravel" to group name.
[J]If Atterberg limits plot in hatched area, soil is a CL-ML, silty clay.
[K]If soil contains 15 to <30 % plus No. 200, add "with sand" or "with gravel," whichever is predominant.
[L]If soil contains ≥30 % plus No. 200, predominantly sand, add "sandy" to group name.
[M]If soil contains ≥30 % plus No. 200, predominantly gravel, add "gravelly" to group name.
[N]PI ≥ 4 and plots on or above "A" line.
[O]PI < 4 or plots below "A" line.
[P]PI plots on or above "A" line.
[Q]PI plots below "A" line.



ADDITIONAL TESTS		
(OTHER THAN TEST PIT AND BORING LOG COLUMN HEADINGS)		
MAX- Maximum Dry Density	PM- Permeability	PP- Pocket Penetrometer
GS- Grain Size Distribution	SG- Specific Gravity	WA- Wash Analysis
SE- Sand Equivalent	HA- Hydrometer Analysis	DS- Direct Shear
EI- Expansion Index	AL- Atterberg Limits	UC- Unconfined Compression
CHM- Sulfate and Chloride Content,	RV- R-Value	MD- Moisture/Density
pH, Resistivity	CN- Consolidation	M- Moisture
COR - Corrosivity	CP- Collapse Potential	SC- Swell Compression
SD- Sample Disturbed	HC- Hydrocollapse	OI- Organic Impurities
	REM- Remolded	

Boring: B-1

PROJECT Miramar College Aviation Instructional Center Building

PROJECT NUMBER A26165.00082 | **SURFACE ELEVATION** 406.4'

DATES DRILLED - - 06/03/2026 | **COORDINATES** 32.813069, -117.149918

DRILLING CONTRACTOR Baja Exploration | **RIG TYPE** CME-85

METHOD Auger | **HAMMER TYPE** Auto | **HAMMER DROP** 30 inch

LOGGED BY DD | **HAMMER WEIGHT** 140 lbs | **HAMMER EFF.** 60%

Elevation (ft)	Depth (ft)	Sample Type	Blow Counts (N Value)	Recovery Length (in)	Graphic Log	USCS	Material Description	Dry Density (PCF)	Moisture Content (%)	% Fines	Liquid Limit	Plasticity Index	Notes and Other Tests
						SC	**PREVIOUSLY PLACED FILL** (**Qppf**): loose to medium dense, dry, brown, fine to medium grained Clayey **SAND**			50.0			
							QUATERNARY VERY OLD PARALIC DEPOSITS (**Qvop**): dense to very dense, dry, reddish brown, fine to medium grained Clayey **SAND**						EI, GS
	5		6 50/6"			CL	Very dense, dry to slightly moist, mottled gray and reddish brown with orange oxidation, fine to medium grained Sandy **CLAY**; with high gravel content						
	10		28 50/5"			SM	Very dense, dry, grayish brown with reddish brown, fine grained Silty **SAND**; with gravels						
	15		26 50/5"			CL	Hard, dry to slightly moist, reddish brown, Sandy **CLAY**; with gravels						
			50/3"			SM	Very dense, dry, reddish brown and grayish brown, fine to medium grained Silty **SAND**; with gravels						

Total Depth = 19ft (refusal on very dense materials)
Groundwater not encountered
Backfilled 6/3/2026

Boring: B-2

PROJECT Miramar College Aviation Instructional Center Building

PROJECT NUMBER A26165.00082 | **SURFACE ELEVATION** 406.7'

DATES DRILLED - - 06/03/2026 | **COORDINATES** 32.813014, -117.149795

DRILLING CONTRACTOR Baja Exploration | **RIG TYPE** CME-85

METHOD Auger | **HAMMER TYPE** Auto | **HAMMER DROP** 30 inch

LOGGED BY DD | **HAMMER WEIGHT** 140 lbs | **HAMMER EFF.** 60%

Elevation (ft)	Depth (ft)	Sample Type	Blow Counts (N Value)	Recovery Length (in)	Graphic Log	USCS	Material Description	Dry Density (PCF)	Moisture Content (%)	% Fines	Liquid Limit	Plasticity Index	Notes and Other Tests
	0					SC	**PREVIOUSLY PLACED FILL** (**Qppf**): dense, dry, reddish brown, fine to medium grained Clayey **SAND**						
							QUATERNARY VERY OLD PARALIC DEPOSITS (**Qvop**): very dense, dry, reddish brown, fine to medium grained Clayey **SAND**						
			22 50/5"				Becomes mottled reddish brown, grayish brown, and orangish brown						
	5		50/6"				gravels present high gravel content						
	10		17 18 20										
	15		50/2"			SM	Dense, dry to slightly moist, grayish brown, fine grained Silty **SAND**; some oxidation and trace gravels.						
			27 17 24				Becomes light gray with no gravels						
	20						Total Depth - 20.0 ft bgs (non-refusal) Groundwater not encountered Backfilled 6/3/2026						

Boring: B-3

PROJECT Miramar College Aviation Instructional Center Building

PROJECT NUMBER A26165.00082 **SURFACE ELEVATION** 406.8'

DATES DRILLED - - 06/03/2026 **COORDINATES** 32.812868, -117.149669

DRILLING CONTRACTOR Baja Exploration **RIG TYPE** CME-85

METHOD Auger **HAMMER TYPE** Auto **HAMMER DROP** 30 inch

LOGGED BY DD **HAMMER WEIGHT** 140 lbs **HAMMER EFF.** 60%

Elevation (ft)	Depth (ft)	Sample Type	Blow Counts (N Value)	Recovery Length (in)	Graphic Log	USCS	Material Description	Dry Density (PCF)	Moisture Content (%)	% Fines	Liquid Limit	Plasticity Index	Notes and Other Tests
						SM	**ASPHALT**; ~ 2 inches **PREVIOUSLY PLACED FILL** (**Qppf**): medium dense to dense, dry, orangish brown, fine grained Silty **SAND**; trace gravels			24.0			GS, CHM
	5		17 50/5"				**QUATERNARY VERY OLD PARALIC DEPOSITS** (**Qvop**): very dense, dry, orangish brown, fine to coarse grained Silty **SAND**; with gravels Becomes reddish brown						
	10		50/6"										
	15		22 50/4"										
			17 50/3"										

Total Depth = 19 ft bgs (refusal on very dense materials)
Groundwater not encountered
Backfilled 6/3/2026

Boring: B-4

PROJECT Miramar College Aviation Instructional Center Building

PROJECT NUMBER A26165.00082 | **SURFACE ELEVATION** 405.8'

DATES DRILLED - - 06/03/2026 | **COORDINATES** 32.812791, -117.149909

DRILLING CONTRACTOR Baja Exploration | **RIG TYPE** CME-85

METHOD Auger | **HAMMER TYPE** Auto | **HAMMER DROP** 30 inch

LOGGED BY DD | **HAMMER WEIGHT** 140 lbs | **HAMMER EFF.** 60%

Elevation (ft)	Depth (ft)	Sample Type	Blow Counts (N Value)	Recovery Length (in)	Graphic Log	USCS	Material Description	Dry Density (PCF)	Moisture Content (%)	% Fines	Liquid Limit	Plasticity Index	Notes and Other Tests
	5		30 50/2"			SM	**PREVIOUSLY PLACED FILL** (**Qppf**): medium dense to dense, dry, dark brown, fine grained Silty **SAND**						
	10		50/5" 21 21 22				**QUATERNARY VERY OLD PARALIC DEPOSITS** (**Qvop**): very dense, dry, orangish brown, fine to medium grained Silty **SAND**; with gravels Becomes dense, dry, mottled orangish brown and grayish brown						
	15		50/1"				Becomes very dense						
			50/6"										

Total Depth = 18.5 ft bgs (refusal on very dense materials)
Groundwater not encountered
Backfilled 6/3/2026

Boring: B-5

PROJECT Miramar College Aviation Instructional Center Building

PROJECT NUMBER A26165.00082 **SURFACE ELEVATION** 403.2'

DATES DRILLED - - 06/03/2026 **COORDINATES** 32.812426, -117.149909

DRILLING CONTRACTOR Baja Exploration **RIG TYPE** CME-85

METHOD Auger **HAMMER TYPE** Auto **HAMMER DROP** 30 inch

LOGGED BY DD **HAMMER WEIGHT** 140 lbs **HAMMER EFF.** 60%

Elevation (ft)	Depth (ft)	Sample Type	Blow Counts (N Value)	Recovery Length (in)	Graphic Log	USCS	Material Description	Dry Density (PCF)	Moisture Content (%)	% Fines	Liquid Limit	Plasticity Index	Notes and Other Tests
						SM	**PREVIOUSLY PLACED FILL** (**Qppf**): medium dense, dry, light brown, fine to coarse grained Silty **SAND**						RV (1/2)
	5		50/6"				**QUATERNARY VERY OLD PARALIC DEPOSITS** (**Qvop**): very dense, dry, light brown, fine to medium grained Silty **SAND** Becomes reddish brown						

Total Depth = 5.5 ft bgs (non-refusal)
Groundwater not encountered
Backfilled 6/3/2026

Boring: B-6

PROJECT Miramar College Aviation Instructional Center Building

PROJECT NUMBER A26165.00082 **SURFACE ELEVATION** 404.8'

DATES DRILLED - - 06/03/2026 **COORDINATES** 32.81236, -117.149651

DRILLING CONTRACTOR Baja Exploration **RIG TYPE** CME-85

METHOD Auger **HAMMER TYPE** Auto **HAMMER DROP** 30 inch

LOGGED BY DD **HAMMER WEIGHT** 140 lbs **HAMMER EFF.** 60%

Elevation (ft)	Depth (ft)	Sample Type	Blow Counts (N Value)	Recovery Length (in)	Graphic Log	USCS	Material Description	Dry Density (PCF)	Moisture Content (%)	% Fines	Liquid Limit	Plasticity Index	Notes and Other Tests
			10 11 13			SM	**PREVIOUSLY PLACED FILL** (**Qppf**): medium dense, dry, brown to reddish brown, Silty **SAND**						RV (2/2)
	5		50/6" 50/4"				**QUATERNARY VERY OLD PARALIC DEPOSITS** (**Qvop**): very dense, dry, light orangish brown to redish brown, Silty **SAND**						
			31 36 50/5"										

Total Depth = 9.5 ft bgs (non-refusal)
Groundwater not encountered
Backfilled 6/3/2026

Boring: P-1

PROJECT Miramar College Aviation Instructional Center Building

PROJECT NUMBER A26165.00082 **SURFACE ELEVATION** 404.3'

DATES DRILLED - - 06/03/2026 **COORDINATES** 32.812784, -117.150035

DRILLING CONTRACTOR Baja Exploration **RIG TYPE** CME-85

METHOD Auger **HAMMER TYPE** Auto **HAMMER DROP** 30 inch

LOGGED BY DD **HAMMER WEIGHT** 140 lbs **HAMMER EFF.** 60%

Elevation (ft)	Depth (ft)	Sample Type	Blow Counts (N Value)	Recovery Length (in)	Graphic Log	USCS	Material Description	Dry Density (PCF)	Moisture Content (%)	% Fines	Liquid Limit	Plasticity Index	Notes and Other Tests
	0					SM	**PREVIOUSLY PLACED FILL** (**Qppf**): dry, orangish brown, fine grained Silty **SAND** Becomes dark brown						
							QUATERNARY VERY OLD PARALIC DEPOSITS (**Qvop**): dry, orangish brown, fine grained Silty **SAND**						
	5						Total Depth = 5.0 ft bgs (non-refusal) Groundwater not encountered Backfilled 6/4/2026						

Boring: P-2

PROJECT Miramar College Aviation Instructional Center Building

PROJECT NUMBER A26165.00082 **SURFACE ELEVATION** 404.5'

DATES DRILLED - - 06/03/2026 **COORDINATES** 32.812768, -117.15001

DRILLING CONTRACTOR Baja Exploration **RIG TYPE** CME-85

METHOD Auger **HAMMER TYPE** Auto **HAMMER DROP** 30 inch

LOGGED BY DD **HAMMER WEIGHT** 140 lbs **HAMMER EFF.** 60%

Elevation (ft)	Depth (ft)	Sample Type	Blow Counts (N Value)	Recovery Length (in)	Graphic Log	USCS	Material Description	Dry Density (PCF)	Moisture Content (%)	% Fines	Liquid Limit	Plasticity Index	Notes and Other Tests
	0					SM	**PREVIOUSLY PLACED FILL** (**Qppf**): dry, orangish brown to brown, fine grained **SAND** Becomes dark brown						
							QUATERNARY VERY OLD PARALIC DEPOSITS (**Qvop**): dry, orangish brown, fine grained Silty **SAND**						
	5						Total Depth = 5 ft bgs (non-refusal) Groundwater not encountered Backfilled 6/4/2026						

APPENDIX C

LABORATORY METHODS AND RESULTS

LABORATORY TEST METHODS

Laboratory tests were performed on selected soil samples to evaluate their engineering properties. Tests were performed following test methods of the American Society for Testing and Materials, or other accepted standards. The following presents a brief description of the various test methods used. Laboratory results are presented in the following section of this Appendix.

Classification (ASTM D2487)

Earth materials encountered were visually and texturally classified in accordance with the Unified Soil Classification System (USCS/ASTM D2487) and ASTM D2488. Material classifications are indicated on the logs of the exploratory borings presented in Appendix B.

Particle-size Distribution Tests (ASTM D6913)

Particle-size distribution (gradation) testing was performed on selected samples of the materials encountered in general accordance with the latest version of the ASTM D6913 test method. The test results were utilized in evaluating the soil classifications in accordance with the Unified Soil Classification System and to evaluate the geotechnical engineering characteristics of the tested material. The test results are plotted on grain-size distribution graphs and are presented in the following section of this appendix.

Expansion Index Test (ASTM D4829)

Expansion index testing was performed on selected samples of the earth materials encountered in general accordance with the ASTM D4829 test method. The test determines the expansion potential of the materials encountered. The test results are presented in the following section of this appendix.

Resistance "R" Value Test (CTM 301/ ASTM D2844)

R-Value testing was performed on selected samples of the earth materials encountered in general accordance with the California Test Method 301/ ASTM D2844. The test results are presented in the following section of this appendix.

Soil Corrosivity Tests

The water-soluble sulfate and chloride content, the resistivity, and pH of selected samples were performed by a third-party laboratory in general accordance with California Test Methods. The tests results are useful in the assessment of the degree of corrosivity of the earth materials encountered with regard to concrete and normal grade steel.

EXPANSION INDEX

(ASTM D4829)

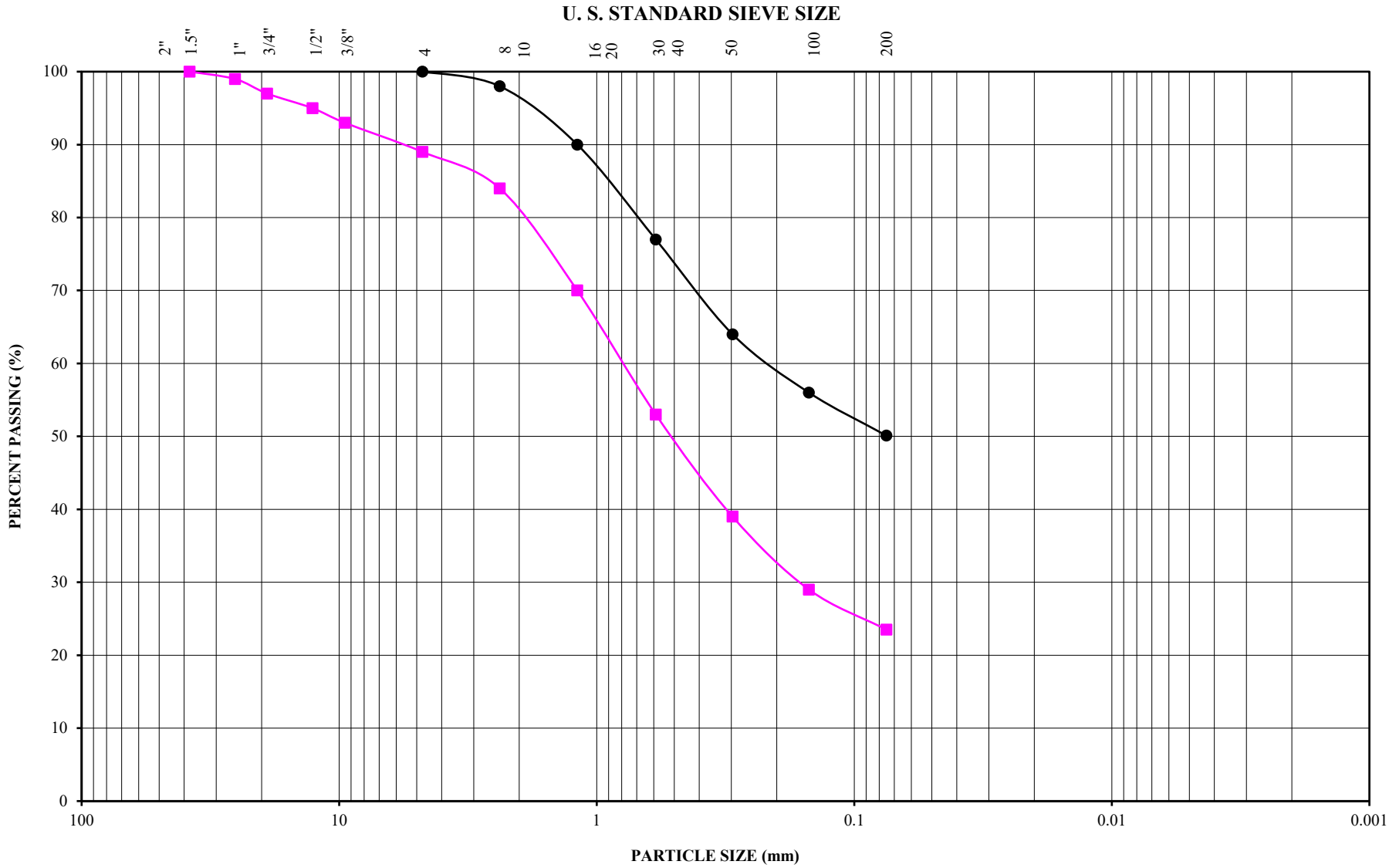
Sample Location / Depth (feet)	Expansion Index	Expansion Potential
B1-@05	16	Very Low
B-1@5	17	Very Low

R-VALUE
(CTM 301/ASTM D2844)

Sample Location / Depth	Material Type (USCS)	R-Value
B-7&B-8 @ 0-5 Combined	Brown SM	21

SOIL CORROSIVITY
(CTM 417, CTM 422 and CTM 643)

Sample Location / Depth	Material Type (USCS)	pH	Minimum Resistivity (Ohm-cm)	Water Soluble Sulfates (ppm)	Water Soluble Chlorides (ppm)
B-3@0-5’	SM	4.93	12500	30.5	6.7



PARTICLE SIZE ANALYSIS

Sample Designation	Sample Depth (feet)	Symbol	Liquid Limit (%)	Plasticity Index	Classification
B-1	0-5	●	--	--	SC
B-3	0-5	■	--	--	SM
UES JOB NUMBER:		A26165.00082		FIGURE:	C-1

APPENDIX D

STANDARD SPECIFICATIONS FOR GRADING

Section 1 - General

UES Professional Solutions, Inc. presents the following standard recommendations for grading and other associated operations on construction projects. These guidelines should be considered a portion of the project specifications. Recommendations contained in the body of the previously presented soils report shall supersede the recommendations and or requirements as specified herein. The project geotechnical consultant shall interpret disputes arising out of interpretation of the recommendations contained in the soils report or specifications contained herein.

Section 2 - Responsibilities of Project Personnel

The geotechnical consultant should provide observation and testing services sufficient to general conformance with project specifications and standard grading practices. The geotechnical consultant should report any deviations to the client or his authorized representative.

The Client should be chiefly responsible for all aspects of the project. He or his authorized representative has the responsibility of reviewing the findings and recommendations of the geotechnical consultant. He shall authorize or cause to have authorized the Contractor and/or other consultants to perform work and/or provide services. During grading the Client or his authorized representative should remain on-site or should remain reasonably accessible to all concerned parties in order to make decisions necessary to maintain the flow of the project.

The Contractor is responsible for the safety of the project and satisfactory completion of all grading and other associated operations on construction projects, including, but not limited to, earth work in accordance with the project plans, specifications and controlling agency requirements.

Section 3 - Preconstruction Meeting

A preconstruction site meeting should be arranged by the owner and/or client and should include the grading contractor, design engineer, geotechnical consultant, owner's representative and representatives of the appropriate governing authorities.

Section 4 - Site Preparation

The client or contractor should obtain the required approvals from the controlling authorities for the project prior, during and/or after demolition, site preparation and removals, etc. The appropriate approvals should be obtained prior to proceeding with grading operations.

Clearing and grubbing should consist of the removal of vegetation such as brush, grass, woods, stumps, trees, root of trees and otherwise deleterious natural materials from the areas to be graded. Clearing and grubbing should extend to the outside of all proposed excavation and fill areas.

Demolition should include removal of buildings, structures, foundations, reservoirs, utilities (including underground pipelines, septic tanks, leach fields, seepage pits, cisterns, mining shafts, tunnels, etc.) and other man-made surface and subsurface improvements from the areas to be graded. Demolition of utilities should include proper capping and/or rerouting pipelines at the project perimeter and cutoff and capping of wells in accordance with the requirements of the governing authorities and the recommendations of the geotechnical consultant at the time of demolition.

Trees, plants or man-made improvements not planned to be removed or demolished should be protected by the contractor from damage or injury.

Debris generated during clearing, grubbing and/or demolition operations should be wasted from areas to be graded and disposed off-site. Clearing, grubbing and demolition operations should be performed under the observation of the geotechnical consultant.

Section 5 - Site Protection

Protection of the site during the period of grading should be the responsibility of the contractor. Unless other provisions are made in writing and agreed upon among the concerned parties, completion of a portion of the project should not be considered to preclude that portion or adjacent areas from the requirements for site protection until such time as the entire project is complete as identified by the geotechnical consultant, the client and the regulating agencies.

Precautions should be taken during the performance of site clearing, excavations and grading to protect the work site from flooding, ponding or inundation by poor or improper surface drainage. Temporary provisions should be made during the rainy season to adequately direct surface drainage away from and off the work site. Where low areas cannot be avoided, pumps should be kept on hand to continually remove water during periods of rainfall.

Rain related damage should be considered to include, but may not be limited to, erosion, silting, saturation, swelling, structural distress and other adverse conditions as determined by the geotechnical consultant. Soil adversely affected should be classified as unsuitable materials and should be subject to overexcavation and replacement with compacted fill or other remedial grading as recommended by the geotechnical consultant.

The contractor should be responsible for the stability of all temporary excavations. Recommendations by the geotechnical consultant pertaining to temporary excavations (e.g., backcuts) are made in consideration of stability of the completed project and, therefore, should not be considered to preclude the responsibilities of the contractor. Recommendations by the geotechnical consultant should not be considered to preclude requirements that are more restrictive by the regulating agencies. The contractor should provide during periods of extensive rainfall plastic sheeting to prevent unprotected slopes from becoming saturated and unstable. When deemed appropriate by the geotechnical consultant or governing agencies the contractor shall install checkdams, desilting basins, sand bags or other drainage control measures.

In relatively level areas and/or slope areas, where saturated soil and/or erosion gullies exist to depths of greater than 1.0 foot; they should be overexcavated and replaced as compacted fill in accordance with the applicable specifications. Where affected materials exist to depths of 1.0 foot or less below proposed finished grade, remedial grading by moisture conditioning in-place, followed by thorough recompaction in accordance with the applicable grading guidelines herein may be attempted. If the desired results are not achieved, all affected materials should be overexcavated and replaced as compacted fill in accordance with the slope repair recommendations herein. If field conditions dictate, the geotechnical consultant may recommend other slope repair procedures.

Section 6 - Excavations

6.1 Unsuitable Materials

Materials that are unsuitable should be excavated under observation and recommendations of the geotechnical consultant. Unsuitable materials include, but may not be limited to, dry, loose, soft, wet, organic compressible natural soils and fractured, weathered, soft bedrock and nonengineered or otherwise deleterious fill materials.

Material identified by the geotechnical consultant as unsatisfactory due to its moisture conditions should be overexcavated; moisture conditioned as needed, to a uniform at or above optimum moisture condition before placement as compacted fill.

If during the course of grading adverse geotechnical conditions are exposed which were not anticipated in the preliminary soil report as determined by the geotechnical consultant additional exploration, analysis, and treatment of these problems may be recommended.

6.2 Cut Slopes

Unless otherwise recommended by the geotechnical consultant and approved by the regulating agencies, permanent cut slopes should not be steeper than 2:1 (horizontal: vertical).

The geotechnical consultant should observe cut slope excavation and if these excavations expose loose cohesionless, significantly fractured or otherwise unsuitable material, the materials should be overexcavated and replaced with a compacted stabilization fill. If encountered specific cross section details should be obtained from the Geotechnical Consultant.

When extensive cut slopes are excavated or these cut slopes are made in the direction of the prevailing drainage, a non-erodible diversion swale (brow ditch) should be provided at the top of the slope.

6.3 Pad Areas

All lot pad areas, including side yard terrace containing both cut and fill materials, transitions, located less than 3 feet deep should be overexcavated to a depth of 3 feet and replaced with a uniform compacted fill blanket of 3 feet. Actual depth of overexcavation may vary and should be delineated by the geotechnical consultant during grading, especially where deep or drastic transitions are present.

For pad areas created above cut or natural slopes, positive drainage should be established away from the top-of-slope. This may be accomplished utilizing a berm drainage swale and/or an appropriate pad gradient. A gradient in soil areas away from the top-of-slopes of 2 percent or greater is recommended.

Section 7 - Compacted Fill

All fill materials should have fill quality, placement, conditioning and compaction as specified below or as approved by the geotechnical consultant.

7.1 Fill Material Quality

Excavated on-site or import materials which are acceptable to the geotechnical consultant may be utilized as compacted fill, provided trash, vegetation and other deleterious materials are removed prior to placement. All import materials anticipated for use on-site should be sampled tested and approved prior to and placement is in conformance with the requirements outlined.

Rocks 12 inches in maximum and smaller may be utilized within compacted fill provided sufficient fill material is placed and thoroughly compacted over and around all rock to effectively fill rock voids. The amount of rock should not exceed 40 percent by dry weight passing the 3/4-inch sieve. The geotechnical consultant may vary those requirements as field conditions dictate.

Where rocks greater than 12 inches but less than four feet of maximum dimension are generated during grading, or otherwise desired to be placed within an engineered fill, special handling in accordance with the recommendations below. Rocks greater than four feet should be broken down or disposed off-site.

7.2 Placement of Fill

Prior to placement of fill material, the geotechnical consultant should observe and approve the area to receive fill. After observation and approval, the exposed ground surface should be scarified to a depth of 6 to 8 inches. The scarified material should be conditioned (i.e. moisture added or air dried by continued discing) to achieve a moisture content at or slightly above optimum moisture conditions and compacted to a minimum of 90 percent of the maximum density or as otherwise recommended in the soils report or by appropriate government agencies.

Compacted fill should then be placed in thin horizontal lifts not exceeding eight inches in loose thickness prior to compaction. Each lift should be moisture conditioned as needed, thoroughly blended to achieve a consistent moisture content at or slightly above optimum and thoroughly compacted by mechanical methods to a minimum of 90 percent of laboratory maximum dry density. Each lift should be treated in a like manner until the desired finished grades are achieved.

The contractor should have suitable and sufficient mechanical compaction equipment and watering apparatus on the job site to handle the amount of fill being placed in consideration of moisture retention properties of the materials and weather conditions.

When placing fill in horizontal lifts adjacent to areas sloping steeper than 5:1 (horizontal: vertical), horizontal keys and vertical benches should be excavated into the adjacent slope area. Keying and benching should be sufficient to provide at least six-foot wide benches and a minimum of four feet of vertical bench height within the firm natural ground, firm bedrock or engineered compacted fill. No compacted fill should be placed in an area after keying and benching until the geotechnical consultant has reviewed the area. Material generated by the benching operation should be moved sufficiently away from

the bench area to allow for the recommended review of the horizontal bench prior to placement of fill.

Within a single fill area where grading procedures dictate two or more separate fills, temporary slopes (false slopes) may be created. When placing fill adjacent to a false slope, benching should be conducted in the same manner as above described. At least a 3-foot vertical bench should be established within the firm core of adjacent approved compacted fill prior to placement of additional fill. Benching should proceed in at least 3-foot vertical increments until the desired finished grades are achieved.

Prior to placement of additional compacted fill following an overnight or other grading delay, the exposed surface or previously compacted fill should be processed by scarification, moisture conditioning as needed to at or slightly above optimum moisture content, thoroughly blended and recompacted to a minimum of 90 percent of laboratory maximum dry density. Where unsuitable materials exist to depths of greater than one foot, the unsuitable materials should be over-excavated.

Following a period of flooding, rainfall or overwatering by other means, no additional fill should be placed until damage assessments have been made and remedial grading performed as described herein.

Rocks 12 inch in maximum dimension and smaller may be utilized in the compacted fill provided the fill is placed and thoroughly compacted over and around all rock. No oversize material should be used within 3 feet of finished pad grade and within 1 foot of other compacted fill areas. Rocks 12 inches up to four feet maximum dimension should be placed below the upper 10 feet of any fill and should not be closer than 15 feet to any slope face. These recommendations could vary as locations of improvements dictate. Where practical, oversized material should not be placed below areas where structures or deep utilities are proposed. Oversized material should be placed in windrows on a clean, overexcavated or unyielding compacted fill or firm natural ground surface. Select native or imported granular soil (S.E. 30 or higher) should be placed and thoroughly flooded over and around all windrowed rock, such that voids are filled. Windrows of oversized material should be staggered so those successive strata of oversized material are not in the same vertical plane.

It may be possible to dispose of individual larger rock as field conditions dictate and as recommended by the geotechnical consultant at the time of placement.

The contractor should assist the geotechnical consultant and/or his representative by digging test pits for removal determinations and/or for testing compacted fill. The contractor should provide this work at no additional cost to the owner or contractor's client.

Fill should be tested by the geotechnical consultant for compliance with the recommended relative compaction and moisture conditions. Field density testing should conform to ASTM Method of Test D 1556-00, D 2922-04. Tests should be conducted at a minimum of approximately two vertical feet or approximately 1,000 to 2,000 cubic yards of fill placed. Actual test intervals may vary as field conditions dictate. Fill found not to be in conformance with the grading recommendations should be removed or otherwise handled as recommended by the geotechnical consultant.

7.3 Fill Slopes

Unless otherwise recommended by the geotechnical consultant and approved by the regulating agencies, permanent fill slopes should not be steeper than 2:1 (horizontal: vertical).

Except as specifically recommended in these grading guidelines compacted fill slopes should be over-built two to five feet and cut back to grade, exposing the firm, compacted fill inner core. The actual amount of overbuilding may vary as field conditions dictate. If the desired results are not achieved, the existing slopes should be overexcavated and reconstructed under the guidelines of the geotechnical consultant. The degree of overbuilding shall be increased until the desired compacted slope surface condition is achieved. Care should be taken by the contractor to provide thorough mechanical compaction to the outer edge of the overbuilt slope surface.

At the discretion of the geotechnical consultant, slope face compaction may be attempted by conventional construction procedures including backrolling. The procedure must create a firmly compacted material throughout the entire depth of the slope face to the surface of the previously compacted firm fill intercore.

During grading operations, care should be taken to extend compactive effort to the outer edge of the slope. Each lift should extend horizontally to the desired finished slope surface or more as needed to ultimately established desired grades. Grade during construction should not be allowed to roll off at the edge of the slope. It may be helpful to elevate slightly the outer edge of the slope. Slough resulting from the placement of individual lifts should not be allowed to drift down over previous lifts. At intervals not

exceeding four feet in vertical slope height or the capability of available equipment, whichever is less, fill slopes should be thoroughly dozer trackrolled.

For pad areas above fill slopes, positive drainage should be established away from the top-of-slope. This may be accomplished using a berm and pad gradient of at least two percent.

Section 8 - Trench Backfill

Utility and/or other excavation of trench backfill should, unless otherwise recommended, be compacted by mechanical means. Unless otherwise recommended, the degree of compaction should be a minimum of 90 percent of the laboratory maximum density.

Within slab areas, but outside the influence of foundations, trenches up to one foot wide and two feet deep may be backfilled with sand and consolidated by jetting, flooding or by mechanical means. If on-site materials are utilized, they should be wheel-rolled, tamped or otherwise compacted to a firm condition. For minor interior trenches, density testing may be deleted or spot testing may be elected if deemed necessary, based on review of backfill operations during construction.

If utility contractors indicate that it is undesirable to use compaction equipment in close proximity to a buried conduit, the contractor may elect the utilization of light weight mechanical compaction equipment and/or shading of the conduit with clean, granular material, which should be thoroughly jetted in-place above the conduit, prior to initiating mechanical compaction procedures. Other methods of utility trench compaction may also be appropriate, upon review of the geotechnical consultant at the time of construction.

In cases where clean granular materials are proposed for use in lieu of native materials or where flooding or jetting is proposed, the procedures should be considered subject to review by the geotechnical consultant. Clean granular backfill and/or bedding are not recommended in slope areas.

Section 9 - Drainage

Where deemed appropriate by the geotechnical consultant, canyon subdrain systems should be installed in accordance with CTE's recommendations during grading.

Typical subdrains for compacted fill buttresses, slope stabilization or sidehill masses, should be installed in accordance with the specifications.

Roof, pad and slope drainage should be directed away from slopes and areas of structures to suitable disposal areas via non-erodible devices (i.e., gutters, downspouts, and concrete swales).

For drainage in extensively landscaped areas near structures, (i.e., within four feet) a minimum of 5 percent gradient away from the structure should be maintained. Pad drainage of at least 2 percent should be maintained over the remainder of the site.

Drainage patterns established at the time of fine grading should be maintained throughout the life of the project. Property owners should be made aware that altering drainage patterns could be detrimental to slope stability and foundation performance.

Section 10 - Slope Maintenance

10.1 - Landscape Plants

To enhance surficial slope stability, slope planting should be accomplished at the completion of grading. Slope planting should consist of deep-rooting vegetation requiring little watering. Plants native to the southern California area and plants relative to native plants are generally desirable. Plants native to other semi-arid and arid areas may also be appropriate. A Landscape Architect should be the best party to consult regarding actual types of plants and planting configuration.

10.2 - Irrigation

Irrigation pipes should be anchored to slope faces, not placed in trenches excavated into slope faces.

Slope irrigation should be minimized. If automatic timing devices are utilized on irrigation systems, provisions should be made for interrupting normal irrigation during periods of rainfall.

10.3 - Repair

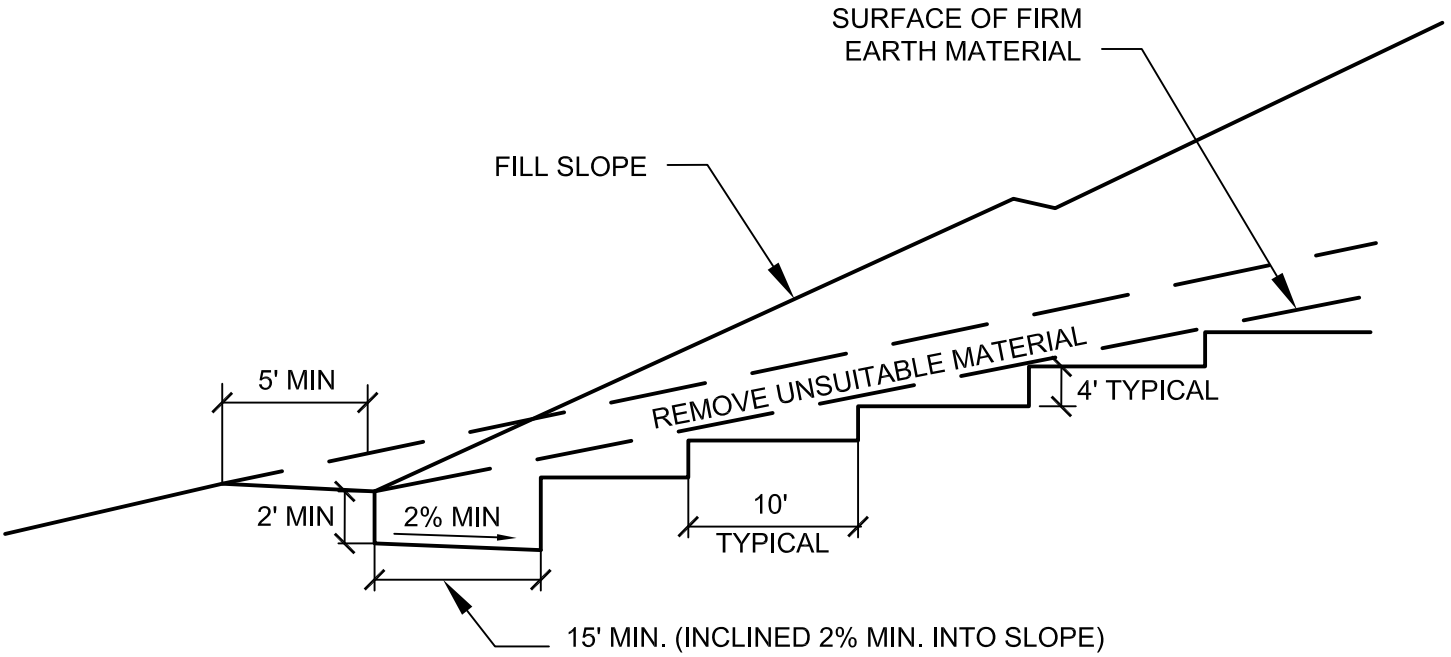
As a precautionary measure, plastic sheeting should be readily available, or kept on hand, to protect all slope areas from saturation by periods of heavy or prolonged rainfall. This measure is strongly recommended, beginning with the period prior to landscape planting.

If slope failures occur, the geotechnical consultant should be contacted for a field review of site conditions and development of recommendations for evaluation and repair.

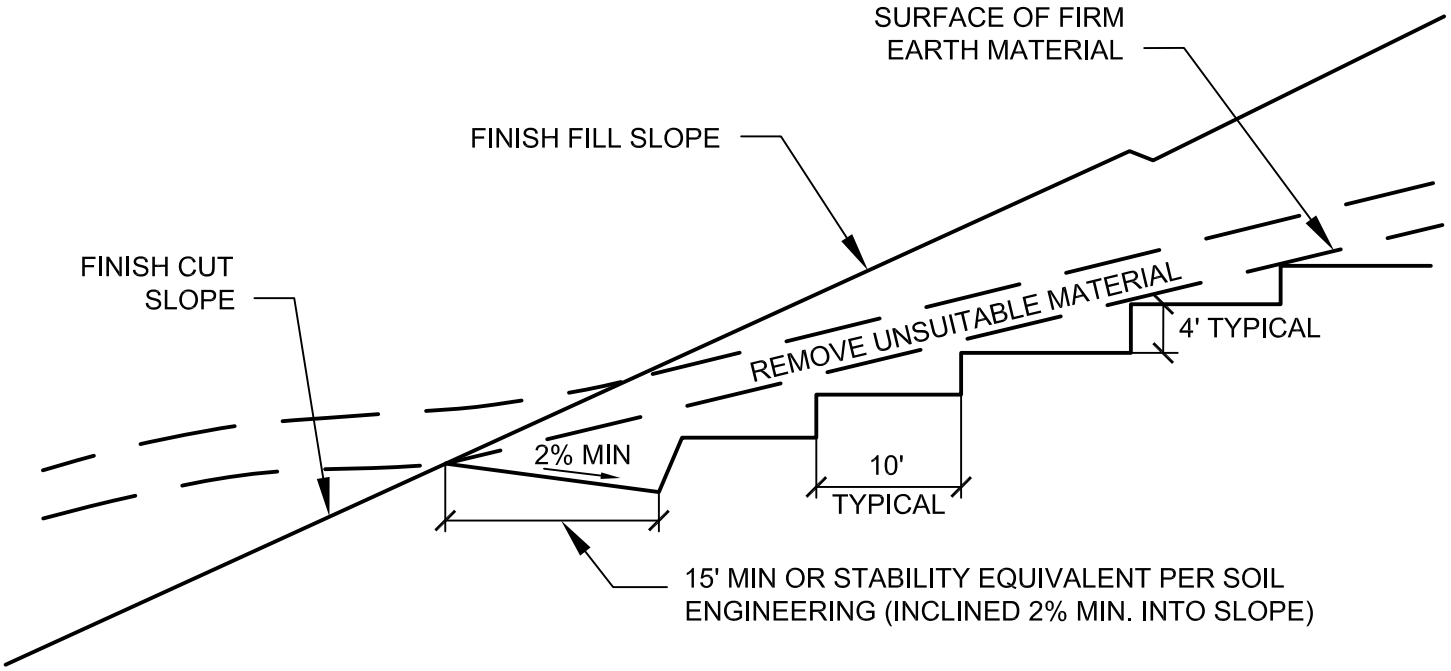
If slope failures occur as a result of exposure to period of heavy rainfall, the failure areas and currently unaffected areas should be covered with plastic sheeting to protect against additional saturation.

In the accompanying Standard Details, appropriate repair procedures are illustrated for superficial slope failures (i.e., occurring typically within the outer one foot to three feet of a slope face).

BENCHING FILL OVER NATURAL

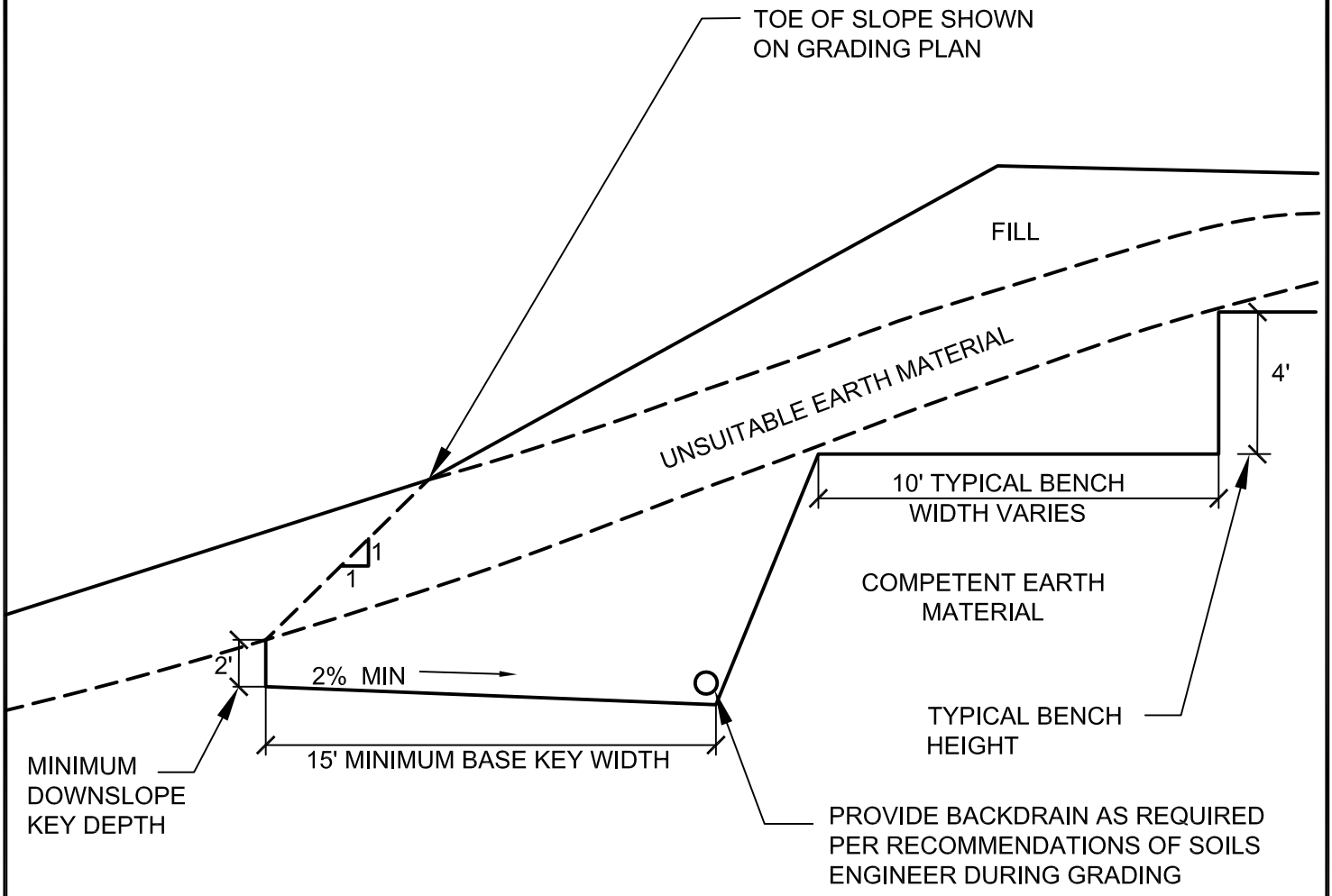


BENCHING FILL OVER CUT



NOT TO SCALE

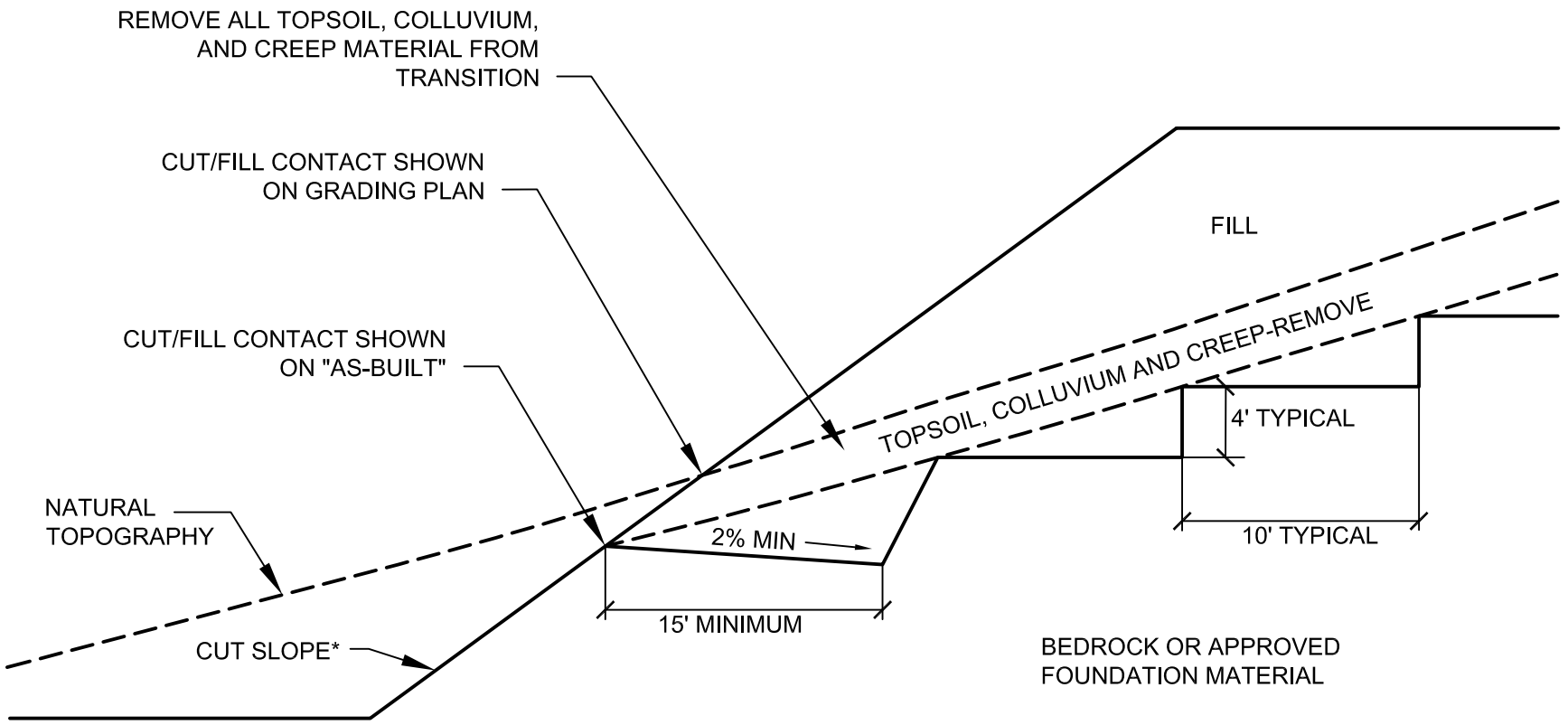
BENCHING FOR COMPACTED FILL DETAIL



WHERE NATURAL SLOPE GRADIENT IS 5:1 OR LESS, BENCHING IS NOT NECESSARY. FILL IS NOT TO BE PLACED ON COMPRESSIBLE OR UNSUITABLE MATERIAL.

NOT TO SCALE

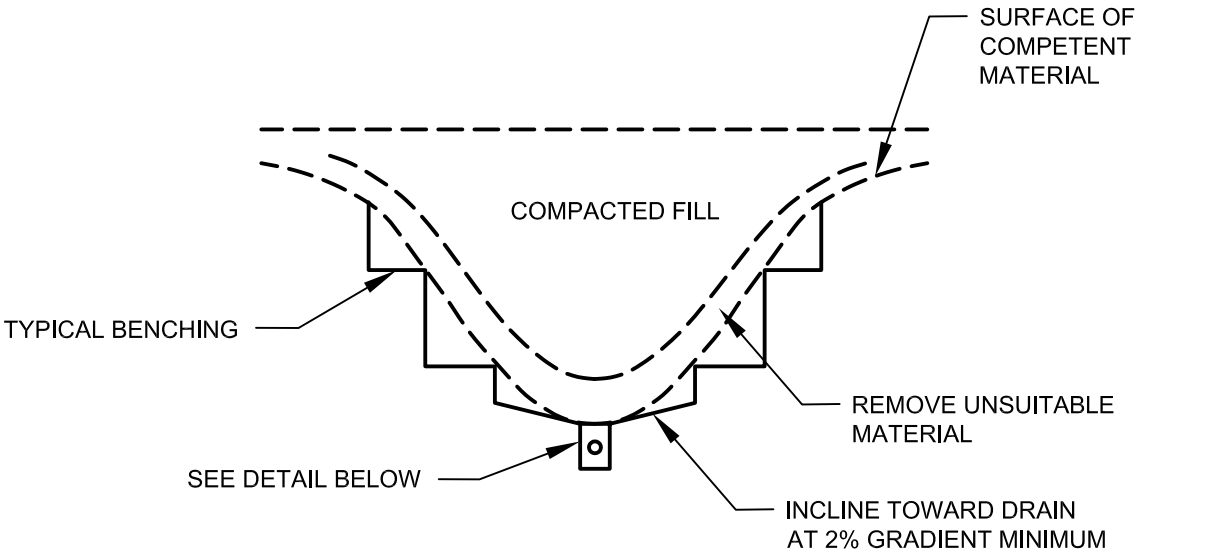
FILL SLOPE ABOVE NATURAL GROUND DETAIL



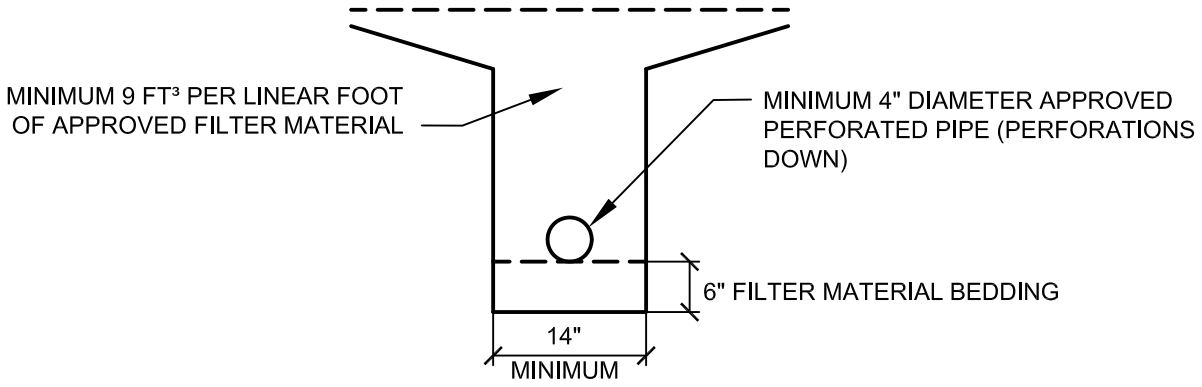
*NOTE: CUT SLOPE PORTION SHOULD BE MADE PRIOR TO PLACEMENT OF FILL

NOT TO SCALE

FILL SLOPE ABOVE CUT SLOPE DETAIL



DETAIL



CALTRANS CLASS 2 PERMEABLE MATERIAL
FILTER MATERIAL TO MEET FOLLOWING SPECIFICATION OR APPROVED EQUAL:

SIEVE SIZE	PERCENTAGE PASSING
1"	100
¾"	90-100
⅜"	40-100
NO. 4	25-40
NO. 8	18-33
NO. 30	5-15
NO. 50	0-7
NO. 200	0-3

APPROVED PIPE TO BE SCHEDULE 40 POLY-VINYL-CHLORIDE (P.V.C.) OR APPROVED EQUAL. MINIMUM CRUSH STRENGTH 1000 psi

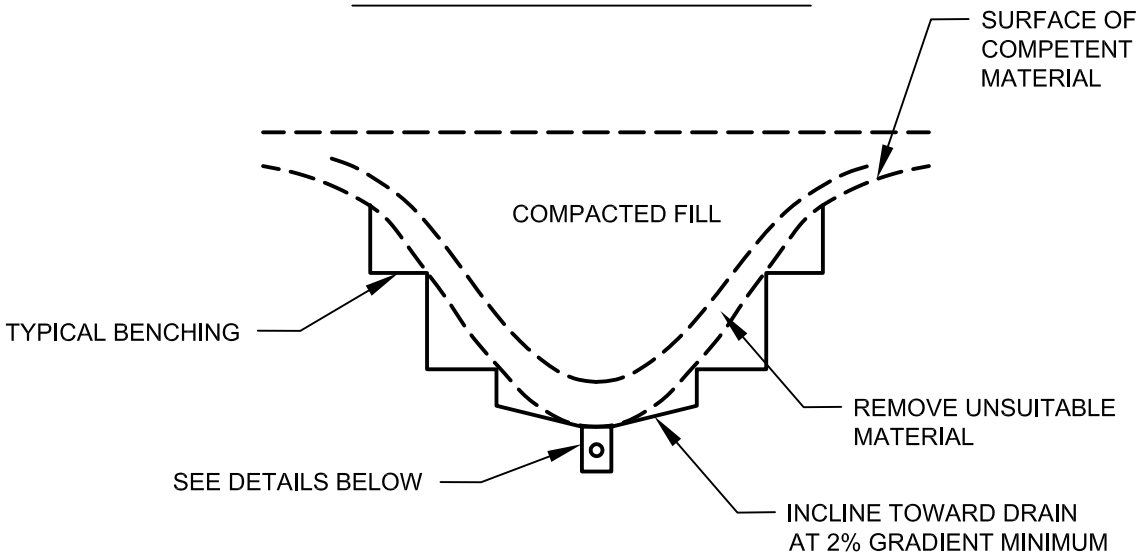
PIPE DIAMETER TO MEET THE FOLLOWING CRITERIA, SUBJECT TO FIELD REVIEW BASED ON ACTUAL GEOTECHNICAL CONDITIONS ENCOUNTERED DURING GRADING

LENGTH OF RUN	PIPE DIAMETER
INITIAL 500'	4"
500' TO 1500'	6"
> 1500'	8"

NOT TO SCALE

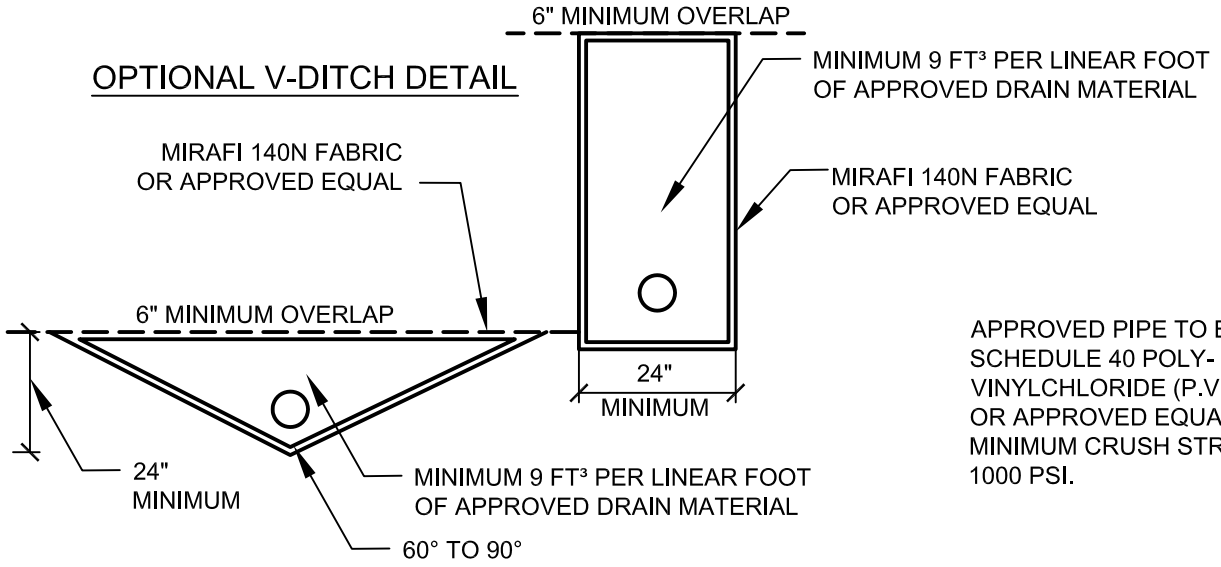
TYPICAL CANYON SUBDRAIN DETAIL

CANYON SUBDRAIN DETAILS



TRENCH DETAILS

OPTIONAL V-DITCH DETAIL



APPROVED PIPE TO BE SCHEDULE 40 POLY-VINYLCHLORIDE (P.V.C.) OR APPROVED EQUAL. MINIMUM CRUSH STRENGTH 1000 PSI.

DRAIN MATERIAL TO MEET FOLLOWING SPECIFICATION OR APPROVED EQUAL:

SIEVE SIZE	PERCENTAGE PASSING
1 ½"	88-100
1"	5-40
¾"	0-17
⅜"	0-7
NO. 200	0-3

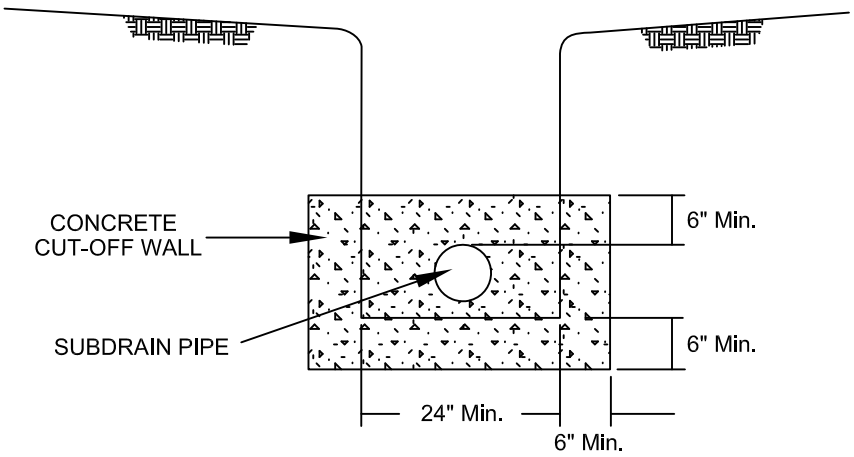
PIPE DIAMETER TO MEET THE FOLLOWING CRITERIA, SUBJECT TO FIELD REVIEW BASED ON ACTUAL GEOTECHNICAL CONDITIONS ENCOUNTERED DURING GRADING

LENGTH OF RUN	PIPE DIAMETER
INITIAL 500'	4"
500' TO 1500'	6"
> 1500'	8"

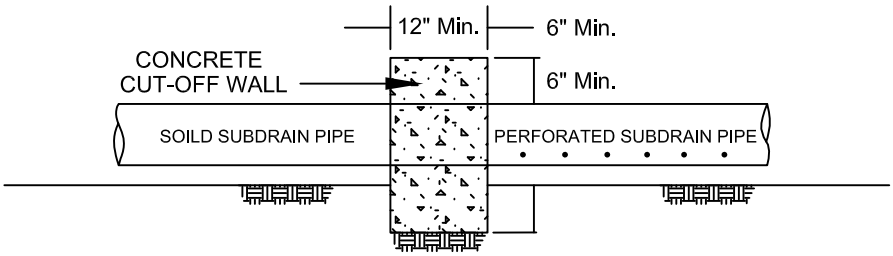
NOT TO SCALE

GEOFABRIC SUBDRAIN

FRONT VIEW



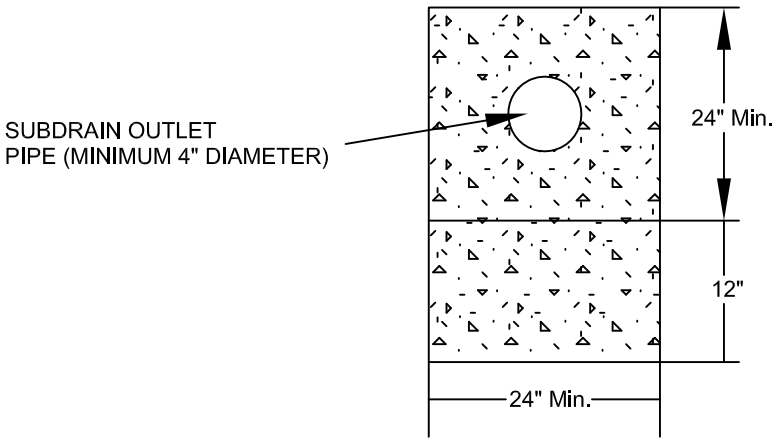
SIDE VIEW



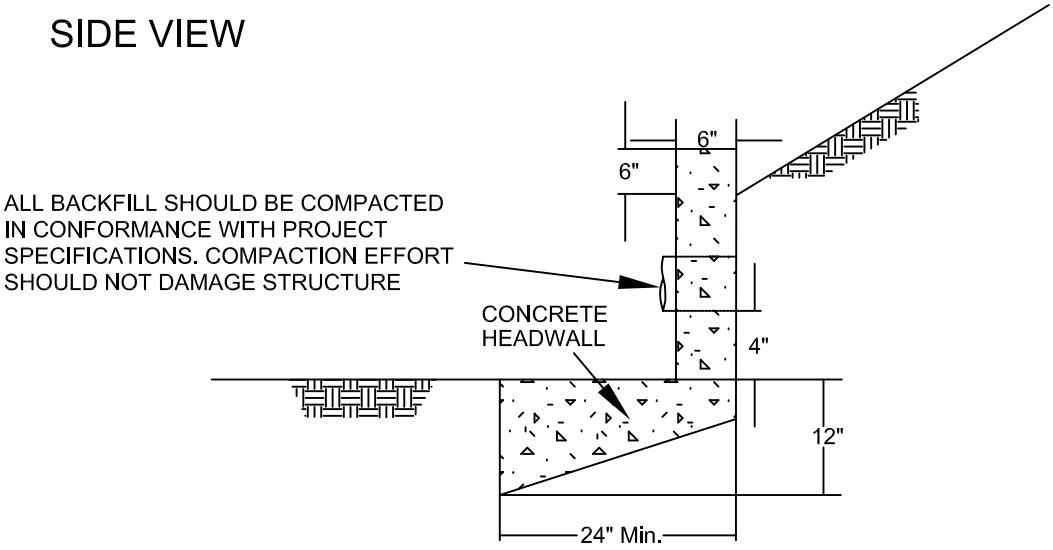
NOT TO SCALE

RECOMMENDED SUBDRAIN CUT-OFF WALL

FRONT VIEW



SIDE VIEW



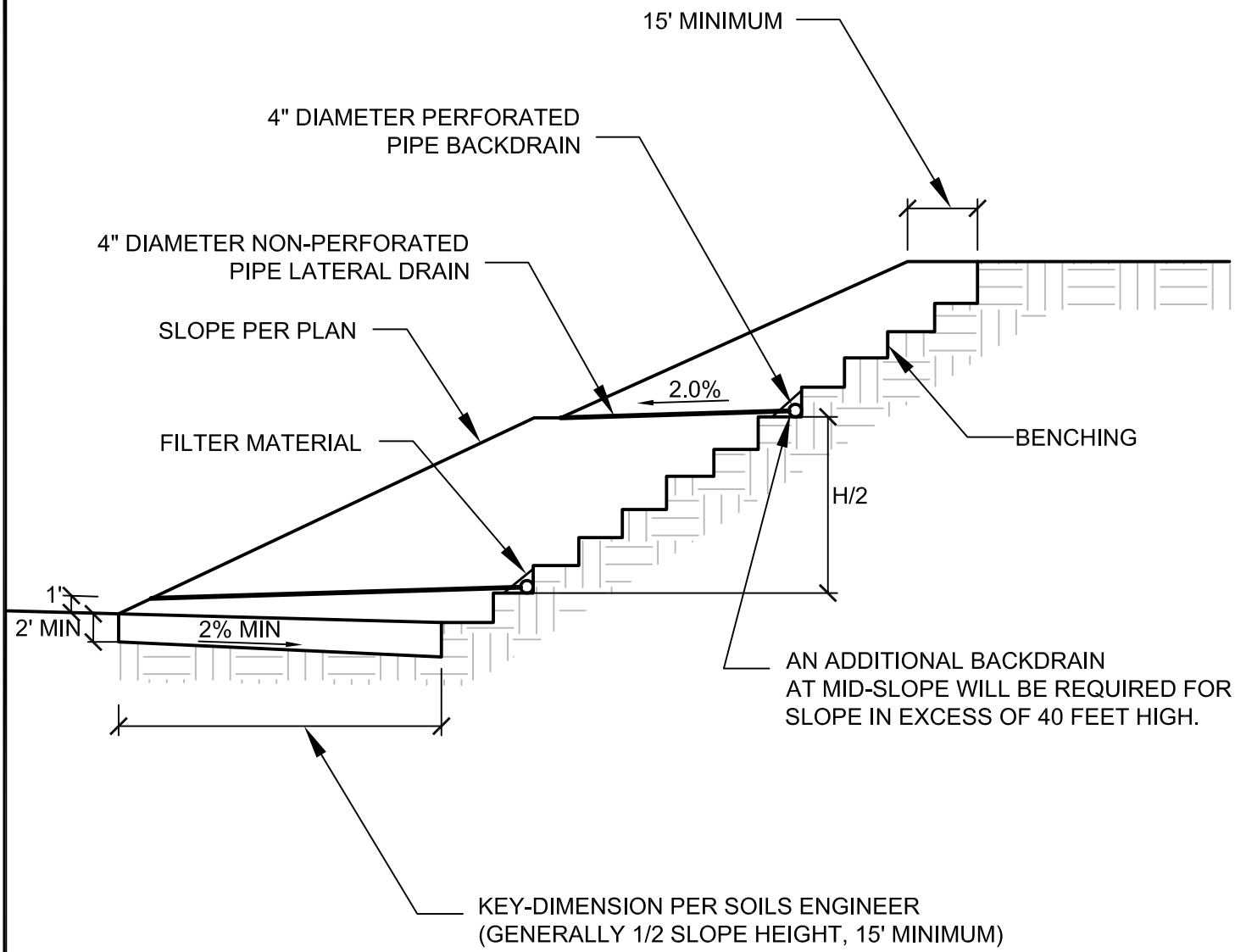
NOTE: HEADWALL SHOULD OUTLET AT TOE OF SLOPE
OR INTO CONTROLLED SURFACE DRAINAGE DEVICE

ALL DISCHARGE SHOULD BE CONTROLLED

THIS DETAIL IS A MINIMUM DESIGN AND MAY BE
MODIFIED DEPENDING UPON ENCOUNTERED
CONDITIONS AND LOCAL REQUIREMENTS

NOT TO SCALE

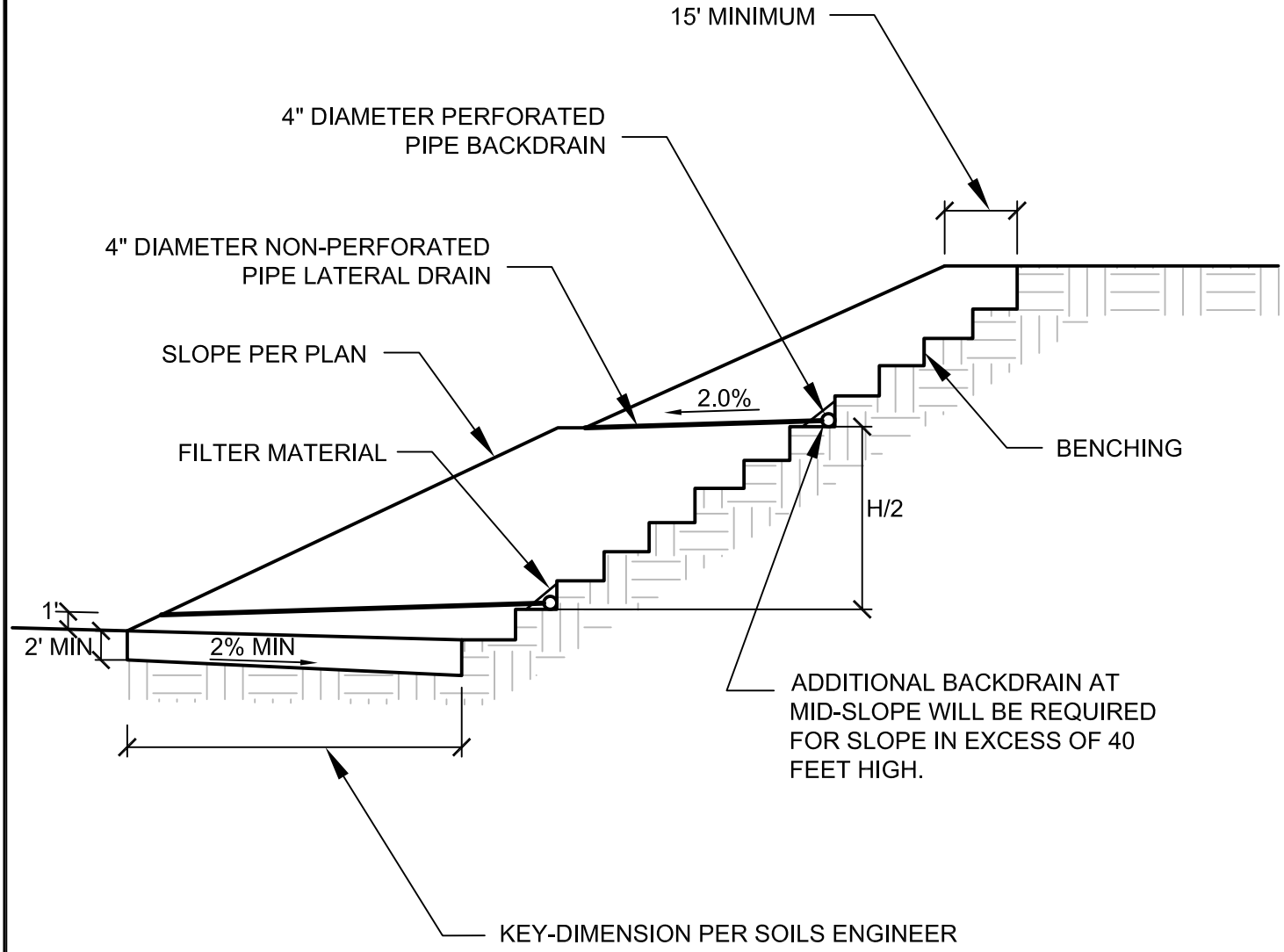
TYPICAL SUBDRAIN OUTLET HEADWALL DETAIL



DIMENSIONS ARE MINIMUM RECOMMENDED

NOT TO SCALE

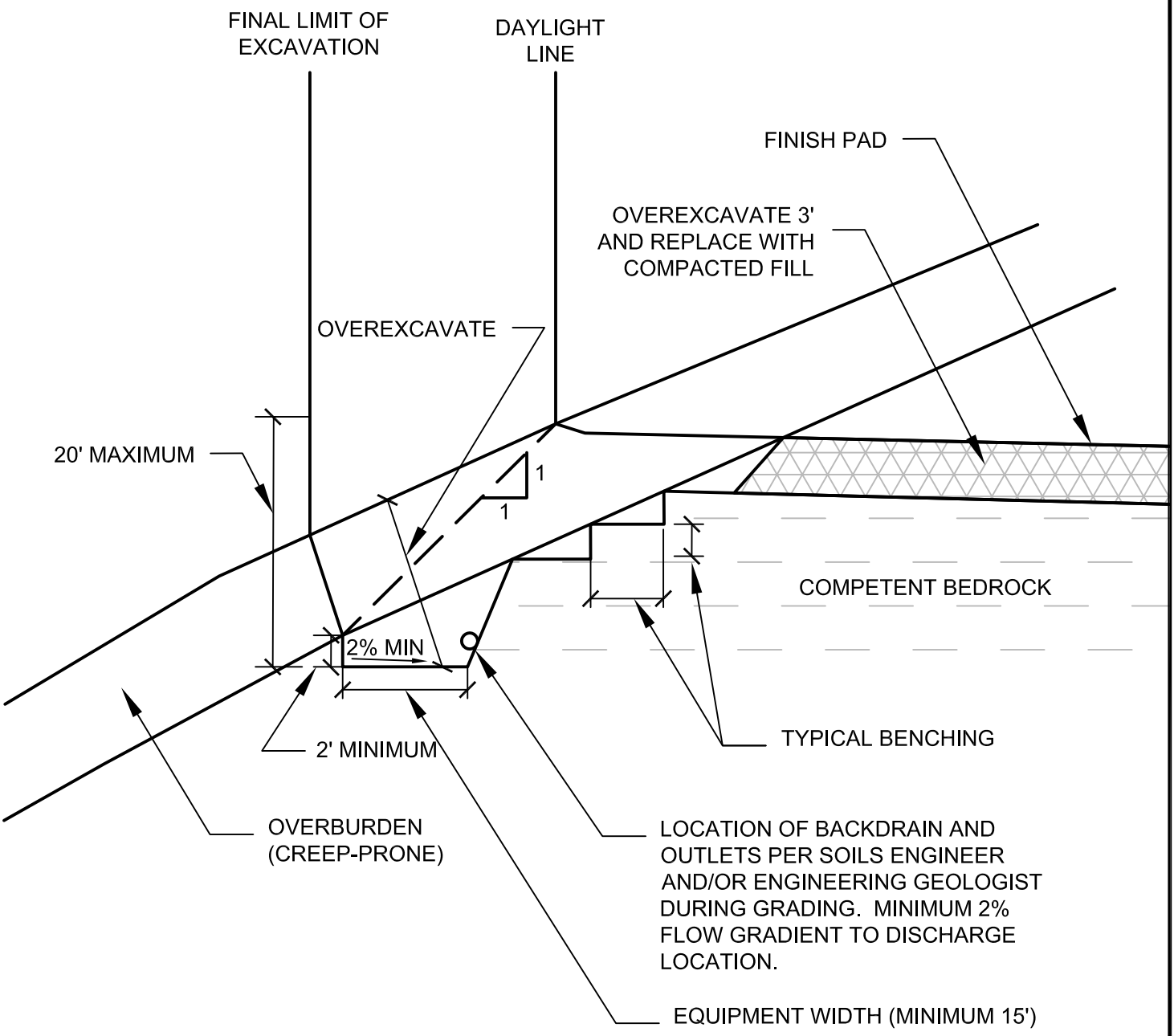
TYPICAL SLOPE STABILIZATION FILL DETAIL



DIMENSIONS ARE MINIMUM RECOMMENDED

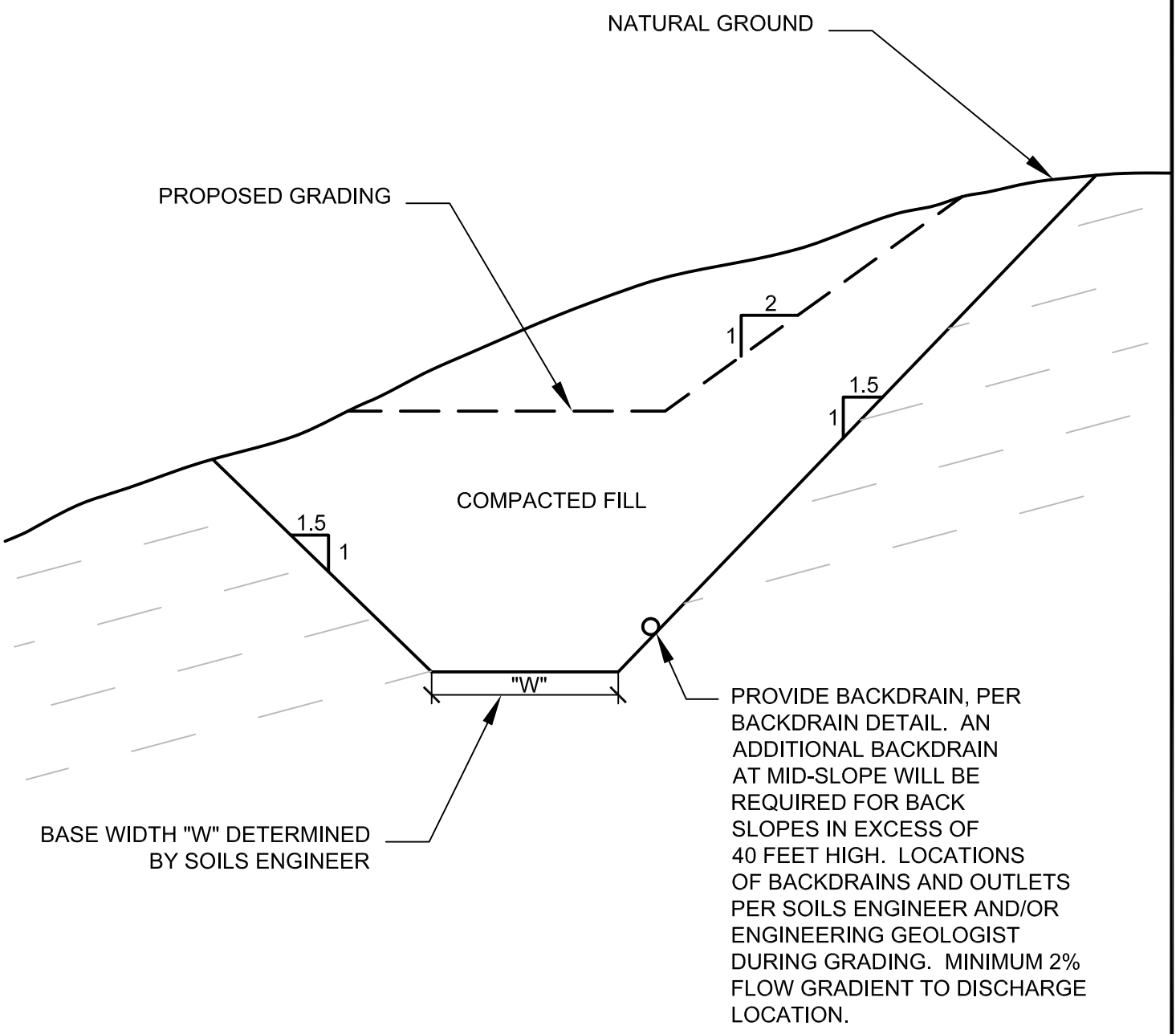
NOT TO SCALE

TYPICAL BUTTRESS FILL DETAIL



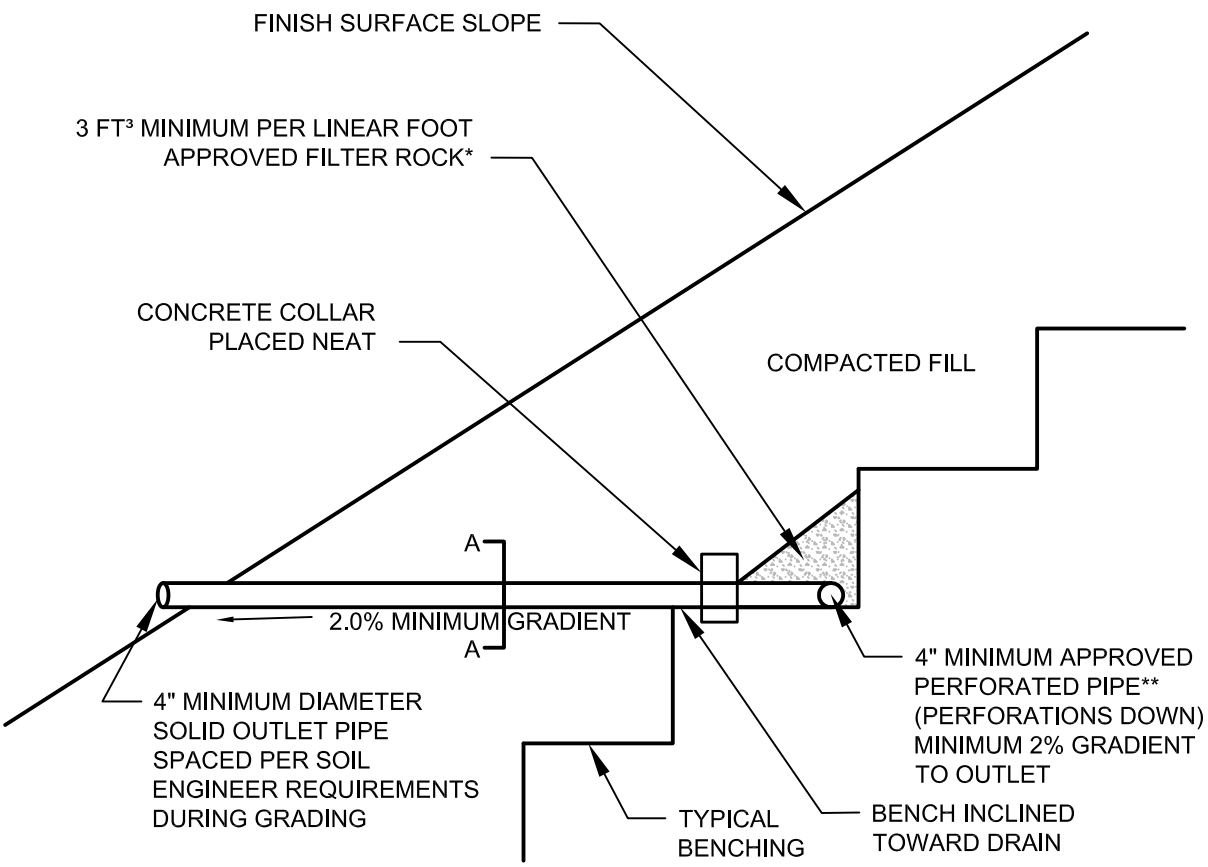
NOT TO SCALE

DAYLIGHT SHEAR KEY DETAIL

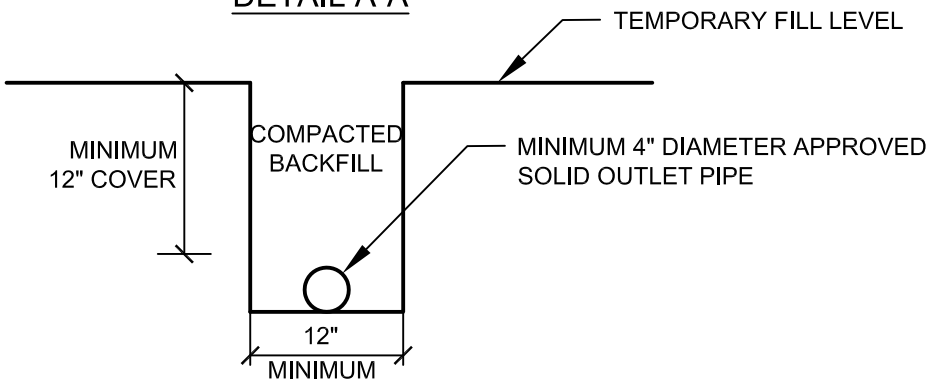


NOT TO SCALE

TYPICAL SHEAR KEY DETAIL



DETAIL A-A



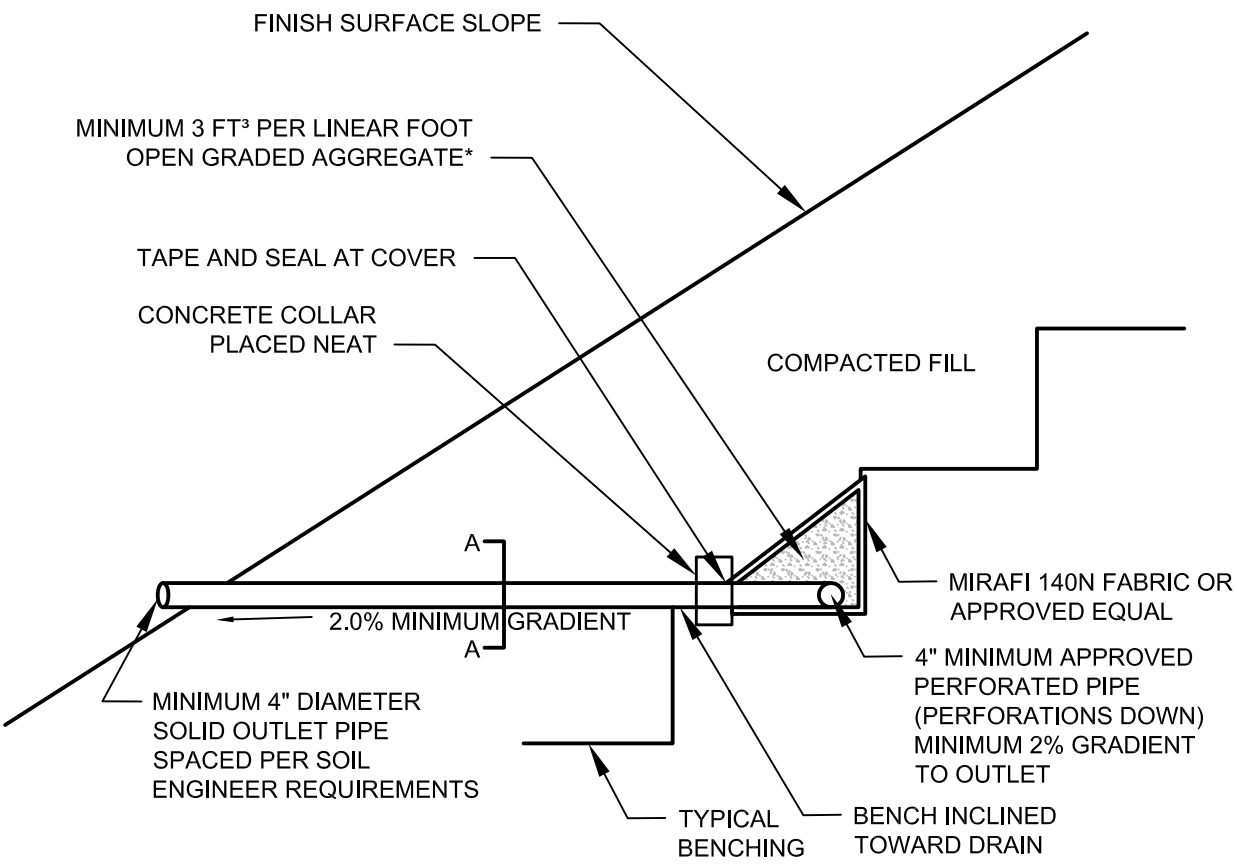
**APPROVED PIPE TYPE:
SCHEDULE 40 POLYVINYL CHLORIDE
(P.V.C.) OR APPROVED EQUAL.
MINIMUM CRUSH STRENGTH 1000 PSI

*FILTER ROCK TO MEET FOLLOWING
SPECIFICATIONS OR APPROVED EQUAL:

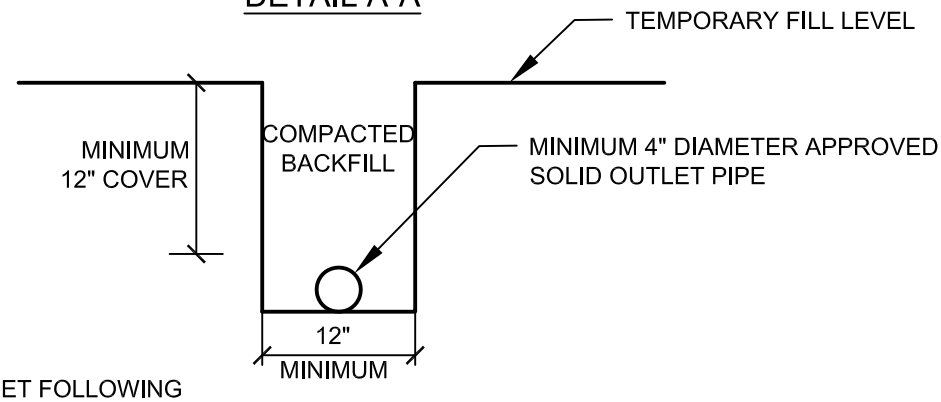
SIEVE SIZE	PERCENTAGE PASSING
1"	100
¾"	90-100
⅜"	40-100
NO. 4	25-40
NO. 30	5-15
NO. 50	0-7
NO. 200	0-3

NOT TO SCALE

TYPICAL BACKDRAIN DETAIL



DETAIL A-A

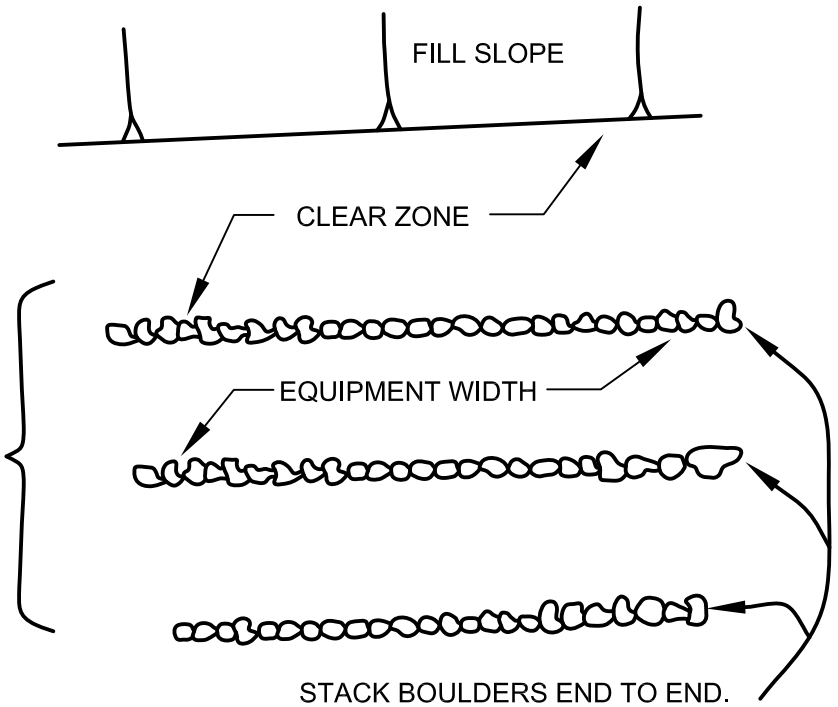


*NOTE: AGGREGATE TO MEET FOLLOWING SPECIFICATIONS OR APPROVED EQUAL:

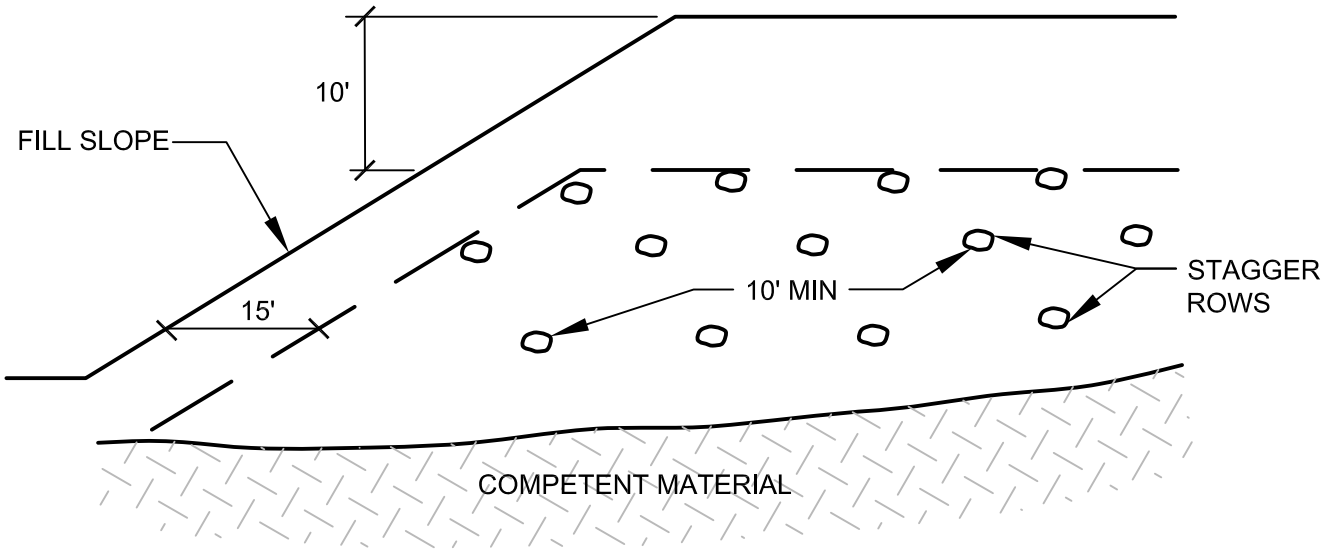
SIEVE SIZE	PERCENTAGE PASSING
1 ½"	100
1"	5-40
¾"	0-17
⅜"	0-7
NO. 200	0-3

NOT TO SCALE

BACKDRAIN DETAIL (GEOFRABIC)

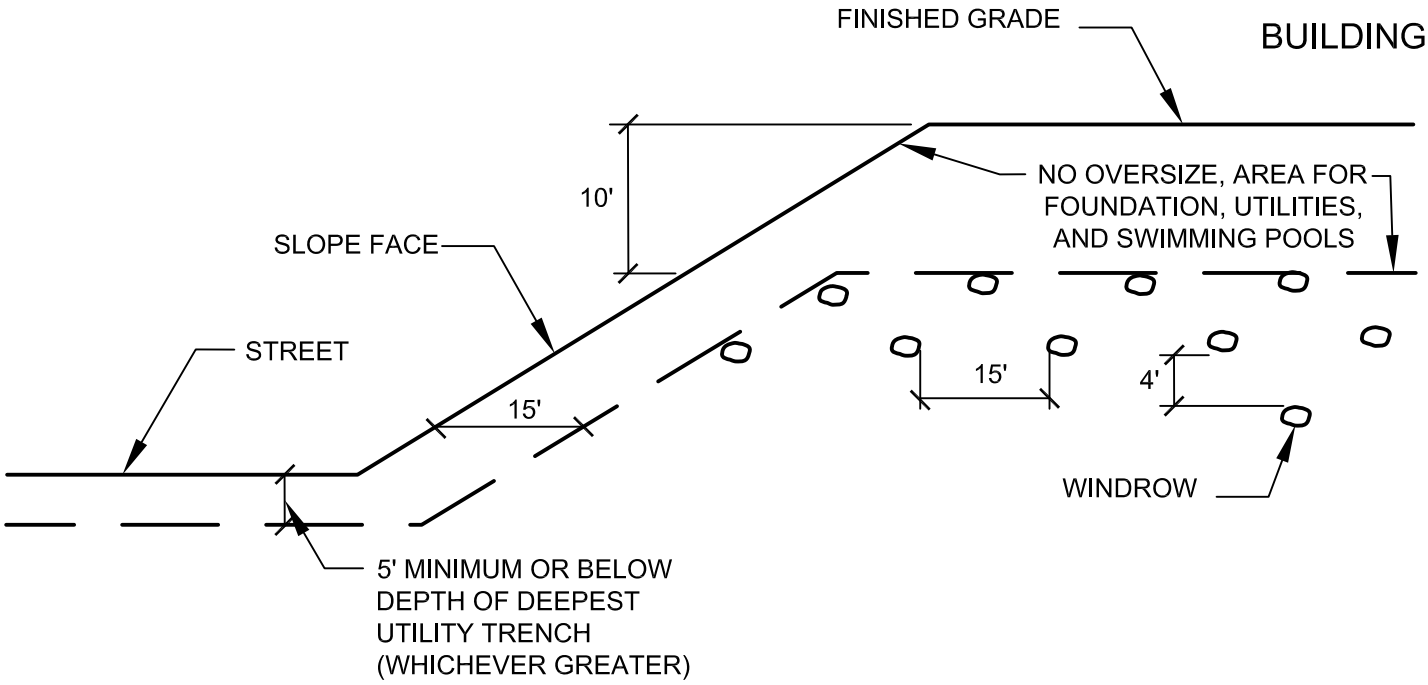


SOIL SHALL BE PUSHED OVER ROCKS AND FLOODED INTO VOIDS. COMPACT AROUND AND OVER EACH WINDROW.

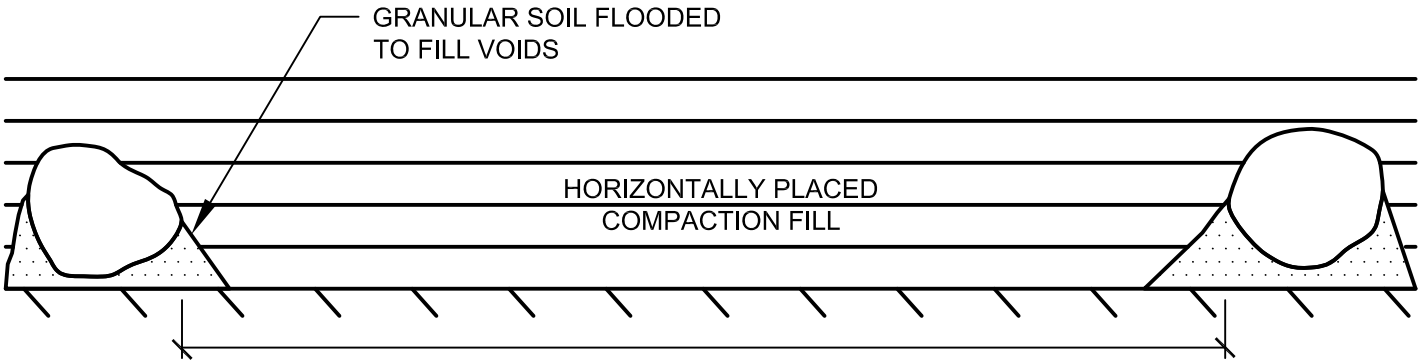


NOT TO SCALE

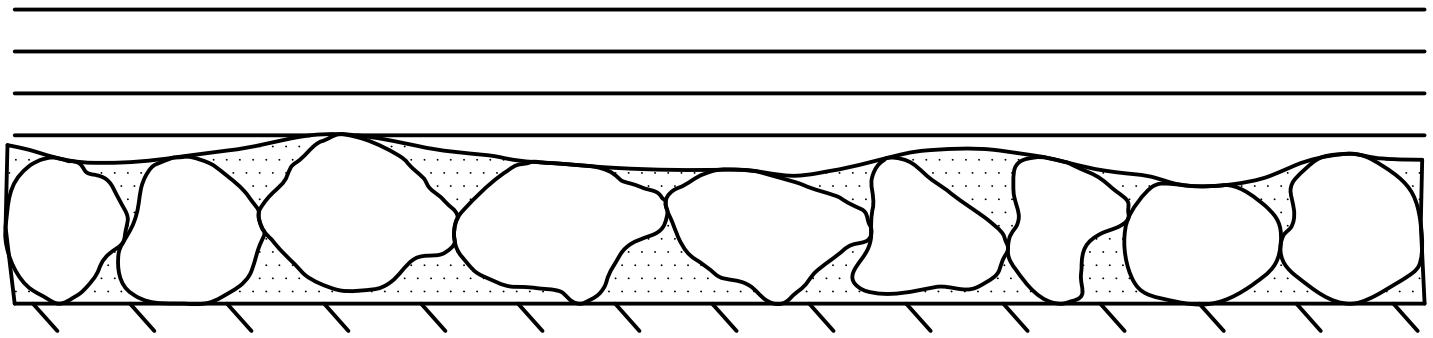
ROCK DISPOSAL DETAIL



TYPICAL WINDROW DETAIL (EDGE VIEW)



PROFILE VIEW

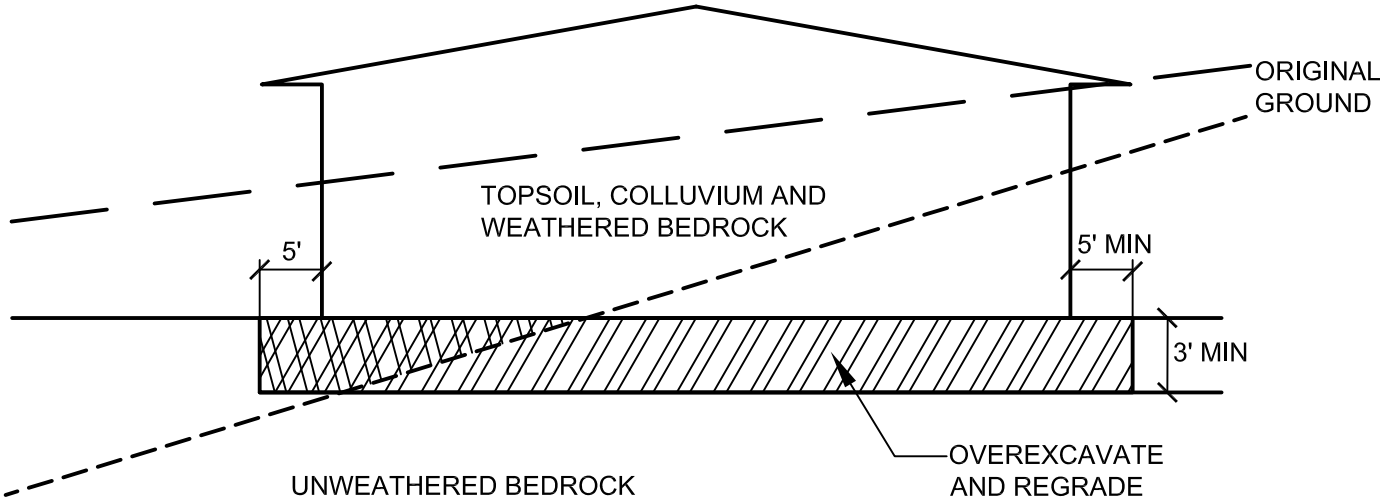


NOT TO SCALE

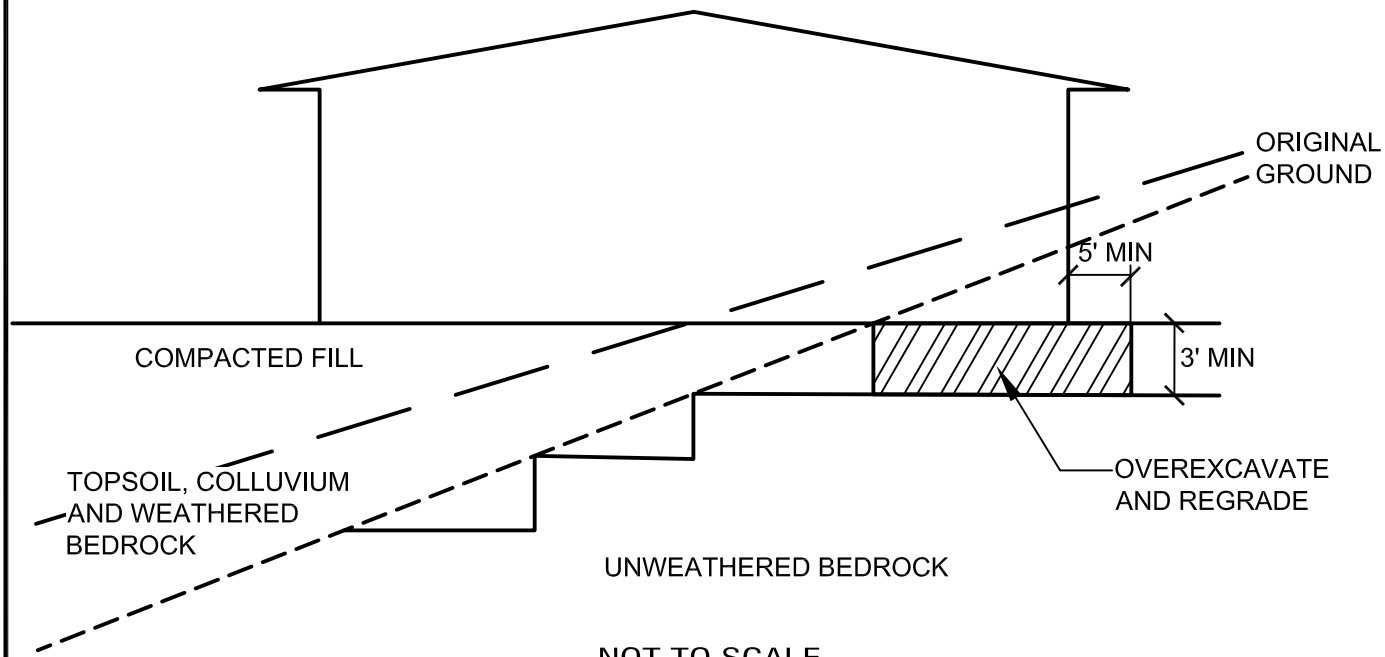
ROCK DISPOSAL DETAIL

GENERAL GRADING RECOMMENDATIONS

CUT LOT



CUT/FILL LOT (TRANSITION)



NOT TO SCALE

TRANSITION LOT DETAIL

APPENDIX E

PERCOLATION TO INFILTRATION CALCULATIONS, FIELD DATA AND CITY OF SANDIEGO WORKSHEET C.4-1

Project: **Miramar College Aviation Building**

Project No.: **A26165.00082** Tables P-1

Percolation Field Data and Calculated Rates

B-6(P-2) **Total Depth:** **58 inches**

Time	Test Interval Time	Test Refill	Water Level Initial/Start	Water Level End/Final	Incremental Water Level Change	Percolation Rate	Percolation Rate
	(minutes)	Depth /Inches	Depth /Inches	Depth /Inches	(inches)	inches/minute	inches/hour
7:06:00	Initial	None	14.00	initial	-		
7:36:00	30	NO	14.00	16.00	2.00	0.067	4.000
8:06:00	30	NO	16.00	17.00	1.00	0.033	2.000
8:36:00	30	NO	17.00	17.63	0.63	0.021	1.250
9:06:00	30	NO	17.63	18.25	0.63	0.021	1.250
9:36:00	30	16	18.25	18.75	0.50	0.017	1.000
10:06:00	30	NO	16.00	16.75	0.75	0.025	1.500
10:36:00	30	NO	16.75	17.25	0.50	0.017	1.000
11:06:00	30	NO	17.25	18.00	0.75	0.025	1.500
11:36:00	30	NO	18.00	18.50	0.50	0.017	1.000
12:06:00	30	NO	18.50	19.00	8.50	0.283	17.000
12:36:00	30	NO	19.00	19.50	0.50	0.017	1.000
13:06:00	30	NO	19.50	20.00	0.50	0.017	1.000

B-5(P-1) **Total Depth:** **60 inches**

Time	Test Interval Time	Test Refill	Water Level Initial/Start	Water Level End/Final	Incremental Water Level Change	Percolation Rate	Percolation Rate
	(minutes)	Depth /Inches	Depth /Inches	Depth /Inches	(inches)	inches/minute	inches/hour
7:08:00	Initial	None	11.25	initial	-		
7:38:00	30	NO	11.25	12.25	1.000	0.033	2.000
8:08:00	30	NO	12.25	13.00	0.750	0.025	1.500
8:38:00	30	NO	13.00	13.50	0.500	0.017	1.000
9:08:00	30	NO	13.50	14.00	0.500	0.017	1.000
9:38:00	30	NO	11.00	14.50	3.500	0.117	7.000
10:08:00	30	NO	14.50	15.00	0.500	0.017	1.000
10:38:00	30	NO	15.00	15.50	0.500	0.017	1.000
11:08:00	30	13.25	15.50	15.75	0.250	0.008	0.500
11:38:00	30	NO	13.25	13.75	0.500	0.017	1.000
12:08:00	30	NO	13.75	14.13	0.375	0.013	0.750
12:38:00	30	NO	14.13	14.50	0.375	0.013	0.750
13:08:00	30	NO	14.50	14.88	0.375	0.013	0.750

As per the referenced guidance, infiltration rates were evaluated using the Porchet Method. The intent of calculating the infiltration via the Porchet Method is to take into account bias inherent in percolation test borehole sidewall infiltration that would not occur at a basin bottom where such sidewalls are not present. The infiltration rate (I_t) is derived by the following equation:

$$I_t = \frac{\Delta H\, \pi r^2\, 60}{\Delta t(\pi r^2 + 2\pi r H_{avg})} = \frac{\Delta H\, 60\, r}{\Delta t(r + 2H_{avg})}$$

Where:

I_t = tested infiltration rate, inches/hour
ΔH = change in head over the time interval, inches
Δt = time interval, minutes
*r = effective radius of test hole
H_{avg} = average head over the time interval, inches

Given the measured percolation rates, the calculated infiltration rates are presented with and without a Factor of Safety applied in Table 3.3 below. The civil engineer of record should determine an appropriate factor of safety to be applied via completion of Worksheet C.4-1 from the Model BMP Design Manual for the City of San Diego or other approved methods. However, UES does not recommend using a factor of safety of less than 2.0. Field data and percolation to infiltration calculations are included below.

TABLE 3.3

RESULTS OF PERCOLATION TESTING WITH 2.0 FACTOR OF SAFETY APPLIED

TEST LOCATION	TEST DEPTH (inch)	CASE	SOIL TYPE (USCS CLASSIFICATION)	PERCOLATION RATE (inch/hour)	INFILTRATION RATE (inch/hour)	INFILTRATION RATE WITH FS OF 2 APPLIED (inch/hour)
P-1	60	Sandy	SM (Qvop8)*	0.750	0.032	0.016
P-2	58	Sandy	SM (Qvop8)*	1.00	0.050	0.025

NOTES: Water level was measured from a fixed point at the top of the hole.
Weather was sunny during percolation testing.
*Qvop = Quaternary Very Old Paralic Deposits, Unit 8
The test holes were eight inches in diameter.

Categorization of Infiltration Feasibility Condition based on Geotechnical Conditions[1]		Worksheet C.4-1: Form I-8A[2]
Part 1 - Full Infiltration Feasibility Screening Criteria		
DMA(s) Being Analyzed:		Project Phase:
Proposed Basin, Montgomery Field Hangar		Design
Criteria 1: Infiltration Rate Screening		
1A	Is the mapped hydrologic soil group according to the NRCS Web Soil Survey or UC Davis Soil Web Mapper Type A or B and corroborated by available site soil data[3]? ○ Yes; the DMA may feasibly support full infiltration. Answer "Yes" to Criteria 1 Result or continue to Step 1B if the applicant elects to perform infiltration testing. ○ No; the mapped soil types are A or B but is not corroborated by available site soil data (continue to Step 1B). ☒ No; the mapped soil types are C, D, or "urban/unclassified" and is corroborated by available site soil data. Answer "No" to Criteria 1 Result. ○ No; the mapped soil types are C, D, or "urban/unclassified" but is not corroborated by available site soil data (continue to Step 1B).	
1B	Is the reliable infiltration rate calculated using planning phase methods from Table D.3-1? ○ Yes; Continue to Step 1C. ○ No; Skip to Step 1D.	
1C	Is the reliable infiltration rate calculated using planning phase methods from Table D.3-1 greater than 0.5 inches per hour? ○ Yes; the DMA may feasibly support full infiltration. Answer "Yes" to Criteria 1 Result. ○ No; full infiltration is not required. Answer "No" to Criteria 1 Result.	
1D	**Infiltration Testing Method.** Is the selected infiltration testing method suitable during the design phase (see Appendix D.3)? Note: Alternative testing standards may be allowed with appropriate rationales and documentation. ○ Yes; continue to Step 1E. ○ No; select an appropriate infiltration testing method.	

[1] Note that it is not required to investigate each and every criterion in the worksheet, a single "no" answer in Part 1, Part 2, Part 3, or Part 4 determines a full, partial, or no infiltration condition.

[2] This form must be completed each time there is a change to the site layout that would affect the infiltration feasibility condition. Previously completed forms shall be retained to document the evolution of the site storm water design.

[3] Available data includes site-specific sampling or observation of soil types or texture classes, such as obtained from borings or test pits necessary to support other design elements.

Categorization of Infiltration Feasibility Condition based on Geotechnical Conditions	Worksheet C.4-1: Form I-8A[2]
1E	**Number of Percolation/Infiltration Tests.** Does the infiltration testing method performed satisfy the minimum number of tests specified in Table D.3-2? ○ Yes; continue to Step 1F. ○ No; conduct appropriate number of tests.
1F	**Factor of Safety.** Is the suitable Factor of Safety selected for full infiltration design? See guidance in D.5; Tables D.5-1 and D.5-2; and Worksheet D.5-1 (Form I-9). ○ Yes; continue to Step 1G. ○ No; select appropriate factor of safety.
1G	**Full Infiltration Feasibility.** Is the average measured infiltration rate divided by the Factor of Safety greater than 0.5 inches per hour? ○ Yes; answer "Yes" to Criteria 1 Result. ○ No; answer "No" to Criteria 1 Result.
Criteria 1 Result	Is the estimated reliable infiltration rate greater than 0.5 inches per hour within the DMA where runoff can reasonably be routed to a BMP? ○ Yes; the DMA may feasibly support full infiltration. Continue to Criteria 2. ⊗ No; full infiltration is not required. Skip to Part 1 Result.

Summarize infiltration testing methods, testing locations, replicates, and results and summarize estimates of reliable infiltration rates according to procedures outlined in D.5. Documentation should be included in project geotechnical report.

Percolation testing was performed in the area of the proposed BMP as directed by the project civil engineer. Description of testing and results are provided in the Geotechnical Report.

Categorization of Infiltration Feasibility Condition based on Geotechnical Conditions		Worksheet C.4-1: Form I-8A[1]	
Criteria 2: Geologic/Geotechnical Screening			
2A	If all questions in Step 2A are answered "Yes," continue to Step 2B. For any "No" answer in Step 2A answer "No" to Criteria 2, and submit an "Infiltration Feasibility Condition Letter" that meets the requirements in Appendix C.1.1. The geologic/geotechnical analyses listed in Appendix C.2.1 do not apply to the DMA because one of the following setbacks cannot be avoided and therefore result in the DMA being in a no infiltration condition. The setbacks must be the closest horizontal radial distance from the surface edge (at the overflow elevation) of the BMP.		
2A-1	Can the proposed full infiltration BMP(s) avoid areas with existing fill materials greater than 5 feet thick below the infiltrating surface?	○ Yes	○ No
2A-2	Can the proposed full infiltration BMP(s) avoid placement within 10 feet of existing underground utilities, structures, or retaining walls?	○ Yes	○ No
2A-3	Can the proposed full infiltration BMP(s) avoid placement within 50 feet of a natural slope (>25%) or within a distance of 1.5H from fill slopes where H is the height of the fill slope?	○ Yes	○ No
2B	When full infiltration is determined to be feasible, a geotechnical investigation report must be prepared that considers the relevant factors identified in Appendix C.2.1. If all questions in Step 2B are answered "Yes," then answer "Yes" to Criteria 2 Result. If there are "No" answers continue to Step 2C.		
2B-1	**Hydroconsolidation.** Analyze hydroconsolidation potential per approved ASTM standard due to a proposed full infiltration BMP. Can full infiltration BMPs be proposed within the DMA without increasing hydroconsolidation risks?	○ Yes	○ No
2B-2	**Expansive Soils.** Identify expansive soils (soils with an expansion index greater than 20) and the extent of such soils due to proposed full infiltration BMPs. Can full infiltration BMPs be proposed within the DMA without increasing expansive soil risks?	○ Yes	○ No

Categorization of Infiltration Feasibility Condition based on Geotechnical Conditions		Worksheet C.4-1: Form I-8A[1]	
2B-3	**Liquefaction**. If applicable, identify mapped liquefaction areas. Evaluate liquefaction hazards in accordance with Section 6.4.2 of the City of San Diego's Guidelines for Geotechnical Reports (2011 or most recent edition). Liquefaction hazard assessment shall take into account any increase in groundwater elevation or groundwater mounding that could occur as a result of proposed infiltration or percolation facilities. Can full infiltration BMPs be proposed within the DMA without increasing liquefaction risks?	○ Yes	○ No
2B-4	**Slope Stability**. If applicable, perform a slope stability analysis in accordance with the ASCE and Southern California Earthquake Center (2002) Recommended Procedures for Implementation of DMG Special Publication 117, Guidelines for Analyzing and Mitigating Landslide Hazards in California to determine minimum slope setbacks for full infiltration BMPs. See the City of San Diego's Guidelines for Geotechnical Reports (2011) to determine which type of slope stability analysis is required. Can full infiltration BMPs be proposed within the DMA without increasing slope stability risks?	○ Yes	○ No
2B-5	**Other Geotechnical Hazards.** Identify site-specific geotechnical hazards not already mentioned (refer to Appendix C.2.1). Can full infiltration BMPs be proposed within the DMA without increasing risk of geologic or geotechnical hazards not already mentioned?	○ Yes	○ No
2B-6	**Setbacks.** Establish setbacks from underground utilities, structures, and/or retaining walls. Reference applicable ASTM or other recognized standard in the geotechnical report. Can full infiltration BMPs be proposed within the DMA using established setbacks from underground utilities, structures, and/or retaining walls?	○ Yes	○ No

Categorization of Infiltration Feasibility Condition based on Geotechnical Conditions		Worksheet C.4-1: Form I-8A[1]	
2C	**Mitigation Measures.** Propose mitigation measures for each geologic/geotechnical hazard identified in Step 2B. Provide a discussion of geologic/geotechnical hazards that would prevent full infiltration BMPs that cannot be reasonably mitigated in the geotechnical report. See Appendix C.2.1.8 for a list of typically reasonable and typically unreasonable mitigation measures. Can mitigation measures be proposed to allow for full infiltration BMPs? If the question in Step 2 is answered "Yes," then answer "Yes" to Criteria 2 Result. If the question in Step 2C is answered "No," then answer "No" to Criteria 2 Result.	○ Yes	○ No
Criteria 2 Result	Can infiltration greater than 0.5 inches per hour be allowed without increasing risk of geologic or geotechnical hazards that cannot be reasonably mitigated to an acceptable level?	○ Yes	○ No
Summarize findings and basis; provide references to related reports or exhibits.			
Part 1 Result – Full Infiltration Geotechnical Screening [4]		**Result**	
If answers to both Criteria 1 and Criteria 2 are "Yes", a full infiltration design is potentially feasible based on Geotechnical conditions only. If either answer to Criteria 1 or Criteria 2 is "No", a full infiltration design is not required.		○ Full infiltration Condition ⊗ Complete Part 2	

[4] To be completed using gathered site information and best professional judgement considering the definition of MEP in the MS4 Permit. Additional testing and/or studies may be required by City Engineer to substantiate findings.

Categorization of Infiltration Feasibility Condition based on Geotechnical Conditions		Worksheet C.4-1: Form I-8A[2]
Part 2 – Partial vs. No Infiltration Feasibility Screening Criteria		
DMA(s) Being Analyzed:		Project Phase:
Proposed Basin, Montgomery Field Hangar		Design
Criteria 3 : Infiltration Rate Screening		
3A	**NRCS Type C, D, or "urban/unclassified":** Is the mapped hydrologic soil group according to the NRCS Web Soil Survey or UC Davis Soil Web Mapper is Type C, D, or "urban/unclassified" and corroborated by available site soil data? ○ Yes; the site is mapped as C soils and a reliable infiltration rate of 0.15 in/hr. is used to size partial infiltration BMPS. Answer "Yes" to Criteria 3 Result. ○ Yes; the site is mapped as D soils or "urban/unclassified" and a reliable infiltration rate of 0.05 in/hr. is used to size partial infiltration BMPS. Answer "Yes" to Criteria 3 Result. ⊗ No; infiltration testing is conducted (refer to Table D.3-1), continue to Step 3B.	
3B	**Infiltration Testing Result:** Is the reliable infiltration rate (i.e. average measured infiltration rate/2) greater than 0.05 in/hr. and less than or equal to 0.5 in/hr? ○ Yes; the site may support partial infiltration. Answer "Yes" to Criteria 3 Result. ⊗ No; the reliable infiltration rate (i.e. average measured rate/2) is less than 0.05 in/hr., partial infiltration is not required. Answer "No" to Criteria 3 Result.	
Criteria 3 Result	Is the estimated reliable infiltration rate (i.e., average measured infiltration rate/2) greater than or equal to 0.05 inches/hour and less than or equal to 0.5 inches/hour at any location within each DMA where runoff can reasonably be routed to a BMP? ○ Yes; Continue to Criteria 4. ⊗ No: Skip to Part 2 Result.	
Summarize infiltration testing and/or mapping results (i.e. soil maps and series description used for infiltration rate).		

Categorization of Infiltration Feasibility Condition based on Geotechnical Conditions		Worksheet C.4-1: Form I-8A[1]	
Criteria 4: Geologic/Geotechnical Screening			
4A	If all questions in Step 4A are answered "Yes," continue to Step 2B. For any "No" answer in Step 4A answer "No" to Criteria 4 Result, and submit an "Infiltration Feasibility Condition Letter" that meets the requirements in Appendix C.1.1. The geologic/geotechnical analyses listed in Appendix C.2.1 do not apply to the DMA because one of the following setbacks cannot be avoided and therefore result in the DMA being in a no infiltration condition. The setbacks must be the closest horizontal radial distance from the surface edge (at the overflow elevation) of the BMP.		
4A-1	Can the proposed partial infiltration BMP(s) avoid areas with existing fill materials greater than 5 feet thick?	○ Yes	○ No
4A-2	Can the proposed partial infiltration BMP(s) avoid placement within 10 feet of existing underground utilities, structures, or retaining walls?	○ Yes	○ No
4A-3	Can the proposed partial infiltration BMP(s) avoid placement within 50 feet of a natural slope (>25%) or within a distance of 1.5H from fill slopes where H is the height of the fill slope?	○ Yes	○ No
4B	When full infiltration is determined to be feasible, a geotechnical investigation report must be prepared that considers the relevant factors identified in Appendix C.2.1. If all questions in Step 4B are answered "Yes," then answer "Yes" to Criteria 4 Result. If there are any "No" answers continue to Step 4C.		
4B-1	**Hydroconsolidation.** Analyze hydroconsolidation potential per approved ASTM standard due to a proposed full infiltration BMP. Can partial infiltration BMPs be proposed within the DMA without increasing hydroconsolidation risks?	○ Yes	○ No
4B-2	**Expansive Soils.** Identify expansive soils (soils with an expansion index greater than 20) and the extent of such soils due to proposed full infiltration BMPs. Can partial infiltration BMPs be proposed within the DMA without increasing expansive soil risks?	○ Yes	○ No
4B-3	**Liquefaction**. If applicable, identify mapped liquefaction areas. Evaluate liquefaction hazards in accordance with Section 6.4.2 of the City of San Diego's Guidelines for Geotechnical Reports (2011). Liquefaction hazard assessment shall take into account any increase in groundwater elevation or groundwater mounding that could occur as a result of proposed infiltration or percolation facilities. Can partial infiltration BMPs be proposed within the DMA without increasing liquefaction risks?	○ Yes	○ No

Categorization of Infiltration Feasibility Condition based on Geotechnical Conditions		Worksheet C.4-1: Form I-8A[2]	
4B-4	**Slope Stability**. If applicable, perform a slope stability analysis in accordance with the ASCE and Southern California Earthquake Center (2002) Recommended Procedures for Implementation of DMG Special Publication 117, Guidelines for Analyzing and Mitigating Landslide Hazards in California to determine minimum slope setbacks for full infiltration BMPs. See the City of San Diego's Guidelines for Geotechnical Reports (2011) to determine which type of slope stability analysis is required. Can partial infiltration BMPs be proposed within the DMA without increasing slope stability risks?	○ Yes	○ No
4B-5	**Other Geotechnical Hazards.** Identify site-specific geotechnical hazards not already mentioned (refer to Appendix C.2.1). Can partial infiltration BMPs be proposed within the DMA without increasing risk of geologic or geotechnical hazards not already mentioned?	○ Yes	○ No
4B-6	**Setbacks.** Establish setbacks from underground utilities, structures, and/or retaining walls. Reference applicable ASTM or other recognized standard in the geotechnical report. Can partial infiltration BMPs be proposed within the DMA using recommended setbacks from underground utilities, structures, and/or retaining walls?	○ Yes	○ No
4C	**Mitigation Measures.** Propose mitigation measures for each geologic/geotechnical hazard identified in Step 4B. Provide a discussion on geologic/geotechnical hazards that would prevent partial infiltration BMPs that cannot be reasonably mitigated in the geotechnical report. See Appendix C.2.1.8 for a list of typically reasonable and typically unreasonable mitigation measures. Can mitigation measures be proposed to allow for partial infiltration BMPs? If the question in Step 4C is answered "Yes," then answer "Yes" to Criteria 4 Result. If the question in Step 4C is answered "No," then answer "No" to Criteria 4 Result.	○ Yes	○ No
Criteria 4 Result	Can infiltration of greater than or equal to 0.05 inches/hour and less than or equal to 0.5 inches/hour be allowed without increasing the risk of geologic or geotechnical hazards that cannot be reasonably mitigated to an acceptable level?	○ Yes	○ No

Categorization of Infiltration Feasibility Condition based on Geotechnical Conditions	
Summarize findings and basis; provide references to related reports or exhibits. Infiltration rates with a safety factor of 2 applied are between 0.016 and 0.025 in./hr. The Geotechnical report includes description of testing and results.	
If answers to both Criteria 3 and Criteria 4 are "Yes", a partial infiltration design is potentially feasible based on geotechnical conditions only. If answers to either Criteria 3 or Criteria 4 is "No", then infiltration of any volume is considered to be infeasible within the site.	◯ Partial Infiltration Condition ⊗ No Infiltration Condition

[5] To be completed using gathered site information and best professional judgement considering the definition of MEP in the MS4 Permit. Additional testing and/or studies may be required by City Engineer to substantiate findings.

APPENDIX F

SHEAR WAVE VELOCITY REPORT

Array Location

Site Name: **Miramar College Aviation Building**
Address: 3750 John J. Montgomery Drive, San Diego, CA
Array Center: 32.8130°, -117.1501°

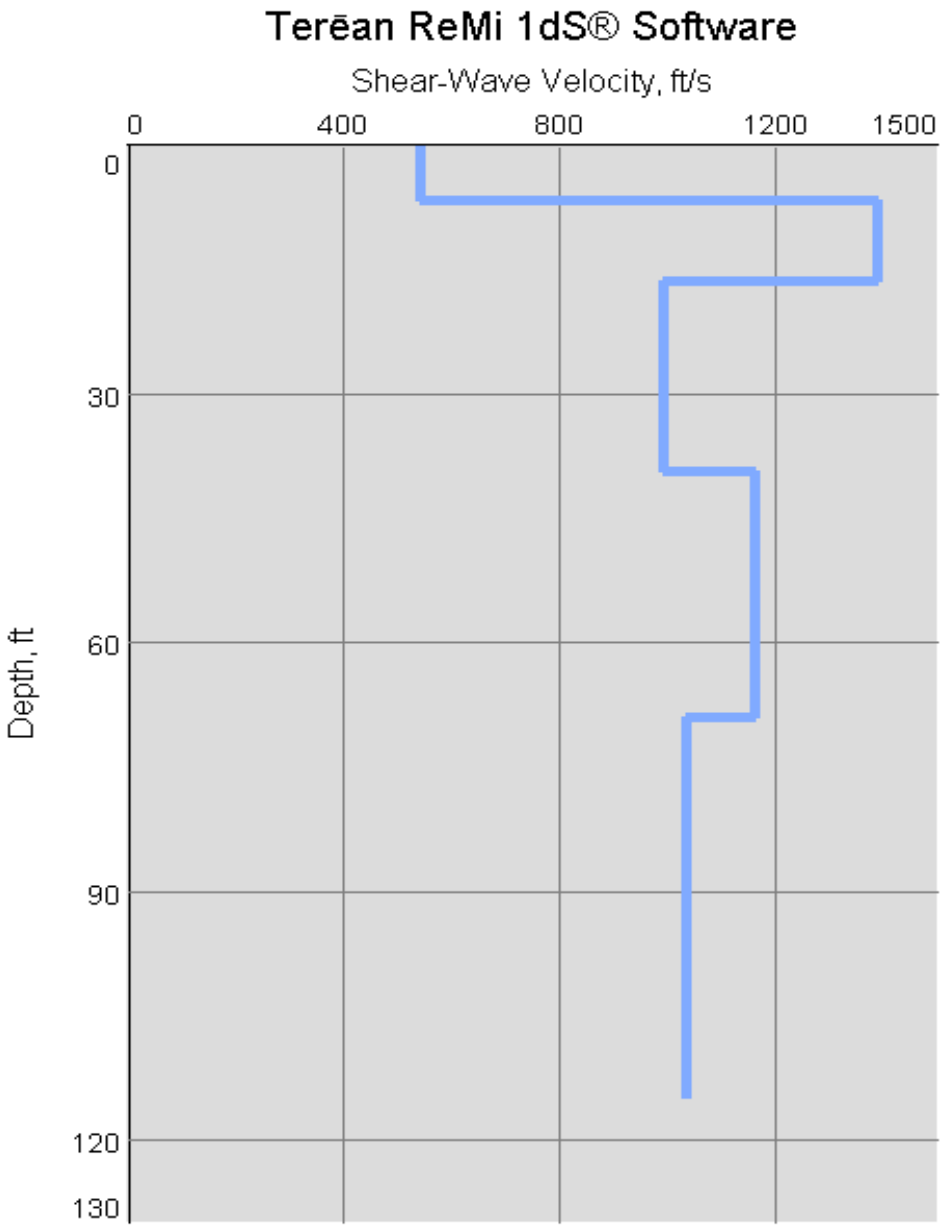
Results
Vs100: **1,023 ft/s**
Site Class: CD
ASCE: ASCE 7-22
Depth: **115 ft**

Survey Parameters
Geophone Count: 24
Geophone Spacing: 10 ft
Array Length: 230 ft
Survey Date: 03/16/2026
Performed By: UES
Analysis By: DD
Analysis Date: Mon Mar 30, 2026

Narrative
SHEAR WAVE VELOCITIES AND SEISMIC SITE CLASS
UES's geophysical site evaluation included subsurface seismic imaging and earthquake ground shaking potential evaluation using Terēan's VsSurf ReMi™ seismic data processing software. Seismic surveys were performed to determine the seismic site class per ASCE 7-22 using the weighted-average soil shear wave velocity for the upper 100 feet (Vs100). The surveys were performed by recording active and/or ambient (passive) seismic sources. The seismic recording array for these surveys consisted of 24, 4.5 Hz geophones at 10 ft spacing, for a total survey length of 230 feet. Noise generated by sledgehammer swings during data acquisition while ambient noise was generated from traffic along the nearby roads. The seismic data were acquired using a Geode 24-Channel seismograph, while data was processed using Terēan's ReMi™ software (terean.com/products). Survey results indicate a weighted-average soil shear wave velocity of the upper 100 feet (Vs100) of 1,023 ft/s. This results in a designation of a Seismic Site Class CD according to Table ASCE 7-22.

Miramar College Aviation Building Shear-Wave Velocity Report
Miramar College Aviation Building Terēan VsSurf ReMi™ 2.1 Software

Depth (ft)	Vs (ft/s)
0.0	543
6.5	543
6.5	1,390
16.3	1,390
16.3	993
39.1	993
39.1	1,160
68.9	1,160
68.9	1,034
115.0	1,034



Miramar College Aviation Building Shear-Wave Velocity Report
Miramar College Aviation Building Terēan VsSurf ReMi™ 2.1 Software

Frequency (Hz)	Slowness (s/m)
42.968	0.00393
39.550	0.00393
35.644	0.00393
32.226	0.00393
28.320	0.00393
25.878	0.00383
22.949	0.00373
20.507	0.00363
18.554	0.00343
16.601	0.00343
14.160	0.00333
12.695	0.00333
11.230	0.00343
10.253	0.00373
8.789	0.00403
8.301	0.00464
8.301	0.00504

Seismic File:	1.dat
Pre-Processing:	preprocess
Surveyed Geophones:	No
Max Frequency, Hz:	50
Min Velocity, m/s:	198

Appendix G

Phase II Environmental Site Assessment

Phase II Environmental Site Assessment

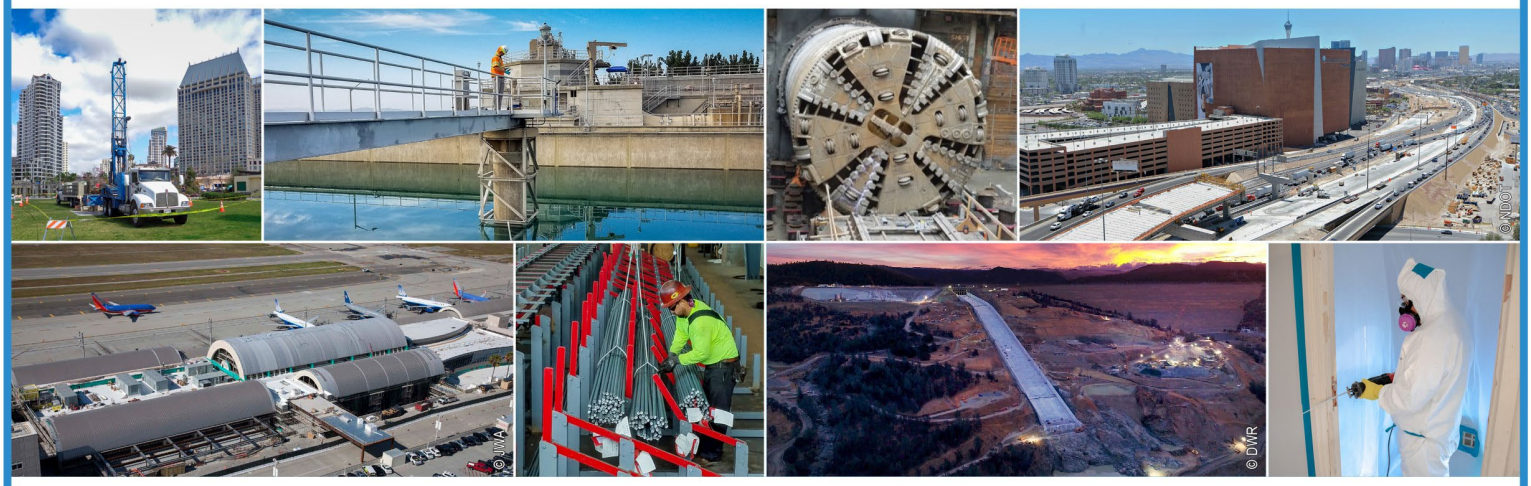
Lot 16 of Montgomery-Gibbs Executive Airport

3873 Kearny Villa Road, San Diego, California

SDCCD District Architect

3375 Camino Del Rio S., Suite 310 | San Diego, California 92123

June 27, 2025 | Project No. 110092001



Geotechnical | Environmental | Construction Inspection & Testing | Forensic Engineering & Expert Witness

Geophysics | Engineering Geology | Laboratory Testing | Industrial Hygiene | Occupational Safety | Air Quality | GIS

Ninyo & Moore

A SOCOTEC COMPANY

Ninyo & Moore
A SOCOTEC COMPANY

Phase II Environmental Site Assessment
Lot 16 of Montgomery-Gibbs Executive Airport
3873 Kearny Villa Road, San Diego, California

SDCCD District Architect
3375 Camino Del Rio S., Suite 310 | San Diego, California 92123

June 27, 2025 | Project No. 110092001

Nathan Diem
Senior Project Geologist

Travis Meier
Principal Environmental Scientist

NDD/TWM/mp

CONTENTS

1	INTRODUCTION	1
2	SITE LOCATION AND DESCRIPTION	1
3	FIELD ACTIVITIES	1
3.1	Geophysical Survey	1
3.2	Drilling and Soil Sampling	1
4	ANALYTICAL RESULTS	2
4.1	Soil Analytical Results	2
5	FINDINGS, CONCLUSIONS AND RECOMMENDATIONS	3
5.1	Summary and Findings	3
5.2	Conclusions	3
5.3	Recommendations	4
6	LIMITATIONS	4
7	REFERENCES	6

TABLES

1 – Soil Analytical Results - CAM 17 Metals

2 – Soil Analytical Results - TPH, PAH, VOC

FIGURES

1 – Site Location

2 – Sampling Locations

APPENDIX

A – Geophysical Survey

B – Boring Logs

C – Lab Report

1 INTRODUCTION

On behalf of San Diego Community College District (SDCCD), Ninyo & Moore has prepared this Phase II Environmental Site Assessment (Assessment) report for the property located at Lot 16 of Montgomery-Gibbs Executive Airport, 3873 Kearny Villa Road, San Diego, California (site) (Figure 1). This Assessment was conducted in accordance with our proposal dated April 24, 2025. Based on information provided by the SDCCD, Ninyo and Moore conducted a subsurface soil investigation to assess the site of potential chemicals of concern (COCs) related to the existing hanger/classroom building prior to the demo of the existing building to be reconstructed into a new hanger/classroom building.

2 SITE LOCATION AND DESCRIPTION

The site is a single-story hanger building currently used as an airplane repair shop and a classroom. The site is surrounded by Montgomery-Gibbs Executive Airport to the north and east, Four Points Hotel to the south, and highway 163 to the west followed by commercial properties. An adjoining hanger was observed directly to north of the site. SDCCD requested an ESA to investigate if any underground hazardous materials are present.

3 FIELD ACTIVITIES

Ninyo and Moore performed a Phase II Site Assessment on May 30th, 2025 consisting of collecting soil samples from four soil borings around the south hanger on-site. Details of the site assessment are described below.

3.1 Geophysical Survey

Prior to drilling activities, the boring locations were marked with white paint and Underground Service Alert (USA) was notified of the proposed drilling locations. Ninyo & Moore retained the services of SubSurface Surveys & Associates on May 22th, 2025 to perform a geophysical survey of the boring locations for any utilities that were not marked by the utility companies. No conflicts were encountered with the proposed boring locations. The geophysical survey report is included in Appendix B.

3.2 Drilling and Soil Sampling

On May 30th, 2025, four boring locations (B-1 through B-2) were advanced along the perimeter of the hanger using a truck mounted drill rig supplied with 6-inch hollow stem augers operated by C-57-licensed drilling contractor. Borings were proposed to be advanced to a total depth of 18-feet bgs. Due to subsurface soil conditions, refusal was encountered at multiple locations. Boring B-1 was advance to a total depth of 13.5ft bgs, B-2 and B-3 to a depth of 18ft bgs, and B-4 to a depth

of 7.5ft bgs. Soil samples were generally collected from borings at approximately every 5 feet bgs. The soil samples in B-1 were collected at depths of 0.5, 5, and 10 feet bgs. Soil samples from B-2 were collected at depths of 0.5, 5, 10, and 15 feet bgs. Soil recovery at 18 feet bgs in boring B-2 was minimal and no sample was collected. Samples in boring B-3 were collected at depths of 0.5, 5, 10, 15, and 18 feet bgs. Soil samples from B-4 were collected from depths 0.5 and 5 feet bgs due to drilling refusal at 7.5 feet bgs.

Soil samples were collected with a split-spoon sampler driven into the ground with a 140-pound hammer. Soil samples were placed in laboratory supplied glass jars, labeled with pertinent information, placed in a cooler with ice and delivered to Enthalpy Analytical a State-certified laboratory for analysis under chain-of-custody procedures. The boring locations are shown on Figure 2.

During drilling activities, soils were logged by field personnel in accordance with the Unified Soil Classification System (USCS). Soils observed during drilling activities consisted of interbedded layers of silty sand, sandy gravels, and silty gravely sands. The boring logs are included in Appendix C.

Following sample collection, the borings were grouted with Portland cement to the near surface following DEH guidelines, and completed to grade with a material matching the existing site material. The investigation derived waste (IDW) generated from the sampling activities was comprised of soil cuttings which were placed in properly labeled 55-gallon steel drums. The IDW drums were sampled and will be properly profiled for offsite disposal pending analytical results.

4 ANALYTICAL RESULTS

Soil analytical results were compared to the 2020 (revised 2022) Department of Toxic Substance Control (DTSC) Screening Levels (SLs) and 2019 (Rev.2) San Francisco Bay Regional Water Quality Control Board (RWQCB) Environmental Screening Levels (ESLs) for commercial/industrial land use (Table 1 and 2). Sample results are discussed in the following sections and a copy of the laboratory analytical reports are included in Appendix D.

4.1 Soil Analytical Results

A total of fourteen (14) soil samples were analyzed from four borings B-1 through B-4. Soil samples were analyzed for CAM 17 metals by USEPA method 6010B/7471A; gasoline range organics (GRO), diesel range organics (DRO), oil range organics (ORO), and Jet Fuel A by USEPA method 8015B(M); polycyclic aromatic hydrocarbons (PAHs) by USEPA method

8270C SIM; and volatile organic compounds (VOCs) by USEPA method 8260B. A summary of detected analytical results is provided below and on Table 1 and 2.

- In soil samples collected from B-1 through B-4 the following metals were detected: arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, molybdenum, nickel, vanadium, and zinc. Detected metals were found at concentrations below the commercial/industrial DTSC SLs except for arsenic in one sample. Arsenic levels were compared to the DTSC California background upper bound limit of arsenic for school sites at a concentration of 12 mg/kg. The 15-foot sample in boring B-2 was above the DTSC SL at a concentration of 15 mg/kg.

- Soluble threshold limit concentration (STLC) for lead was analyzed on samples B-1-0.5 and B-3-0.5. Detected concentration were reported below the STLC regulatory limit of 5 milligrams per liter (mg/L).

- Soil samples collected were analyzed for GRO, DRO, ORO, and Jet Fuel A. GRO and Jet Fuel A were not detected above laboratory reporting limits (RLs). DRO ranged from 17 mg//kg to 400 mg/kg and ORO ranged from 61 mg/kg to 1,000 mg/kg. All concentrations of DRO and ORO did not exceed RWQCB ESLs for commercial/industrial properties.

- Soil samples were analyzed for PAHs. Detected analytes reported above the laboratory RL were found at concentration below the DTSC SLs.

- VOCs were not detected in any soil samples at a concentration above the laboratory RL.

5 FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

Based on the results of this soil assessment, Ninyo & Moore presents the following findings and conclusions:

5.1 Summary and Findings

The following summarizes the findings of Ninyo & Moore's environmental investigation activities:

- Based on information provided by SDCCD, Ninyo and Moore conducted a subsurface soil investigation to assess the site of potential COCs related to the hanger/classroom building.

- Soil samples collected from B-1 through B-4 had concentrations of CAM 17 metals, DRO, ORO, and PAHs above the laboratory detection limit. All concentrations were below their respective SL and ESL for commercial/industrial land use.

- VOCs were not detected in any of the soil samples submitted.

5.2 Conclusions

Based on the results of this environmental investigation, Ninyo & Moore makes the following conclusions:

- No detections of GRO, DRO, ORO, Jet Fuel A, PAHs, and VOCs exceeded the applicable commercial/industrial land use SL or ESL.

- The arsenic concentration in sample B-2-15 was above the DTSC California background level. However, arsenic was below the DTSC SL for all other samples indicating arsenic is not a major environmental concern. The risk of arsenic levels above the DTSC SL contact with sensitive receptors is low based on only one outlier concentration at 15 fee bgs.

5.3 Recommendations

Ninyo & Moore does not recommend additional sampling at this time. Based on current property use and future property use proposed by SDCCD, constituents analyzed in this investigation are not an environmental concern. Ninyo & Moore recommends that any soil deemed for offsite disposal should be analyzed for proper waste classification. Soil may not be suitable for reuse offsite based on lead, arsenic, DRO, and ORO concentrations and should be analyzed before any reuse offsite. We recommend a soils management plan be developed prior to redevelopment to help inform SDCCD and its contractors on proper soil handling, reuse, sampling and stockpiling procedures.

6 LIMITATIONS

The environmental services described in this report have been conducted in general accordance with current regulatory guidelines and the standard-of-care exercised by environmental consultants performing similar work in the project area. No warranty, expressed or implied, is made regarding the professional opinions presented in this report. Please note that this study did not include an evaluation of geotechnical conditions or possible geologic hazards. The background information described and relied upon for the preparation of this report is limited to the accuracy and availability of the sources reviewed.

This document is intended to be used only in its entirety. No portion of the document by itself is designed to completely represent any aspect of the project described herein. Ninyo & Moore should be contacted if the reader requires any additional information or has questions regarding the content, interpretations presented, or completeness of this document.

Our conclusions and opinions are based on an analysis of the observed site conditions, referenced documents, and professional experience. It should be understood that the conditions of a site could change with time as a result of natural processes or the activities of man at the subject site or nearby sites. In addition, changes to the applicable laws, regulations, codes, and standards of practice may occur due to government action or the

broadening of knowledge. The findings of this report may, therefore, be invalidated over time, in part or in whole, by changes over which Ninyo & Moore has no control.

This report is intended exclusively for use by SDCCD. Any use or reuse of the findings, conclusions, opinions, and/or recommendations of this report by parties other than those noted is undertaken at said parties' sole risk.

7 REFERENCES

California Department of Toxic Substance Control Human and Ecological Risk Office Screening Levels, June 2020, revised May 2022.

San Francisco Bay Regional Water Quality Control Board Environmental Screening Levels, January 2019 .

TABLES

Table 1 – Soil Analytical Results - CAM 17 Metals

Sample ID	Date Collected	Sample Depth (bgs)	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Lead STLC	Molybdenum	Nickel	Vanadium	Zinc
			mg/kg								mg/L	mg/kg			
B-1-0.5	5/30/2025	0.5	3.4	72	ND<0.48	6.4	21	3.0	11	75	0.45	ND<0.96	7.3	40	360
B-1-10	5/30/2025	10	1.5	23	ND<0.50	ND<0.50	16	3.2	3.5	2.9	--	ND<1.0	4.4	51	19
B-2-5	5/30/2025	5	3.1	20	ND<0.50	ND<0.50	15	1.7	3.3	5.3	--	ND<0.99	3.5	45	10
B-2-15	5/30/2025	15	**15**	75	ND<0.50	ND<0.50	33	3.6	7.2	11	--	1.1	4.9	42	26
B-3-5	5/30/2025	5	2.6	20	ND<0.49	ND<0.49	16	2.5	3.7	4.9	--	ND<0.97	4.0	35	9.9
B-3-15	5/30/2025	15	8.2	76	0.72	ND<0.48	15	3.7	7.9	9.0	--	ND<0.96	8.0	62	44
B-4-0.5	5/30/2025	0.5	9.3	43	ND<0.48	1.1	31	2.5	7.1	20	--	ND<0.96	9.9	79	43
Screening Criteria															
DTSC SL[1]			12a	NE	230	79	NE	NE	NE	500	NA	NE	11,000	NE	NE
STLC x 10[2]			NA	NA	NA	NA	NA	NA	NA	50	5	NA	NA	NA	NA

Notes:

CAM 17 Metals analyzed using United States Environmental Protection Agency (US EPA) Method 6010B/7471A

Only metals with at least one detection above the laboratory reporting limit are tabualted

ID - identification

bgs - below ground surface

mg/kg - milligrams per kilogram

mg/L - milligrams per liter

ND<X - analyte not detected at or above the reporting limit X

NE - not established

NA - not applicable

-- - not analyzed

a. Arsenic SL was replaced with site-specific upper limit for naturally occuring aresenic calculated using DTSC's 2009 Arsenic Strategies guidance

1. DTSC SL - Department of Toxic Substances Control Screening Levels, Human Health Risk (HERO), Note 3, June2020-Revised-May2022; if cancer endpoint value not available, noncancer endpoint value chosen--if no values, default to EPA Regional Screening Levels (RSL), TR=1E-06, HQ=1, November 2018

2. STLC x 10 - ten times the soluble threshold limit concentration regulatory limit

Table 2 – Soil Analytical Results - TPHs, PAHs, and VOCs

Sample ID	Date Collected	Sample Depth (bgs)	TPHs				PAHs										VOCs
			GRO C8-C10	DRO C10-C28	ORO C28-C44	Jet Fuel A C10 C16	Phenanthrene	Fluoranthene	Pyrene	Benzo(a)anthracene	Chrysene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzo(a)pyrene	Indeno(1,2,3-cd)pyrene	Benzo(g,h,i)perylene	
			mg/kg				ug/kg										
B-1-0.5	5/30/2025	0.5	ND<9.9	17	61	ND<9.9	14	57	62	21	45	73	27	41	44	52	ND
B-1-10	5/30/2025	10	ND<10	ND<10	ND<20	ND<10	ND<10	ND<10	ND<10	ND<10	ND<10	ND<10	ND<10	ND<10	ND<10	ND<10	ND
B-2-5	5/30/2025	5	ND<9.9	ND<9.9	ND<20	ND<9.9	ND<10	ND<10	ND<10	ND<10	ND<10	ND<10	ND<10	ND<10	ND<10	ND<10	ND
B-2-15	5/30/2025	15	ND<9.9	ND<9.9	ND<20	ND<9.9	ND<9.9	ND<9.9	ND<9.9	ND<9.9	ND<9.9	ND<9.9	ND<9.9	ND<9.9	ND<9.9	ND<9.9	ND
B-3-5	5/30/2025	5	ND<9.9	ND<9.9	ND<20	ND<9.9	ND<10	ND<10	ND<10	ND<10	ND<10	ND<10	ND<10	ND<10	ND<10	ND<10	ND
B-3-15	5/30/2025	15	ND<10	ND<10	ND<20	ND<10	ND<10	ND<10	ND<10	ND<10	ND<10	ND<10	ND<10	ND<10	ND<10	ND<10	ND
B-4-0.5	5/30/2025	0.5	ND<99	270	940	ND<99	ND<100	ND<100	ND<100	ND<100	ND<100	ND<100	ND<100	ND<100	ND<100	ND<100	ND
Screening Criteria																	
DTSC SL[1]			NE	NE	NE	NE	NE	18,000,000	13,000,000	12,000	1,300,000	13,000	130,000	1,300	13,000	NE	Various
RWQCB ESLs[2]			2,000	1,200	180,000	270	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Various

Notes:

Analytes with at least one detection above the laboratory reporting limit are tabualted

GRO - gasoline range organics, analyzed by EPA Method 8015M

DRO - diesel range organics, analyzed by EPA Method 8015M

ORO - oil range organics, analyzed by EPA Method 8015M

Jet Fuel A - jet fuel range organics, analyzed by EPA Method 8015M

PAH - polycyclic aromatic hydrocarbons, analyzed by EPA Method 8270C SIM

VOC - volatile organic compounds, analyzed by USEPA Method 8260B

NE - not established

mg/Kg – milligrams per kilogram

ug/Kg – micrograms per kilogram

NA - not applicable

ND - not detected

ND<X – analyte not detected at or above laboratory reporting limit X

[1] - DTSC SL - Department of Toxic Substances Control Screening Levels, Human Health Risk (HERO), Note 3, Quarterly Update, April 2019 Commerical/Industrial; if cancer endpoint value not available, noncancer endpoint value chosen--if no values, default to EPA Regional Screening Levels, TR=1E-06, HQ=1, November 2018

[2] - San Francisco Bay Regional Water Quality Control Board (RWQCB) Commerical/Industrial Environmental Screening Levels (ESLs), 2019 (Rev. 2)

FIGURES



P110092001.aprx 6/19/2025 DRAFTED BY: JDL

NOTE: DIRECTIONS, DIMENSIONS AND LOCATIONS ARE APPROXIMATE. | SOURCE: USGS, 2025

N

FEET

0 2,000 4,000

FIGURE 1

SITE LOCATION

3873 KEARNY VILLA ROAD
SAN DIEGO, CALIFORNIA

110092001 | 6/25

Ninyo & Moore
A SOCOTEC COMPANY



LEGEND

B-4 SAMPLE LOCATION

N

FEET

0 50 100

NOTE: DIRECTIONS, DIMENSIONS AND LOCATIONS ARE APPROXIMATE. | SOURCE: GOOGLE, 2025

FIGURE 2

Ninyo & Moore

A SOCOTEC COMPANY

SAMPLING LOCATIONS

3873 KEARNY VILLA ROAD
SAN DIEGO, CALIFORNIA

110092001 | 6/25

P110092001.aprx 6/19/2025 DRAFTED BY: JDL

APPENDIX A

Geophysical Survey

SubSurface Surveys
& Associates, Inc.
An Applied Geophysical Company

2075 Corte Del Nogal, Suite W
Carlsbad, CA 92011

Office: (760) 476-0492
Fax: (760) 476-0493

May 27, 2025

Project/Invoice No. 25-219

Ninyo & Moore
5710 Ruffin Road
San Diego, CA

Attn: **Nathan Diem**

Re: Geophysical Investigation Report, Montgomery-Gibbs Airport, Miramar Hangar, San Diego, CA.

This report is to present the results of our geophysical survey carried out at Montgomery-Gibbs Airport, Miramar Hangar 30, San Diego, CA (Figure 1). The survey was performed on May 22, 2025, and its purpose was to detect and delineate, insofar as possible, all pipes, conduits, utilities, and other underground drilling obstructions in the immediate vicinity of four 20 feet x 20 feet survey areas for the later placement of boreholes.

A combination of electromagnetic induction (EM), magnetometry, ground penetrating radar (GPR), and utility locators with line tracing capabilities were brought to the field in anticipation of use.

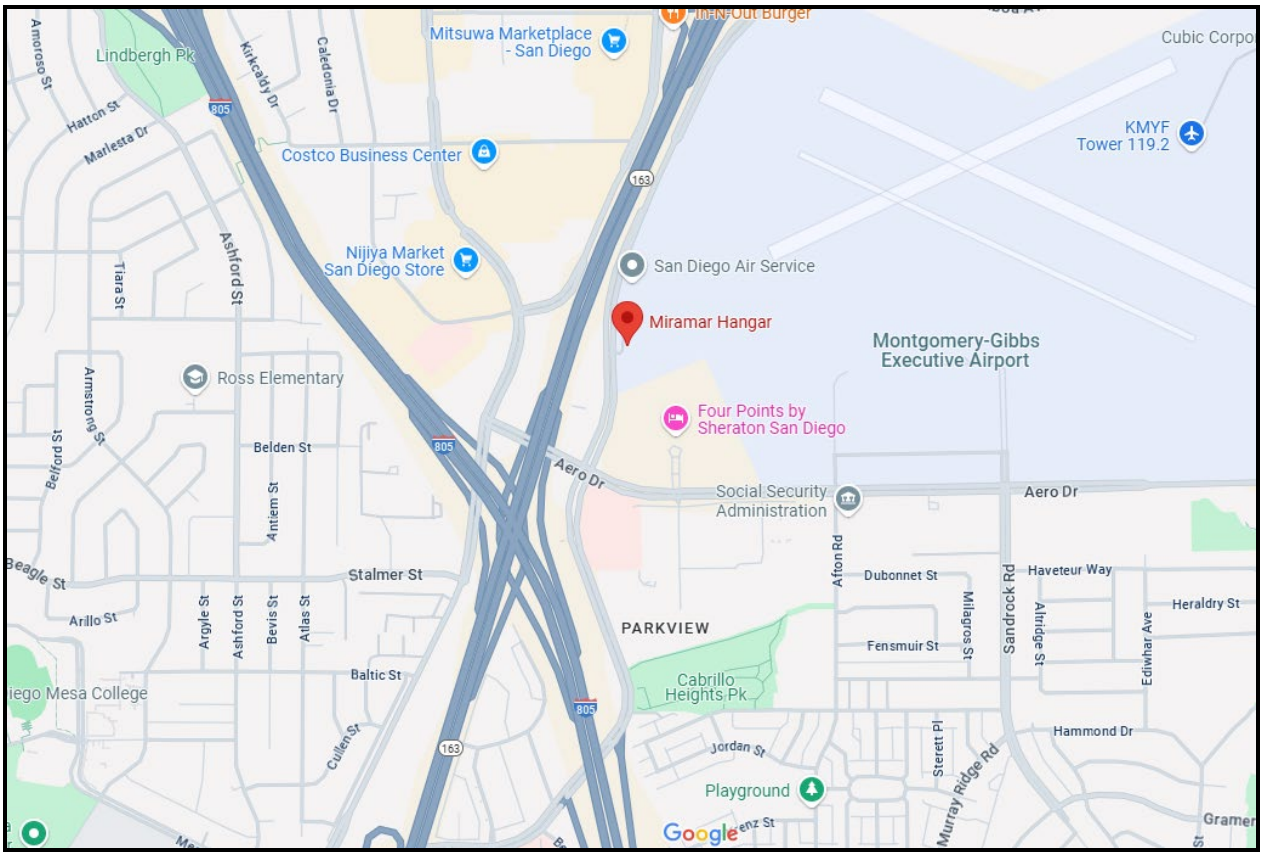


FIGURE 1. Site location map.

Survey Design – The four areas to be surveyed were indicated in the field by the client and measured approximately 1,600 square feet in total.

For this particular site and for all survey objectives the best use of time was achieved by systematically free-traversing with the instruments while simply monitoring them manually, continuously, and in real-time to determine which responses were significant and due to true subsurface targets, and which were due to other non-target or above-ground features and must be ignored (examples being false GPR anomalies from uneven surfaces). In these situations, the free-traversing method is advantageous in that it allows for relatively quick detection of true anomalous objects which, in turn, facilitates the opportunity to immediately reinvestigate them further for clarification and confirmation. In this manner, the EM device, magnetic gradiometer, and GPR were traversed systematically over and around the survey areas in multiple, organized directions. Additional traverses were always taken for detailing and confirmation where anomalous conditions were found.

In addition, the line tracers were used to impress signals onto pipes, generally through accessible risers and tracer wires when present, to delineate the lines' locations and orientations. The instruments were also used in passive mode, configured to detect 60 Hz electrical signals and other common radio-frequency signals found in active electrical and communication lines.

A Fischer TW-6 M-Scope was used for the EM sampling. A Sensors & Software Noggin Ground Penetrating Radar unit with a 500 MHz antenna produced the radar images. The magnetic gradiometer was a Schonstedt GA-52, and a RD 8200 and RIDGID SR-60 SeekTech utility locator rounded out the tools applied.

Brief Description of the Geophysical Methods Applied – The TW-6 M-Scope device energizes the ground by producing an alternating primary magnetic field with AC current in a transmitting coil. If conducting materials are within the area of influence of the primary field, AC eddy currents are induced to flow in the conductors. A receiving coil senses the secondary magnetic field produced by these eddy currents, and outputs the response as anomalous conditions. The strength of the secondary field is a function of the conductivity of the object; say a pipe, tank or cluster of drums, its size, and its depth and position relative to the instrument's two coils. Conductive objects, to a depth of approximately 7 feet below ground surface (bgs) for the M-Scope are sensed. The device is also somewhat focused; that is, it is more sensitive to conductors below the instrument than they are to conductors off to the side.

The magnetic gradiometer has two flux gate magnetic fixed sensors that are passed closely to and over the ground. When not in close proximity to a magnetic object, that is, only in the earth's field, the instrument emits a sound signal at a low frequency. When the instrument passes over a buried iron or steel object, so that locally there is a high magnetic gradient, the frequency of the emitted sound increases. The frequency is a function of the gradient between the two sensors.

The GPR instrument beams energy into the ground from its transducer/antenna, in the form of electromagnetic waves. A portion of this energy is reflected back to the antenna at a boundary in the subsurface across which there is an electrical contrast. The instrument produces a continuous record of the reflected energy as the antenna is traversed across the ground surface. The greater the electrical contrast, the higher the amplitude of the returned energy. The radar wave travels at a velocity unique to the material properties of the ground being investigated, and when these velocities are known, the two-way travel times can be converted to depth. The depth of penetration and image resolution produced are a function of ground

electrical conductivity and dielectric constant.

The line locator is used to passively detect energized high voltage electric lines and electrical conduit (50-60 Hz), VLF signals (14-22 kHz), as well as to actively trace other utilities. Where risers are present, the utility locator transmitter can be connected directly to the object, and a signal (9.8-82 kHz) is sent traveling along the conductor, pipe, conduit, etc. In the absence of a riser, the transmitter can be used to impress an input signal on the utility by induction. In either case, the receiver unit is tuned to the input signal, and is used to actively trace the signal along the pipe's surface projection.

Interpretation and Conclusions – The interpretation took place in real time as the survey progressed, and accordingly, the findings of our investigation were marked on the ground cover at the site with spray paint, were reported directly to the client, and are further documented with site photographs of the surveyed areas (Figures 2-5).

Items detected within the survey areas were marked in coordinated standard colors including red for electric, and pink for utilities of unknown type. Please review the site photographs for the locations and orientations of all items found within the vicinity of the survey areas.

General Limitations, Cautions, and Further Recommendations - It should be understood that nearly all work sites possess conditions or configurations limiting the effectiveness of both geophysical instruments and the surveying techniques in which they are deployed. Additionally, when such is not performing optimally it can often times occur unknowing to the instrument operator. Consequently, the detection of buried objects in all circumstances **cannot be guaranteed**. Such geophysical limitations are numerous and difficult to predict beforehand, but may include such things as rebar-reinforced ground cover or aboveground metallic structures interfering with metal detection, abrupt changes in ground cover type disrupting radar signal, aboveground obstacles preventing full instrument traverses or restricting traverses to one direction only, nearby powerlines or EM transmitters interfering with instrument electronics, highly conductive background soil conditions limiting GPR penetration, non-metallic targets with geo-electrical properties similar to soil, nearby buried objects shielding true targets from detection, tracing signal jumping from the target pipe to nearby non-target conduits, and inaccessible risers, cleanouts, valve boxes, and manholes. If one or more geophysical instrument is rendered ineffective and cannot be utilized, the quality of the survey can be somewhat degraded.

For the above reasons, and in the interest of maximum safety, we encourage our clients to take advantage of Underground Service Alert (USA), Dig Alert, or other similar services, when possible. Furthermore, we recommend hand-auguring and the use of a drilling method known as air knifing or vacuum extraction, when feasible or if applicable to this project. These methods may significantly limit damage to underground pipes, conduits, and utilities that might not have been detectable during this survey. Please bear in mind, that geophysical surveying is only one of several levels of protection that is available to our clients.

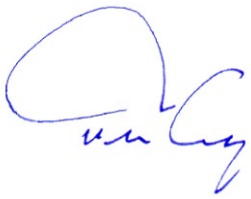
SubSurface Surveys may include maps in some reports. While they are an accurate general representation of the site and our findings, they are not of engineering quality (i.e., measured and mapped by a licensed land surveyor).

SubSurface Surveys and Associates makes no guarantee either expressed or implied regarding the accuracy of the findings and interpretations present. And, in no event will SubSurface Surveys and Associates be liable for any direct, indirect, special, incidental, or consequential damages resulting from interpretations

and opinions presented herewith.

All data generated on this project are in confidential file in this office and are available for review by authorized persons at any time. The opportunity to participate in this investigation is very much appreciated. Please call, if there are questions.





William Donnelly
Staff Geophysicist, SubSurface Surveys

Travis Crosby
Senior Geophysicist, SubSurface Surveys
CA State Geophysics Registration GP1044

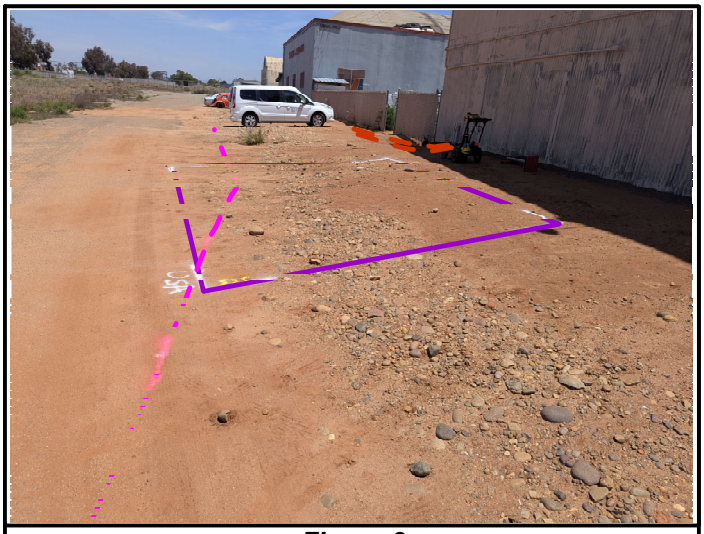


Figure 2



Figure 3



Figure 4

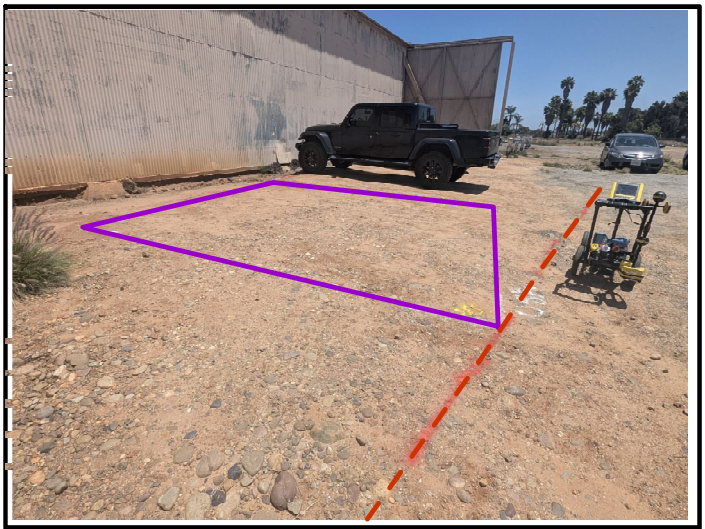


Figure 5

No Photo

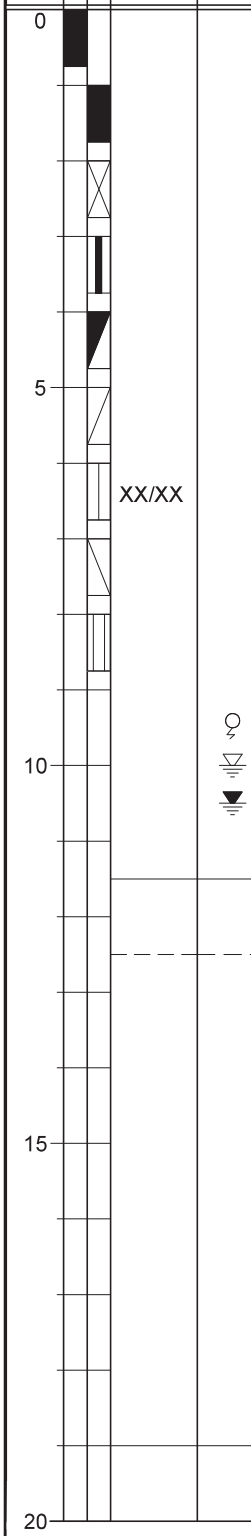
No Photo

Sub Surface Surveys	SITE: **Montgomery-Gibbs Airport** **Miramar Hangar 30** **San Diego, CA**	TITLE: **Borehole Photographs**	SURVEY DATE: **May 22, 2025**
		PREPARED FOR: **Ninyo & Moore**	SSS PROJECT NO: **25-219**

APPENDIX B

Boring Logs

BORING LOG EXPLANATION SHEET



Bulk sample.

Modified split-barrel drive sampler.

No recovery with modified split-barrel drive sampler.

Sample retained by others.

Standard Penetration Test (SPT).

No recovery with a SPT.

Shelby tube sample. Distance pushed in inches/length of sample recovered in inches.

No recovery with Shelby tube sampler.

Continuous Push Sample.

Seepage.

Groundwater encountered during drilling.

Groundwater measured after drilling.

SM

MAJOR MATERIAL TYPE (SOIL):
Solid line denotes unit change.

CL

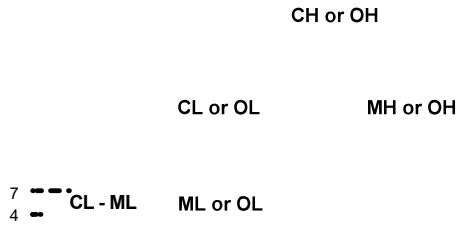
Dashed line denotes material change.

Attitudes: Strike/Dip
b: Bedding
c: Contact
j: Joint
f: Fracture
F: Fault
cs: Clay Seam
s: Shear
bss: Basal Slide Surface
sf: Shear Fracture
sz: Shear Zone
sbs: Shear Bedding Surface

The total depth line is a solid line that is drawn at the bottom of the boring.

COARSE-GRAINED SOILS more than 50% retained on No. 200 sieve	**GRAVEL** more than 50% of coarse fraction retained on No. 4 sieve	CLEAN GRAVEL less than 5% fines		GW	well-graded GRAVEL
				GP	poorly graded GRAVEL
		GRAVEL with DUAL CLASSIFICATIONS 5% to 12% fines		GW-GM	well-graded GRAVEL with silt
				GP-GM	poorly graded GRAVEL with silt
				GW-GC	well-graded GRAVEL with clay
				GP-GC	poorly graded GRAVEL with clay
		GRAVEL with FINES more than 12% fines		GM	silty GRAVEL
				GC	clayey GRAVEL
				GC-GM	silty, clayey GRAVEL
	SAND 50% or more of coarse fraction passes No. 4 sieve	CLEAN SAND less than 5% fines		SW	well-graded SAND
				SP	poorly graded SAND
		SAND with DUAL CLASSIFICATIONS 5% to 12% fines		SW-SM	well-graded SAND with silt
				SP-SM	poorly graded SAND with silt
				SW-SC	well-graded SAND with clay
				SP-SC	poorly graded SAND with clay
		SAND with FINES more than 12% fines		SM	silty SAND
				SC	clayey SAND
				SC-SM	silty, clayey SAND
FINE-GRAINED SOILS 50% or more passes No. 200 sieve	**SILT and CLAY** liquid limit less than 50%	INORGANIC		CL	lean CLAY
				ML	SILT
				CL-ML	silty CLAY
		ORGANIC		OL (PI > 4)	organic CLAY
				OL (PI < 4)	organic SILT
	SILT and CLAY liquid limit 50% or more	INORGANIC		CH	fat CLAY
				MH	elastic SILT
		ORGANIC		OH (plots on or above "A"-line)	organic CLAY
				OH (plots below "A"-line)	organic SILT
	Highly Organic Soils			PT	Peat

Boulders		> 12"	> 12"	Larger than basketball-sized
Cobbles		3 - 12"	3 - 12"	Fist-sized to basketball-sized
Gravel	Coarse	3/4 - 3"	3/4 - 3"	Thumb-sized to fist-sized
	Fine	#4 - 3/4"	0.19 - 0.75"	Pea-sized to thumb-sized
Sand	Coarse	#10 - #4	0.079 - 0.19"	Rock-salt-sized to pea-sized
	Medium	#40 - #10	0.017 - 0.079"	Sugar-sized to rock-salt-sized
	Fine	#200 - #40	0.0029 - 0.017"	Flour-sized to sugar-sized
Fines		Passing #200	< 0.0029"	Flour-sized and smaller



Very Loose	≤ 4	≤ 8	≤ 3	≤ 5
Loose	5 - 10	9 - 21	4 - 7	6 - 14
Medium Dense	11 - 30	22 - 63	8 - 20	15 - 42
Dense	31 - 50	64 - 105	21 - 33	43 - 70
Very Dense	> 50	> 105	> 33	> 70

Very Soft	< 2	< 3	< 1	< 2
Soft	2 - 4	3 - 5	1 - 3	2 - 3
Firm	5 - 8	6 - 10	4 - 5	4 - 6
Stiff	9 - 15	11 - 20	6 - 10	7 - 13
Very Stiff	16 - 30	21 - 39	11 - 20	14 - 26
Hard	> 30	> 39	> 20	> 26

Ninyo & Moore
A SOCOTEC COMPANY

USCS METHOD OF SOIL CLASSIFICATION

DATE DRILLED 5/30/25 BORING NO. B-1

GROUND ELEVATION _____ SHEET 1 OF 1

METHOD OF DRILLING Hand Auger/Hollow Stem Auger

DRIVE WEIGHT N/A DROP N/A

SAMPLED BY JAC LOGGED BY JAC REVIEWED BY _____

DEPTH (feet)	SAMPLES Bulk	SAMPLES Driven	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DESCRIPTION/INTERPRETATION
0								Reddish brown, silty gravely SAND; none plastic; very soft.
10								Reddish brown, silty SAND; none plastic; very soft.
								Reddish brown, sandy GRAVEL; none plastic; very loose.
								Total Depth = 13.5 feet. Refusal.
15								
20								

FIGURE

Ninyo & Moore
Geotechnical & Environmental Sciences Consultants

MONTGOMERY FIELD
SAN DIEGO, CALIFORNIA

110092001 | 6/25

DATE DRILLED 5/30/25 BORING NO. B-2

GROUND ELEVATION _____ SHEET 1 OF 1

METHOD OF DRILLING Hand Auger/Hollow Stem Auger

DRIVE WEIGHT N/A DROP N/A

SAMPLED BY JAC LOGGED BY JAC REVIEWED BY _____

DEPTH (feet)	SAMPLES (Bulk / Driven)	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DESCRIPTION/INTERPRETATION
0							Reddish brown, sandy GRAVEL, none plastic; very loose.
							Reddish brown, silty gravely SAND; none plastic; very soft.
5							
10							Reddish brown, silty SAND; none plastic; very soft.
							Reddish brown, silty gravely SAND; none plastic, very soft.
15							Gravels; very loose.
							Total Depth = 18 feet. Refusal at 18 feet.
20							

FIGURE

Ninyo & Moore
Geotechnical & Environmental Sciences Consultants

MONTGOMERY FIELD
SAN DIEGO, CALIFORNIA

DATE DRILLED 5/30/25 BORING NO. B-3

GROUND ELEVATION _____ SHEET 1 OF 1

METHOD OF DRILLING 6" dia. Hand Auger/Hollow Stem Auger

DRIVE WEIGHT N/A DROP N/A

SAMPLED BY JAC LOGGED BY JAC REVIEWED BY _____

DEPTH (feet)	SAMPLES Bulk	SAMPLES Driven	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DESCRIPTION/INTERPRETATION
0								Light brown, silty gravely SAND; none plastic; very soft
								Red, silty SAND, low plasticity; soft.
5								
10								Reddish brown, silty SAND; none plastic; very soft.
								Reddish brown, silty gravely SAND; none plastic, very soft.
15								
								Total Depth = 18 feet.
20								

FIGURE

Ninyo & Moore
Geotechnical & Environmental Sciences Consultants

MONTGOMERY FIELD
SAN DIEGO, CALIFORNIA

110092001 | 6/25

DATE DRILLED 5/30/25 BORING NO. B-4

GROUND ELEVATION _____ SHEET 1 OF 1

METHOD OF DRILLING 6" dia. Hand Auger/Hollow Stem Auger

DRIVE WEIGHT N/A DROP N/A

SAMPLED BY JAC LOGGED BY JAC REVIEWED BY _____

DEPTH (feet)	SAMPLES (Bulk / Driven)	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DESCRIPTION/INTERPRETATION
0							Reddish brown, silty gravely SAND; none plastic; very soft.
5							
							Total Depth = 7.5 feet. Refusal.
10							
15							
20							

FIGURE

Ninyo & Moore
Geotechnical & Environmental Sciences Consultants

MONTGOMERY FIELD
SAN DIEGO, CALIFORNIA

110092001 | 6/25

APPENDIX C

Lab Report

Enthalpy Analytical
931 West Barkley Ave
Orange, CA 92868
(714) 771-6900

enthalpy.com

Lab Job Number	:	534374
Report Level	:	II
Report Date	:	06/17/2025
Revision	:	**1 (See narrative)**

Analytical Report *prepared for:*

Nathan Diem
Ninyo & Moore - San Diego
5710 Ruffin Road
San Diego, CA 92123

Location: SDCCD MONTGOMERY-GIBBS AP

Authorized for release by:



Diane Galvan, Project Manager
714-771-9928
diane.galvan@enthalpy.com

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the above signature which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

CA ELAP# 1338, NELAP# 4038, SCAQMD LAP# 18LA0518, LACSD ID# 10105, ORELAP# 4197

ENTHALPY ANALYTICAL

Sample Summary

Nathan Diem
Ninyo & Moore - San Diego
5710 Ruffin Road
San Diego, CA 92123

Lab Job #: 534374
Location: SDCCD MONTGOMERY-GIBBS AP
Date Received: 05/30/25

Sample ID	Lab ID	Collected	Matrix
B-1-0.5	534374-001	05/30/25 08:35	Soil
B-1-5	534374-002	05/30/25 09:17	Soil
B-1-10	534374-003	05/30/25 09:45	Soil
B-2-0.5	534374-004	05/30/25 10:45	Soil
B-2-5	534374-005	05/30/25 11:05	Soil
B-2-10	534374-006	05/30/25 11:25	Soil
B-2-15	534374-007	05/30/25 11:42	Soil
B-3-0.5	534374-008	05/30/25 12:36	Soil
B-3-5	534374-009	05/30/25 12:54	Soil
B-3-10	534374-010	05/30/25 13:34	Soil
B-3-15	534374-011	05/30/25 13:51	Soil
B-3-18	534374-012	05/30/25 14:05	Soil
B-4-0.5	534374-013	05/30/25 14:40	Soil
B-4-5	534374-014	05/30/25 14:56	Soil
COMP-1	534374-015	05/30/25 15:27	Soil
B-2-18	534374-016	05/30/25 00:00	Soil

Case Narrative

Ninyo & Moore - San Diego 5710 Ruffin Road San Diego, CA 92123 Nathan Diem	Lab Job Number: 534374 Location: SDCCD MONTGOMERY-GIBBS AP Date Received: 05/30/25

- This data package contains sample and QC results for fifteen soil samples, requested for the above referenced project on 06/02/25. The samples were received cold and intact.
- Supplemental report, including STLC results.

TPH-Extractables by GC (EPA 8015M):

- B-4-0.5 (lab # 534374-013) was diluted due to the dark color of the sample extract.
- No other analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B):

- Low recoveries were observed for many analytes in the MS/MSD of B-1-0.5 (lab # 534374-001); the BS/BSD were within limits. High RPD was observed for trichloroethene; the RPD was acceptable in the BS/BSD, and this analyte was not detected at or above the RL in the associated sample.
- Low recoveries were observed for many analytes in the MSD for batch 373124; the parent sample was not a project sample, and the BS/BSD were within limits. High RPD was observed for a number of analytes in the MS/MSD for batch 373124; the RPD was acceptable in the BS/BSD, and these analytes were not detected at or above the RL in the associated samples.
- No other analytical problems were encountered.

Semivolatile Organics by GC/MS SIM (EPA 8270C-SIM):

- Low surrogate recovery was observed for terphenyl-d14 in B-1-10 (lab # 534374-003).
- B-4-0.5 (lab # 534374-013) was diluted due to the dark and viscous nature of the sample extract.
- No other analytical problems were encountered.

Metals (EPA 6010B and EPA 7471A) Soil:

- High recovery was observed for barium in the MSD for batch 372896; the parent sample was not a project sample, and the LCS was within limits. High RPD was also observed for barium in the MS/MSD for batch 372896.
- No other analytical problems were encountered.

ENTHALPY ANALYTICAL

Chain of Custody Record

Lab No: 534374

Page: 1 of 2

Turn Around Time (rush by advanced notice only)

Standard:	X	5 Day:		3 Day:	
2 Day:		1 Day:		Custom TAT:	

Enthalpy Analytical - San Diego

4340 Vandever Avenue, San Diego, CA 92120

Phone 858-587-7333

Matrix: A = Air, S = Soil/Solid, W = Water, DW = Drinking Water, P = Product, O = Oil, SD = Sediment, T = Tissue, WP = Wipe, WW = Wastewater, X = Other

Sample Type: C = Composite, G = Grab or Discrete, B = Blank, O = Other

Preservatives: 0 = none, 1 = $Na_2S_2O_3$, 2 = HCl, 3 = HNO_3, 4 = H_2SO_4, 5 = NaOH, 6 = Other

Sample Receipt Temp and Notes (lab use only): 5.8/5.8 IR13 100

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	Ninyo and Moore	Name:	SDCCD Montgomery-Gibbs AP
Report To:	Nathan Diem	Number:	110092001
Email:	ndiem@ninyoandmoore.com	P.O. #:	110092001
Address:	5710 Ruffin Road	Address:	3873 Kearney Villas Rd.
	San Diego, CA		
Phone:	510.584.7217	Global ID:	
Fax:		Sampled By:	

Login 534324

Test Instructions / Comments: Report to RL and MDL

224

	Sample ID	Sampling Date	Sampling Time (24 hr)	Matrix	Sample Type	Pres.	Cont. No.	Cont. Size	Initials	Cam 17 Metals 6010/7471	PAHs by 8270	VOCs 8260	Diesel Range Organics by 8015B(M)	Jet-A Range Organics by 8015B(M)
1	B-1-0.5	5/30/25	0835	S	G	O	1	8oz	JAC	X	X	X	X	X
2	B-1-5		0917						JAC	X	X	X	X	X
3	B-1-10		0945						JAC	X	X	X	X	X
4	B-2-0.5		1045						JAC	X	X	X	X	X
5	B-2-5		1105						JAC	X	X	X	X	X
6	B-2-10		1125						JAC	X	X	X	X	X
7	B-2-15		1142						JAC	X	X	X	X	X
8	~~B-2-18~~ (JAC)													
9	B-3-0.5		1236						JAC	X	X	X	X	X
10	B-3-5		1254						JAC	X	X	X	X	X

	Signature	Print Name	Company / Title	Date / Time
[1] Relinquished By:		Jorge Contreras	Ninyo & Moore	5/30/25 1605
[1] Received By:		Sumyata Little	EASD	5/30/25 1605
[2] Relinquished By:		Sumyata Little	EASD	6/2/25 1620
[2] Received By:		DEREK P	EA-ORA	6/2/25 1620
[3] Relinquished By:		DEREK P	EA-ORA	6/2/25 1800

RECEIVED BY: J. Quitugua JEUBERT QUITUGUA EA-ORA 6/2/25 1800

ENTHALPY ANALYTICAL

Chain of Custody Record

Lab No: 534374

Page: 2 of 2

Turn Around Time (rush by advanced notice only)

Standard:	X	5 Day:		3 Day:	
2 Day:		1 Day:		Custom TAT:	

Enthalpy Analytical - San Diego

4340 Vandever Avenue, San Diego, CA 92120

Phone 858-587-7333

Matrix: A = Air, S = Soil/Solid, W = Water, DW = Drinking Water, P = Product, O = Oil, SD = Sediment, T = Tissue, WP = Wipe, WW = Wastewater, X = Other

Sample Type: C = Composite, G = Grab or Discrete, B = Blank, O = Other

Preservatives: 0 = none, 1 = $Na_2S_2O_3$, 2 = HCl, 3 = HNO_3, 4 = H_2SO_4, 5 = NaOH, 6 = Other

Sample Receipt Temp and Notes (lab use only): 5.8/5.8 cR17 HOLD

CUSTOMER INFORMATION

Company:	Ninyo and Moore
Report To:	Nathan Diem
Email:	ndiem@ninyoandmoore.com
Address:	5710 Ruffin Road
	San Diego, CA
Phone:	510.584.7217
Fax:	

PROJECT INFORMATION

Name:	SDCCD Montgomery-Gibbs AP
Number:	110092001
P.O. #:	110092001
Address:	3873 Kearney Villas Rd.
Global ID:	
Sampled By:	

Analysis Request

Test Instructions / Comments

Report to RL and MDL

22.6

	Sample ID	Sampling Date	Sampling Time (24 hr)	Matrix	Sample Type	Pres.	Cont. No.	Cont. Size	Initials	Cam 17 Metals 6010/7471	PAHs by 8270	VOCs 8260	Diesel Range Organics by 8015B(M)	Jet-A Range Organics by 8015B(M)
1	B-3-10	5/30/25	1334	S	G	O	1	8oz	JAC	X	X	X	X	X
2	B-3-15		1351						JAC	X	X	X	X	X
3	B-3-18		1405						JAC	X	X	X	X	X
4	B-4-0.5		1440						JAC	X	X	X	X	X
5	B-4-5		1456						JAC	X	X	X	X	X
6	COMP-1		1527						JAC	X	X	X	X	X
7														
8														
9														
10														

	Signature	Print Name	Company / Title	Date / Time
1 Relinquished By:		Serge Contreras	Ninyo & Moore	5/30/25 1605
1 Received By:		Sunyata Little	EASD	5/30/25 1605
2 Relinquished By:		Sunyata Little	EASD	6/2/25 1620
2 Received By:		DEREK P	EA-ORA	6/2/25 1620
3 Relinquished By:		DEREK P	EA-ORA	6/2/25 1800

RECEIVED BY: J. Quitugua JEUBERT QUITUGUA EA-ORA 6/2/25 1800

SAMPLE RECEIPT CHECKLIST

Section 1: General Info

Date Received: 5-30-25 WO# 534374 Client: Ninyo and Moore

Section 2: Shipping / Custody **Are custody seals present?** ☐ Yes ☒ No

Custody seals intact on arrival? ■ N/A ☐ Yes ☐ No ☐ On cooler / box ☐ On samples

☐ Courier ■ Walk-In ☐ Field Sampling ☐ Shipping Info: _____

Section 3a: Condition / Packaging ☐ **Outside 0.0 - 6.0°C (0.0 - 10.0°C for microbiology) (PM notified)**

Date Opened 5-30-25 By (initials) SKL Type of ice used: ■ Wet ☐ Blue/Gel ☐ None

■ Samples received on ice directly from the field; cooling process had begun. (if checked, skip temperatures)

☐ Sample matrix doesn't require cooling (e.g. air, bulk PCB). (if checked, skip temperatures)

If no cooler: Observed/Adjusted Temp (°C): _____ / _____ Thermometer/IR Gun: IR08 CF: +0.2

Cooler Temp (°C) #1: 22.6 / 22.8 #2: ____/____ #3: ____/____ #4: ____/____ #5: ____/____ #6: ____/____

Section 3b: Microbiology Samples ■ **No microbiology samples submitted (skip 3b)**

☐ Within temp range 0.0 - 10.0°C or received on ice directly from field.

☐ Adequate headspace for microbiology analysis.

Section 3c: Air Samples ■ **No air samples submitted (skip 3c)**

☐ 1.4L Canisters ☐ 6L Canisters ☐ Tedlar Bags ☐ MCE Cassettes ☐ Sorbent Tubes ☐ Other_____

Section 4: Containers / Labels / Samples	YES	NO	N/A
1) Were custody papers present, filled properly, and legible?	/		
2) Is the sampler's name present on the CoC?	/		
3) Were containers received in good condition (unbroken / unopened / uncompromised)?	/		
4) Were the samples bagged? (required for microbiology samples; recommended for soil samples)	/		
5) Were all of, and only, the correct samples received?		/	
6) Are sample labels present, legible, and in agreement with the CoC?	/		
7) Does the container count match the CoC?		/	
8) Was sufficient sample volume / mass received for the analyses requested?	/		
9) Were samples received in proper containers for the analyses requested?	/		
10) Were samples received with > 1/2 holding time remaining?	/		
11) Are samples properly preserved as indicated by CoC / labels?	/		
12) Unpreserved VOAs received - If necessary, was the hold time changed in LIMS?			/
13) Are VOA vials free from headspace/bubbles > 6mm?			/

Section 5: Explanations / Comments

(If no comments are made, then no discrepancies noted.)

4.5 / 4.7 Client crossed off sample ID B-2-18 on the COC and did not select any analysis. however we still received the sample in question.

☐ **No additional discrepancies**

Date Logged 5-30-25 **By (print)** SKL **(sign)** _____

Date Labeled 5-30-25 **By (print)** SKL **(sign)** _____

SAMPLE RECEIPT CHECKLIST

Section 1: General Info
Date Received: 6/2/25 WO# 534374 Client: NINYO + MOORE

Section 2: Shipping / Custody **Are custody seals present?** ☐ Yes ☒ No
Custody seals intact on arrival? ☒ N/A ☐ Yes ☐ No ☐ On cooler / box ☐ On samples
☒ Courier ☐ Walk-In ☐ Field Sampling ☐ Shipping Info: _____

Section 3a: Condition / Packaging ☐ **Outside 0.0 - 6.0°C (0.0 - 10.0°C for microbiology) (PM notified)**
Date Opened 6/2/25 By (initials) DEP Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None
☐ Samples received on ice directly from the field; cooling process had begun. (if checked, skip temperatures)
☐ Sample matrix doesn't require cooling (e.g. air, bulk PCB). (if checked, skip temperatures)
If no cooler: Observed/Adjusted Temp (°C): _____ / _____ Thermometer/IR Gun: IR13 CF: 0.0
Cooler Temp (°C) #1: 5.8 / 5.8 #2: ____/____ #3: ____/____ #4: ____/____ #5: ____/____ #6: ____/____

Section 3b: Microbiology Samples ☒ **No microbiology samples submitted (skip 3b)**
☐ Within temp range 0.0 - 10.0°C or received on ice directly from field.
☐ Adequate headspace for microbiology analysis.

Section 3c: Air Samples ☒ **No air samples submitted (skip 3c)**
☐ 1.4L Canisters ☐ 6L Canisters ☐ Tedlar Bags ☐ MCE Cassettes ☐ Sorbent Tubes ☐ Other _____

Section 4: Containers / Labels / Samples	YES	NO	N/A
1) Were custody papers present, filled properly, and legible?	X		
2) Is the sampler's name present on the CoC?	X		
3) Were containers received in good condition (unbroken / unopened / uncompromised)?	X		
4) Were the samples bagged? (required for microbiology samples; recommended for soil samples)	X		
5) Were all of, and only, the correct samples received?		X	
6) Are sample labels present, legible, and in agreement with the CoC?	X		
7) Does the container count match the CoC?		X	
8) Was sufficient sample volume / mass received for the analyses requested?	X		
9) Were samples received in proper containers for the analyses requested?	X		
10) Were samples received with > 1/2 holding time remaining?	X		
11) Are samples properly preserved as indicated by CoC / labels?	X		
12) Unpreserved VOAs received - If necessary, was the hold time changed in LIMS?			X
13) Are VOA vials free from headspace/bubbles > 6mm?			X

Section 5: Explanations / Comments
(If no comments are made, then no discrepancies noted.)

☐ **No additional discrepancies**

Date Logged 5/30/25 **By (print)** EA-SD **(sign)** _____
Date Labeled 5/30/25 **By (print)** EA-SD **(sign)** _____

ENTHALPY ANALYTICAL

Analysis Results for 534374

Nathan Diem
Ninyo & Moore - San Diego
5710 Ruffin Road
San Diego, CA 92123

Lab Job #: 534374
Location: SDCCD MONTGOMERY-GIBBS AP
Date Received: 05/30/25

Sample ID: B-1-0.5 **Lab ID: 534374-001** **Collected: 05/30/25 08:35**

534374-001 Analyte	Result	Qual	Units	RL	Matrix	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B										
Antimony	ND		mg/Kg	2.9	Soil	0.96	372896	06/03/25	06/03/25	CAP
Arsenic	**3.4**		mg/Kg	0.96	Soil	0.96	372896	06/03/25	06/03/25	CAP
Barium	**72**		mg/Kg	0.96	Soil	0.96	372896	06/03/25	06/03/25	CAP
Beryllium	ND		mg/Kg	0.48	Soil	0.96	372896	06/03/25	06/03/25	CAP
Cadmium	**6.4**		mg/Kg	0.48	Soil	0.96	372896	06/03/25	06/03/25	CAP
Chromium	**21**		mg/Kg	0.96	Soil	0.96	372896	06/03/25	06/03/25	CAP
Cobalt	**3.0**		mg/Kg	0.48	Soil	0.96	372896	06/03/25	06/03/25	CAP
Copper	**11**		mg/Kg	0.96	Soil	0.96	372896	06/03/25	06/03/25	CAP
Lead	**75**		mg/Kg	0.96	Soil	0.96	372896	06/03/25	06/03/25	CAP
Molybdenum	ND		mg/Kg	0.96	Soil	0.96	372896	06/03/25	06/03/25	CAP
Nickel	**7.3**		mg/Kg	0.96	Soil	0.96	372896	06/03/25	06/03/25	CAP
Selenium	ND		mg/Kg	2.9	Soil	0.96	372896	06/03/25	06/03/25	CAP
Silver	ND		mg/Kg	0.48	Soil	0.96	372896	06/03/25	06/03/25	CAP
Thallium	ND		mg/Kg	2.9	Soil	0.96	372896	06/03/25	06/03/25	CAP
Vanadium	**40**		mg/Kg	0.96	Soil	0.96	372896	06/03/25	06/03/25	CAP
Zinc	**360**		mg/Kg	4.8	Soil	0.96	372896	06/03/25	06/03/25	CAP
Method: EPA 6010B Prep Method: METHOD										
Lead	**0.45**		mg/L	0.15	WET Leachate	10	373797	06/12/25	06/12/25	CAP
Method: EPA 7471A Prep Method: EPA 7471A										
Mercury	ND		mg/Kg	0.15	Soil	1.1	372906	06/03/25	06/03/25	DXC
Method: EPA 8015M Prep Method: EPA 3580M										
GRO C8-C10	ND		mg/Kg	9.9	Soil	0.99	372931	06/03/25	06/05/25	DIB
DRO C10-C28	**17**		mg/Kg	9.9	Soil	0.99	372931	06/03/25	06/05/25	DIB
ORO C28-C44	**61**		mg/Kg	20	Soil	0.99	372931	06/03/25	06/05/25	DIB
Jet Fuel A C10-C16	ND		mg/Kg	9.9	Soil	0.99	372931	06/03/25	06/05/25	DIB
Surrogates				**Limits**						
n-Triacontane	127%		%REC	70-130	Soil	0.99	372931	06/03/25	06/05/25	DIB
Method: EPA 8260B Prep Method: EPA 5030B										
3-Chloropropene	ND		ug/Kg	5.1	Soil	1	372860	06/03/25	06/03/25	LYZ
Freon 12	ND		ug/Kg	5.1	Soil	1	372860	06/03/25	06/03/25	LYZ
Chloromethane	ND		ug/Kg	5.1	Soil	1	372860	06/03/25	06/03/25	LYZ
Vinyl Chloride	ND		ug/Kg	5.1	Soil	1	372860	06/03/25	06/03/25	LYZ
Bromomethane	ND		ug/Kg	5.1	Soil	1	372860	06/03/25	06/03/25	LYZ
Chloroethane	ND		ug/Kg	5.1	Soil	1	372860	06/03/25	06/03/25	LYZ
Trichlorofluoromethane	ND		ug/Kg	5.1	Soil	1	372860	06/03/25	06/03/25	LYZ
Acetone	ND		ug/Kg	100	Soil	1	372860	06/03/25	06/03/25	LYZ
Freon 113	ND		ug/Kg	5.1	Soil	1	372860	06/03/25	06/03/25	LYZ

Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

Analysis Results for 534374

534374-001 Analyte	Result	Qual	Units	RL	Matrix	DF	Batch	Prepared	Analyzed	Chemist
1,1-Dichloroethene	ND		ug/Kg	5.1	Soil	1	372860	06/03/25	06/03/25	LYZ
Methylene Chloride	ND		ug/Kg	5.1	Soil	1	372860	06/03/25	06/03/25	LYZ
MTBE	ND		ug/Kg	5.1	Soil	1	372860	06/03/25	06/03/25	LYZ
trans-1,2-Dichloroethene	ND		ug/Kg	5.1	Soil	1	372860	06/03/25	06/03/25	LYZ
1,1-Dichloroethane	ND		ug/Kg	5.1	Soil	1	372860	06/03/25	06/03/25	LYZ
2-Butanone	ND		ug/Kg	100	Soil	1	372860	06/03/25	06/03/25	LYZ
cis-1,2-Dichloroethene	ND		ug/Kg	5.1	Soil	1	372860	06/03/25	06/03/25	LYZ
2,2-Dichloropropane	ND		ug/Kg	5.1	Soil	1	372860	06/03/25	06/03/25	LYZ
Chloroform	ND		ug/Kg	5.1	Soil	1	372860	06/03/25	06/03/25	LYZ
Bromochloromethane	ND		ug/Kg	5.1	Soil	1	372860	06/03/25	06/03/25	LYZ
1,1,1-Trichloroethane	ND		ug/Kg	5.1	Soil	1	372860	06/03/25	06/03/25	LYZ
1,1-Dichloropropene	ND		ug/Kg	5.1	Soil	1	372860	06/03/25	06/03/25	LYZ
Carbon Tetrachloride	ND		ug/Kg	5.1	Soil	1	372860	06/03/25	06/03/25	LYZ
1,2-Dichloroethane	ND		ug/Kg	5.1	Soil	1	372860	06/03/25	06/03/25	LYZ
Benzene	ND		ug/Kg	5.1	Soil	1	372860	06/03/25	06/03/25	LYZ
Trichloroethene	ND		ug/Kg	5.1	Soil	1	372860	06/03/25	06/03/25	LYZ
1,2-Dichloropropane	ND		ug/Kg	5.1	Soil	1	372860	06/03/25	06/03/25	LYZ
Bromodichloromethane	ND		ug/Kg	5.1	Soil	1	372860	06/03/25	06/03/25	LYZ
Dibromomethane	ND		ug/Kg	5.1	Soil	1	372860	06/03/25	06/03/25	LYZ
4-Methyl-2-Pentanone	ND		ug/Kg	5.1	Soil	1	372860	06/03/25	06/03/25	LYZ
cis-1,3-Dichloropropene	ND		ug/Kg	5.1	Soil	1	372860	06/03/25	06/03/25	LYZ
Toluene	ND		ug/Kg	5.1	Soil	1	372860	06/03/25	06/03/25	LYZ
trans-1,3-Dichloropropene	ND		ug/Kg	5.1	Soil	1	372860	06/03/25	06/03/25	LYZ
1,1,2-Trichloroethane	ND		ug/Kg	5.1	Soil	1	372860	06/03/25	06/03/25	LYZ
1,3-Dichloropropane	ND		ug/Kg	5.1	Soil	1	372860	06/03/25	06/03/25	LYZ
Tetrachloroethene	ND		ug/Kg	5.1	Soil	1	372860	06/03/25	06/03/25	LYZ
Dibromochloromethane	ND		ug/Kg	5.1	Soil	1	372860	06/03/25	06/03/25	LYZ
1,2-Dibromoethane	ND		ug/Kg	5.1	Soil	1	372860	06/03/25	06/03/25	LYZ
Chlorobenzene	ND		ug/Kg	5.1	Soil	1	372860	06/03/25	06/03/25	LYZ
1,1,1,2-Tetrachloroethane	ND		ug/Kg	5.1	Soil	1	372860	06/03/25	06/03/25	LYZ
Ethylbenzene	ND		ug/Kg	5.1	Soil	1	372860	06/03/25	06/03/25	LYZ
m,p-Xylenes	ND		ug/Kg	10	Soil	1	372860	06/03/25	06/03/25	LYZ
o-Xylene	ND		ug/Kg	5.1	Soil	1	372860	06/03/25	06/03/25	LYZ
Styrene	ND		ug/Kg	5.1	Soil	1	372860	06/03/25	06/03/25	LYZ
Bromoform	ND		ug/Kg	5.1	Soil	1	372860	06/03/25	06/03/25	LYZ
Isopropylbenzene	ND		ug/Kg	5.1	Soil	1	372860	06/03/25	06/03/25	LYZ
1,1,2,2-Tetrachloroethane	ND		ug/Kg	5.1	Soil	1	372860	06/03/25	06/03/25	LYZ
1,2,3-Trichloropropane	ND		ug/Kg	5.1	Soil	1	372860	06/03/25	06/03/25	LYZ
Propylbenzene	ND		ug/Kg	5.1	Soil	1	372860	06/03/25	06/03/25	LYZ
Bromobenzene	ND		ug/Kg	5.1	Soil	1	372860	06/03/25	06/03/25	LYZ
1,3,5-Trimethylbenzene	ND		ug/Kg	5.1	Soil	1	372860	06/03/25	06/03/25	LYZ
2-Chlorotoluene	ND		ug/Kg	5.1	Soil	1	372860	06/03/25	06/03/25	LYZ
4-Chlorotoluene	ND		ug/Kg	5.1	Soil	1	372860	06/03/25	06/03/25	LYZ
tert-Butylbenzene	ND		ug/Kg	5.1	Soil	1	372860	06/03/25	06/03/25	LYZ
1,2,4-Trimethylbenzene	ND		ug/Kg	5.1	Soil	1	372860	06/03/25	06/03/25	LYZ
sec-Butylbenzene	ND		ug/Kg	5.1	Soil	1	372860	06/03/25	06/03/25	LYZ
para-Isopropyl Toluene	ND		ug/Kg	5.1	Soil	1	372860	06/03/25	06/03/25	LYZ
1,3-Dichlorobenzene	ND		ug/Kg	5.1	Soil	1	372860	06/03/25	06/03/25	LYZ
1,4-Dichlorobenzene	ND		ug/Kg	5.1	Soil	1	372860	06/03/25	06/03/25	LYZ
n-Butylbenzene	ND		ug/Kg	5.1	Soil	1	372860	06/03/25	06/03/25	LYZ
1,2-Dichlorobenzene	ND		ug/Kg	5.1	Soil	1	372860	06/03/25	06/03/25	LYZ
1,2-Dibromo-3-Chloropropane	ND		ug/Kg	5.1	Soil	1	372860	06/03/25	06/03/25	LYZ

Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

Analysis Results for 534374

534374-001 Analyte	Result	Qual	Units	RL	Matrix	DF	Batch	Prepared	Analyzed	Chemist
1,2,4-Trichlorobenzene	ND		ug/Kg	5.1	Soil	1	372860	06/03/25	06/03/25	LYZ
Hexachlorobutadiene	ND		ug/Kg	5.1	Soil	1	372860	06/03/25	06/03/25	LYZ
Naphthalene	ND		ug/Kg	5.1	Soil	1	372860	06/03/25	06/03/25	LYZ
1,2,3-Trichlorobenzene	ND		ug/Kg	5.1	Soil	1	372860	06/03/25	06/03/25	LYZ
cis-1,4-Dichloro-2-butene	ND		ug/Kg	5.1	Soil	1	372860	06/03/25	06/03/25	LYZ
trans-1,4-Dichloro-2-butene	ND		ug/Kg	5.1	Soil	1	372860	06/03/25	06/03/25	LYZ
Xylene (total)	ND		ug/Kg	5.1	Soil	1	372860	06/03/25	06/03/25	LYZ
Surrogates				**Limits**						
Dibromofluoromethane	95%		%REC	70-145	Soil	1	372860	06/03/25	06/03/25	LYZ
1,2-Dichloroethane-d4	91%		%REC	70-145	Soil	1	372860	06/03/25	06/03/25	LYZ
Toluene-d8	104%		%REC	70-145	Soil	1	372860	06/03/25	06/03/25	LYZ
Bromofluorobenzene	102%		%REC	70-145	Soil	1	372860	06/03/25	06/03/25	LYZ
Method: EPA 8270C-SIM Prep Method: EPA 3546										
1-Methylnaphthalene	ND		ug/Kg	10	Soil	1	372914	06/03/25	06/03/25	ZFA
2-Methylnaphthalene	ND		ug/Kg	10	Soil	1	372914	06/03/25	06/03/25	ZFA
Naphthalene	ND		ug/Kg	10	Soil	1	372914	06/03/25	06/03/25	ZFA
Acenaphthylene	ND		ug/Kg	10	Soil	1	372914	06/03/25	06/03/25	ZFA
Acenaphthene	ND		ug/Kg	10	Soil	1	372914	06/03/25	06/03/25	ZFA
Fluorene	ND		ug/Kg	10	Soil	1	372914	06/03/25	06/03/25	ZFA
Phenanthrene	**14**		ug/Kg	10	Soil	1	372914	06/03/25	06/03/25	ZFA
Anthracene	ND		ug/Kg	10	Soil	1	372914	06/03/25	06/03/25	ZFA
Fluoranthene	**57**		ug/Kg	10	Soil	1	372914	06/03/25	06/03/25	ZFA
Pyrene	**62**		ug/Kg	10	Soil	1	372914	06/03/25	06/03/25	ZFA
Benzo(a)anthracene	**21**		ug/Kg	10	Soil	1	372914	06/03/25	06/03/25	ZFA
Chrysene	**45**		ug/Kg	10	Soil	1	372914	06/03/25	06/03/25	ZFA
Benzo(b)fluoranthene	**73**		ug/Kg	10	Soil	1	372914	06/03/25	06/03/25	ZFA
Benzo(k)fluoranthene	**27**		ug/Kg	10	Soil	1	372914	06/03/25	06/03/25	ZFA
Benzo(a)pyrene	**41**		ug/Kg	10	Soil	1	372914	06/03/25	06/03/25	ZFA
Indeno(1,2,3-cd)pyrene	**44**		ug/Kg	10	Soil	1	372914	06/03/25	06/03/25	ZFA
Dibenz(a,h)anthracene	ND		ug/Kg	10	Soil	1	372914	06/03/25	06/03/25	ZFA
Benzo(g,h,i)perylene	**52**		ug/Kg	10	Soil	1	372914	06/03/25	06/03/25	ZFA
Surrogates				**Limits**						
Nitrobenzene-d5	55%		%REC	27-125	Soil	1	372914	06/03/25	06/03/25	ZFA
2-Fluorobiphenyl	62%		%REC	30-120	Soil	1	372914	06/03/25	06/03/25	ZFA
Terphenyl-d14	74%		%REC	33-155	Soil	1	372914	06/03/25	06/03/25	ZFA

Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

Analysis Results for 534374

Sample ID: B-1-5	Lab ID: 534374-002	Collected: 05/30/25 09:17
	Matrix: Soil	

534374-002 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Antimony	ND		mg/Kg	3.0	1	372896	06/03/25	06/03/25	CAP
Arsenic	**2.7**		mg/Kg	1.0	1	372896	06/03/25	06/03/25	CAP
Barium	**24**		mg/Kg	1.0	1	372896	06/03/25	06/03/25	CAP
Beryllium	ND		mg/Kg	0.50	1	372896	06/03/25	06/03/25	CAP
Cadmium	ND		mg/Kg	0.50	1	372896	06/03/25	06/03/25	CAP
Chromium	**29**		mg/Kg	1.0	1	372896	06/03/25	06/03/25	CAP
Cobalt	**2.1**		mg/Kg	0.50	1	372896	06/03/25	06/03/25	CAP
Copper	**11**		mg/Kg	1.0	1	372896	06/03/25	06/03/25	CAP
Lead	**4.1**		mg/Kg	1.0	1	372896	06/03/25	06/03/25	CAP
Molybdenum	**2.0**		mg/Kg	1.0	1	372896	06/03/25	06/03/25	CAP
Nickel	**4.5**		mg/Kg	1.0	1	372896	06/03/25	06/03/25	CAP
Selenium	ND		mg/Kg	3.0	1	372896	06/03/25	06/03/25	CAP
Silver	ND		mg/Kg	0.50	1	372896	06/03/25	06/03/25	CAP
Thallium	ND		mg/Kg	3.0	1	372896	06/03/25	06/03/25	CAP
Vanadium	**36**		mg/Kg	1.0	1	372896	06/03/25	06/03/25	CAP
Zinc	**14**		mg/Kg	5.0	1	372896	06/03/25	06/03/25	CAP
Method: EPA 7471A Prep Method: EPA 7471A									
Mercury	ND		mg/Kg	0.14	1	372906	06/03/25	06/03/25	DXC
Method: EPA 8015M Prep Method: EPA 3580M									
GRO C8-C10	ND		mg/Kg	10	1	372931	06/03/25	06/05/25	DIB
DRO C10-C28	**140**		mg/Kg	10	1	372931	06/03/25	06/05/25	DIB
ORO C28-C44	**110**		mg/Kg	20	1	372931	06/03/25	06/05/25	DIB
Jet Fuel A C10-C16	ND		mg/Kg	10	1	372931	06/03/25	06/05/25	DIB
Surrogates				**Limits**					
n-Triacontane	115%		%REC	70-130	1	372931	06/03/25	06/05/25	DIB
Method: EPA 8260B Prep Method: EPA 5030B									
3-Chloropropene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Freon 12	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Chloromethane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Vinyl Chloride	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Bromomethane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Chloroethane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Trichlorofluoromethane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Acetone	ND		ug/Kg	100	1	373211	06/06/25	06/06/25	ZST
Freon 113	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,1-Dichloroethene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Methylene Chloride	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
MTBE	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
trans-1,2-Dichloroethene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,1-Dichloroethane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
2-Butanone	ND		ug/Kg	100	1	373211	06/06/25	06/06/25	ZST
cis-1,2-Dichloroethene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST

Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

Analysis Results for 534374

534374-002 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
2,2-Dichloropropane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Chloroform	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Bromochloromethane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,1,1-Trichloroethane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,1-Dichloropropene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Carbon Tetrachloride	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,2-Dichloroethane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Benzene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Trichloroethene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,2-Dichloropropane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Bromodichloromethane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Dibromomethane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
4-Methyl-2-Pentanone	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
cis-1,3-Dichloropropene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Toluene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
trans-1,3-Dichloropropene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,1,2-Trichloroethane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,3-Dichloropropane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Tetrachloroethene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Dibromochloromethane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,2-Dibromoethane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Chlorobenzene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,1,1,2-Tetrachloroethane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Ethylbenzene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
m,p-Xylenes	ND		ug/Kg	10	1	373211	06/06/25	06/06/25	ZST
o-Xylene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Styrene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Bromoform	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Isopropylbenzene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,1,2,2-Tetrachloroethane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,2,3-Trichloropropane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Propylbenzene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Bromobenzene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,3,5-Trimethylbenzene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
2-Chlorotoluene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
4-Chlorotoluene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
tert-Butylbenzene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,2,4-Trimethylbenzene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
sec-Butylbenzene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
para-Isopropyl Toluene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,3-Dichlorobenzene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,4-Dichlorobenzene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
n-Butylbenzene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,2-Dichlorobenzene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,2-Dibromo-3-Chloropropane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,2,4-Trichlorobenzene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Hexachlorobutadiene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Naphthalene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,2,3-Trichlorobenzene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
cis-1,4-Dichloro-2-butene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
trans-1,4-Dichloro-2-butene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Xylene (total)	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST

Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

Analysis Results for 534374

534374-002 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Surrogates				**Limits**					
Dibromofluoromethane	94%		%REC	70-145	1	373211	06/06/25	06/06/25	ZST
1,2-Dichloroethane-d4	89%		%REC	70-145	1	373211	06/06/25	06/06/25	ZST
Toluene-d8	103%		%REC	70-145	1	373211	06/06/25	06/06/25	ZST
Bromofluorobenzene	104%		%REC	70-145	1	373211	06/06/25	06/06/25	ZST
Method: EPA 8270C-SIM Prep Method: EPA 3546									
1-Methylnaphthalene	ND		ug/Kg	10	1	372914	06/03/25	06/03/25	ZFA
2-Methylnaphthalene	ND		ug/Kg	10	1	372914	06/03/25	06/03/25	ZFA
Naphthalene	ND		ug/Kg	10	1	372914	06/03/25	06/03/25	ZFA
Acenaphthylene	ND		ug/Kg	10	1	372914	06/03/25	06/03/25	ZFA
Acenaphthene	ND		ug/Kg	10	1	372914	06/03/25	06/03/25	ZFA
Fluorene	ND		ug/Kg	10	1	372914	06/03/25	06/03/25	ZFA
Phenanthrene	ND		ug/Kg	10	1	372914	06/03/25	06/03/25	ZFA
Anthracene	ND		ug/Kg	10	1	372914	06/03/25	06/03/25	ZFA
Fluoranthene	ND		ug/Kg	10	1	372914	06/03/25	06/03/25	ZFA
Pyrene	ND		ug/Kg	10	1	372914	06/03/25	06/03/25	ZFA
Benzo(a)anthracene	ND		ug/Kg	10	1	372914	06/03/25	06/03/25	ZFA
Chrysene	ND		ug/Kg	10	1	372914	06/03/25	06/03/25	ZFA
Benzo(b)fluoranthene	ND		ug/Kg	10	1	372914	06/03/25	06/03/25	ZFA
Benzo(k)fluoranthene	ND		ug/Kg	10	1	372914	06/03/25	06/03/25	ZFA
Benzo(a)pyrene	ND		ug/Kg	10	1	372914	06/03/25	06/03/25	ZFA
Indeno(1,2,3-cd)pyrene	ND		ug/Kg	10	1	372914	06/03/25	06/03/25	ZFA
Dibenz(a,h)anthracene	ND		ug/Kg	10	1	372914	06/03/25	06/03/25	ZFA
Benzo(g,h,i)perylene	ND		ug/Kg	10	1	372914	06/03/25	06/03/25	ZFA
Surrogates				**Limits**					
Nitrobenzene-d5	52%		%REC	27-125	1	372914	06/03/25	06/03/25	ZFA
2-Fluorobiphenyl	50%		%REC	30-120	1	372914	06/03/25	06/03/25	ZFA
Terphenyl-d14	54%		%REC	33-155	1	372914	06/03/25	06/03/25	ZFA

Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

Analysis Results for 534374

Sample ID: B-1-10	Lab ID: 534374-003	Collected: 05/30/25 09:45
	Matrix: Soil	

534374-003 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Antimony	ND		mg/Kg	3.0	1	372896	06/03/25	06/03/25	CAP
Arsenic	**1.5**		mg/Kg	1.0	1	372896	06/03/25	06/03/25	CAP
Barium	**23**		mg/Kg	1.0	1	372896	06/03/25	06/03/25	CAP
Beryllium	ND		mg/Kg	0.50	1	372896	06/03/25	06/03/25	CAP
Cadmium	ND		mg/Kg	0.50	1	372896	06/03/25	06/03/25	CAP
Chromium	**16**		mg/Kg	1.0	1	372896	06/03/25	06/03/25	CAP
Cobalt	**3.2**		mg/Kg	0.50	1	372896	06/03/25	06/03/25	CAP
Copper	**3.5**		mg/Kg	1.0	1	372896	06/03/25	06/03/25	CAP
Lead	**2.9**		mg/Kg	1.0	1	372896	06/03/25	06/03/25	CAP
Molybdenum	ND		mg/Kg	1.0	1	372896	06/03/25	06/03/25	CAP
Nickel	**4.4**		mg/Kg	1.0	1	372896	06/03/25	06/03/25	CAP
Selenium	ND		mg/Kg	3.0	1	372896	06/03/25	06/03/25	CAP
Silver	ND		mg/Kg	0.50	1	372896	06/03/25	06/03/25	CAP
Thallium	ND		mg/Kg	3.0	1	372896	06/03/25	06/03/25	CAP
Vanadium	**51**		mg/Kg	1.0	1	372896	06/03/25	06/03/25	CAP
Zinc	**19**		mg/Kg	5.0	1	372896	06/03/25	06/03/25	CAP
Method: EPA 7471A Prep Method: EPA 7471A									
Mercury	ND		mg/Kg	0.15	1.1	372906	06/03/25	06/03/25	DXC
Method: EPA 8015M Prep Method: EPA 3580M									
GRO C8-C10	ND		mg/Kg	10	1	372931	06/03/25	06/05/25	DIB
DRO C10-C28	ND		mg/Kg	10	1	372931	06/03/25	06/05/25	DIB
ORO C28-C44	ND		mg/Kg	20	1	372931	06/03/25	06/05/25	DIB
Jet Fuel A C10-C16	ND		mg/Kg	10	1	372931	06/03/25	06/05/25	DIB
Surrogates				**Limits**					
n-Triacontane	116%		%REC	70-130	1	372931	06/03/25	06/05/25	DIB
Method: EPA 8260B Prep Method: EPA 5030B									
3-Chloropropene	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
Freon 12	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
Chloromethane	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
Vinyl Chloride	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
Bromomethane	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
Chloroethane	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
Trichlorofluoromethane	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
Acetone	ND		ug/Kg	100	1	373124	06/05/25	06/05/25	EJB
Freon 113	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
1,1-Dichloroethene	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
Methylene Chloride	ND		ug/Kg	7.3	1	373124	06/05/25	06/05/25	EJB
MTBE	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
trans-1,2-Dichloroethene	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
1,1-Dichloroethane	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
2-Butanone	ND		ug/Kg	100	1	373124	06/05/25	06/05/25	EJB
cis-1,2-Dichloroethene	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB

Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

Analysis Results for 534374

534374-003 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
2,2-Dichloropropane	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
Chloroform	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
Bromochloromethane	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
1,1,1-Trichloroethane	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
1,1-Dichloropropene	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
Carbon Tetrachloride	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
1,2-Dichloroethane	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
Benzene	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
Trichloroethene	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
1,2-Dichloropropane	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
Bromodichloromethane	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
Dibromomethane	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
4-Methyl-2-Pentanone	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
cis-1,3-Dichloropropene	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
Toluene	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
trans-1,3-Dichloropropene	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
1,1,2-Trichloroethane	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
1,3-Dichloropropane	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
Tetrachloroethene	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
Dibromochloromethane	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
1,2-Dibromoethane	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
Chlorobenzene	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
1,1,1,2-Tetrachloroethane	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
Ethylbenzene	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
m,p-Xylenes	ND		ug/Kg	10	1	373124	06/05/25	06/05/25	EJB
o-Xylene	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
Styrene	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
Bromoform	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
Isopropylbenzene	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
1,1,2,2-Tetrachloroethane	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
1,2,3-Trichloropropane	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
Propylbenzene	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
Bromobenzene	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
1,3,5-Trimethylbenzene	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
2-Chlorotoluene	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
4-Chlorotoluene	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
tert-Butylbenzene	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
1,2,4-Trimethylbenzene	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
sec-Butylbenzene	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
para-Isopropyl Toluene	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
1,3-Dichlorobenzene	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
1,4-Dichlorobenzene	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
n-Butylbenzene	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
1,2-Dichlorobenzene	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
1,2-Dibromo-3-Chloropropane	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
1,2,4-Trichlorobenzene	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
Hexachlorobutadiene	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
Naphthalene	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
1,2,3-Trichlorobenzene	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
cis-1,4-Dichloro-2-butene	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
trans-1,4-Dichloro-2-butene	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
Xylene (total)	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB

Results for any subcontracted analyses are not included in this section.

Analysis Results for 534374

534374-003 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Surrogates				**Limits**					
Dibromofluoromethane	103%		%REC	70-145	1	373124	06/05/25	06/05/25	EJB
1,2-Dichloroethane-d4	106%		%REC	70-145	1	373124	06/05/25	06/05/25	EJB
Toluene-d8	100%		%REC	70-145	1	373124	06/05/25	06/05/25	EJB
Bromofluorobenzene	96%		%REC	70-145	1	373124	06/05/25	06/05/25	EJB
Method: EPA 8270C-SIM Prep Method: EPA 3546									
1-Methylnaphthalene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
2-Methylnaphthalene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Naphthalene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Acenaphthylene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Acenaphthene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Fluorene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Phenanthrene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Anthracene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Fluoranthene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Pyrene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Benzo(a)anthracene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Chrysene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Benzo(b)fluoranthene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Benzo(k)fluoranthene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Benzo(a)pyrene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Indeno(1,2,3-cd)pyrene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Dibenz(a,h)anthracene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Benzo(g,h,i)perylene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Surrogates				**Limits**					
Nitrobenzene-d5	33%		%REC	27-125	1	372914	06/03/25	06/04/25	ZFA
2-Fluorobiphenyl	33%		%REC	30-120	1	372914	06/03/25	06/04/25	ZFA
Terphenyl-d14	30%	*	%REC	33-155	1	372914	06/03/25	06/04/25	ZFA

Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

Analysis Results for 534374

Sample ID: B-2-0.5	Lab ID: 534374-004	Collected: 05/30/25 10:45
	Matrix: Soil	

534374-004 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Antimony	ND		mg/Kg	3.0	1	372896	06/03/25	06/03/25	CAP
Arsenic	**3.8**		mg/Kg	1.0	1	372896	06/03/25	06/03/25	CAP
Barium	**80**		mg/Kg	1.0	1	372896	06/03/25	06/03/25	CAP
Beryllium	ND		mg/Kg	0.50	1	372896	06/03/25	06/03/25	CAP
Cadmium	ND		mg/Kg	0.50	1	372896	06/03/25	06/03/25	CAP
Chromium	**24**		mg/Kg	1.0	1	372896	06/03/25	06/03/25	CAP
Cobalt	**5.7**		mg/Kg	0.50	1	372896	06/03/25	06/03/25	CAP
Copper	**8.8**		mg/Kg	1.0	1	372896	06/03/25	06/03/25	CAP
Lead	**11**		mg/Kg	1.0	1	372896	06/03/25	06/03/25	CAP
Molybdenum	ND		mg/Kg	1.0	1	372896	06/03/25	06/03/25	CAP
Nickel	**8.9**		mg/Kg	1.0	1	372896	06/03/25	06/03/25	CAP
Selenium	ND		mg/Kg	3.0	1	372896	06/03/25	06/03/25	CAP
Silver	ND		mg/Kg	0.50	1	372896	06/03/25	06/03/25	CAP
Thallium	ND		mg/Kg	3.0	1	372896	06/03/25	06/03/25	CAP
Vanadium	**54**		mg/Kg	1.0	1	372896	06/03/25	06/03/25	CAP
Zinc	**22**		mg/Kg	5.0	1	372896	06/03/25	06/03/25	CAP
Method: EPA 7471A Prep Method: EPA 7471A									
Mercury	ND		mg/Kg	0.15	1.1	372906	06/03/25	06/03/25	DXC
Method: EPA 8015M Prep Method: EPA 3580M									
GRO C8-C10	ND		mg/Kg	9.9	0.99	372931	06/03/25	06/05/25	DIB
DRO C10-C28	ND		mg/Kg	9.9	0.99	372931	06/03/25	06/05/25	DIB
ORO C28-C44	ND		mg/Kg	20	0.99	372931	06/03/25	06/05/25	DIB
Jet Fuel A C10-C16	ND		mg/Kg	9.9	0.99	372931	06/03/25	06/05/25	DIB
Surrogates				**Limits**					
n-Triacontane	120%		%REC	70-130	0.99	372931	06/03/25	06/05/25	DIB
Method: EPA 8260B Prep Method: EPA 5030B									
3-Chloropropene	ND		ug/Kg	5.1	1	373124	06/05/25	06/05/25	EJB
Freon 12	ND		ug/Kg	5.1	1	373124	06/05/25	06/05/25	EJB
Chloromethane	ND		ug/Kg	5.1	1	373124	06/05/25	06/05/25	EJB
Vinyl Chloride	ND		ug/Kg	5.1	1	373124	06/05/25	06/05/25	EJB
Bromomethane	ND		ug/Kg	5.1	1	373124	06/05/25	06/05/25	EJB
Chloroethane	ND		ug/Kg	5.1	1	373124	06/05/25	06/05/25	EJB
Trichlorofluoromethane	ND		ug/Kg	5.1	1	373124	06/05/25	06/05/25	EJB
Acetone	ND		ug/Kg	100	1	373124	06/05/25	06/05/25	EJB
Freon 113	ND		ug/Kg	5.1	1	373124	06/05/25	06/05/25	EJB
1,1-Dichloroethene	ND		ug/Kg	5.1	1	373124	06/05/25	06/05/25	EJB
Methylene Chloride	ND		ug/Kg	7.5	1	373124	06/05/25	06/05/25	EJB
MTBE	ND		ug/Kg	5.1	1	373124	06/05/25	06/05/25	EJB
trans-1,2-Dichloroethene	ND		ug/Kg	5.1	1	373124	06/05/25	06/05/25	EJB
1,1-Dichloroethane	ND		ug/Kg	5.1	1	373124	06/05/25	06/05/25	EJB
2-Butanone	ND		ug/Kg	100	1	373124	06/05/25	06/05/25	EJB
cis-1,2-Dichloroethene	ND		ug/Kg	5.1	1	373124	06/05/25	06/05/25	EJB

Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

Analysis Results for 534374

534374-004 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
2,2-Dichloropropane	ND		ug/Kg	5.1	1	373124	06/05/25	06/05/25	EJB
Chloroform	ND		ug/Kg	5.1	1	373124	06/05/25	06/05/25	EJB
Bromochloromethane	ND		ug/Kg	5.1	1	373124	06/05/25	06/05/25	EJB
1,1,1-Trichloroethane	ND		ug/Kg	5.1	1	373124	06/05/25	06/05/25	EJB
1,1-Dichloropropene	ND		ug/Kg	5.1	1	373124	06/05/25	06/05/25	EJB
Carbon Tetrachloride	ND		ug/Kg	5.1	1	373124	06/05/25	06/05/25	EJB
1,2-Dichloroethane	ND		ug/Kg	5.1	1	373124	06/05/25	06/05/25	EJB
Benzene	ND		ug/Kg	5.1	1	373124	06/05/25	06/05/25	EJB
Trichloroethene	ND		ug/Kg	5.1	1	373124	06/05/25	06/05/25	EJB
1,2-Dichloropropane	ND		ug/Kg	5.1	1	373124	06/05/25	06/05/25	EJB
Bromodichloromethane	ND		ug/Kg	5.1	1	373124	06/05/25	06/05/25	EJB
Dibromomethane	ND		ug/Kg	5.1	1	373124	06/05/25	06/05/25	EJB
4-Methyl-2-Pentanone	ND		ug/Kg	5.1	1	373124	06/05/25	06/05/25	EJB
cis-1,3-Dichloropropene	ND		ug/Kg	5.1	1	373124	06/05/25	06/05/25	EJB
Toluene	ND		ug/Kg	5.1	1	373124	06/05/25	06/05/25	EJB
trans-1,3-Dichloropropene	ND		ug/Kg	5.1	1	373124	06/05/25	06/05/25	EJB
1,1,2-Trichloroethane	ND		ug/Kg	5.1	1	373124	06/05/25	06/05/25	EJB
1,3-Dichloropropane	ND		ug/Kg	5.1	1	373124	06/05/25	06/05/25	EJB
Tetrachloroethene	ND		ug/Kg	5.1	1	373124	06/05/25	06/05/25	EJB
Dibromochloromethane	ND		ug/Kg	5.1	1	373124	06/05/25	06/05/25	EJB
1,2-Dibromoethane	ND		ug/Kg	5.1	1	373124	06/05/25	06/05/25	EJB
Chlorobenzene	ND		ug/Kg	5.1	1	373124	06/05/25	06/05/25	EJB
1,1,1,2-Tetrachloroethane	ND		ug/Kg	5.1	1	373124	06/05/25	06/05/25	EJB
Ethylbenzene	ND		ug/Kg	5.1	1	373124	06/05/25	06/05/25	EJB
m,p-Xylenes	ND		ug/Kg	10	1	373124	06/05/25	06/05/25	EJB
o-Xylene	ND		ug/Kg	5.1	1	373124	06/05/25	06/05/25	EJB
Styrene	ND		ug/Kg	5.1	1	373124	06/05/25	06/05/25	EJB
Bromoform	ND		ug/Kg	5.1	1	373124	06/05/25	06/05/25	EJB
Isopropylbenzene	ND		ug/Kg	5.1	1	373124	06/05/25	06/05/25	EJB
1,1,2,2-Tetrachloroethane	ND		ug/Kg	5.1	1	373124	06/05/25	06/05/25	EJB
1,2,3-Trichloropropane	ND		ug/Kg	5.1	1	373124	06/05/25	06/05/25	EJB
Propylbenzene	ND		ug/Kg	5.1	1	373124	06/05/25	06/05/25	EJB
Bromobenzene	ND		ug/Kg	5.1	1	373124	06/05/25	06/05/25	EJB
1,3,5-Trimethylbenzene	ND		ug/Kg	5.1	1	373124	06/05/25	06/05/25	EJB
2-Chlorotoluene	ND		ug/Kg	5.1	1	373124	06/05/25	06/05/25	EJB
4-Chlorotoluene	ND		ug/Kg	5.1	1	373124	06/05/25	06/05/25	EJB
tert-Butylbenzene	ND		ug/Kg	5.1	1	373124	06/05/25	06/05/25	EJB
1,2,4-Trimethylbenzene	ND		ug/Kg	5.1	1	373124	06/05/25	06/05/25	EJB
sec-Butylbenzene	ND		ug/Kg	5.1	1	373124	06/05/25	06/05/25	EJB
para-Isopropyl Toluene	ND		ug/Kg	5.1	1	373124	06/05/25	06/05/25	EJB
1,3-Dichlorobenzene	ND		ug/Kg	5.1	1	373124	06/05/25	06/05/25	EJB
1,4-Dichlorobenzene	ND		ug/Kg	5.1	1	373124	06/05/25	06/05/25	EJB
n-Butylbenzene	ND		ug/Kg	5.1	1	373124	06/05/25	06/05/25	EJB
1,2-Dichlorobenzene	ND		ug/Kg	5.1	1	373124	06/05/25	06/05/25	EJB
1,2-Dibromo-3-Chloropropane	ND		ug/Kg	5.1	1	373124	06/05/25	06/05/25	EJB
1,2,4-Trichlorobenzene	ND		ug/Kg	5.1	1	373124	06/05/25	06/05/25	EJB
Hexachlorobutadiene	ND		ug/Kg	5.1	1	373124	06/05/25	06/05/25	EJB
Naphthalene	ND		ug/Kg	5.1	1	373124	06/05/25	06/05/25	EJB
1,2,3-Trichlorobenzene	ND		ug/Kg	5.1	1	373124	06/05/25	06/05/25	EJB
cis-1,4-Dichloro-2-butene	ND		ug/Kg	5.1	1	373124	06/05/25	06/05/25	EJB
trans-1,4-Dichloro-2-butene	ND		ug/Kg	5.1	1	373124	06/05/25	06/05/25	EJB
Xylene (total)	ND		ug/Kg	5.1	1	373124	06/05/25	06/05/25	EJB

Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

Analysis Results for 534374

534374-004 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Surrogates				**Limits**					
Dibromofluoromethane	106%		%REC	70-145	1	373124	06/05/25	06/05/25	EJB
1,2-Dichloroethane-d4	105%		%REC	70-145	1	373124	06/05/25	06/05/25	EJB
Toluene-d8	97%		%REC	70-145	1	373124	06/05/25	06/05/25	EJB
Bromofluorobenzene	98%		%REC	70-145	1	373124	06/05/25	06/05/25	EJB
Method: EPA 8270C-SIM Prep Method: EPA 3546									
1-Methylnaphthalene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
2-Methylnaphthalene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Naphthalene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Acenaphthylene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Acenaphthene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Fluorene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Phenanthrene	**11**		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Anthracene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Fluoranthene	**13**		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Pyrene	**13**		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Benzo(a)anthracene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Chrysene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Benzo(b)fluoranthene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Benzo(k)fluoranthene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Benzo(a)pyrene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Indeno(1,2,3-cd)pyrene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Dibenz(a,h)anthracene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Benzo(g,h,i)perylene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Surrogates				**Limits**					
Nitrobenzene-d5	57%		%REC	27-125	1	372914	06/03/25	06/04/25	ZFA
2-Fluorobiphenyl	60%		%REC	30-120	1	372914	06/03/25	06/04/25	ZFA
Terphenyl-d14	74%		%REC	33-155	1	372914	06/03/25	06/04/25	ZFA

Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

Analysis Results for 534374

Sample ID: B-2-5	Lab ID: 534374-005	Collected: 05/30/25 11:05
	Matrix: Soil	

534374-005 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Antimony	ND		mg/Kg	3.0	0.99	372896	06/03/25	06/03/25	CAP
Arsenic	**3.1**		mg/Kg	0.99	0.99	372896	06/03/25	06/03/25	CAP
Barium	**20**		mg/Kg	0.99	0.99	372896	06/03/25	06/03/25	CAP
Beryllium	ND		mg/Kg	0.50	0.99	372896	06/03/25	06/03/25	CAP
Cadmium	ND		mg/Kg	0.50	0.99	372896	06/03/25	06/03/25	CAP
Chromium	**15**		mg/Kg	0.99	0.99	372896	06/03/25	06/03/25	CAP
Cobalt	**1.7**		mg/Kg	0.50	0.99	372896	06/03/25	06/03/25	CAP
Copper	**3.3**		mg/Kg	0.99	0.99	372896	06/03/25	06/03/25	CAP
Lead	**5.3**		mg/Kg	0.99	0.99	372896	06/03/25	06/03/25	CAP
Molybdenum	ND		mg/Kg	0.99	0.99	372896	06/03/25	06/03/25	CAP
Nickel	**3.5**		mg/Kg	0.99	0.99	372896	06/03/25	06/03/25	CAP
Selenium	ND		mg/Kg	3.0	0.99	372896	06/03/25	06/03/25	CAP
Silver	ND		mg/Kg	0.50	0.99	372896	06/03/25	06/03/25	CAP
Thallium	ND		mg/Kg	3.0	0.99	372896	06/03/25	06/03/25	CAP
Vanadium	**45**		mg/Kg	0.99	0.99	372896	06/03/25	06/03/25	CAP
Zinc	**10**		mg/Kg	5.0	0.99	372896	06/03/25	06/03/25	CAP
Method: EPA 7471A Prep Method: EPA 7471A									
Mercury	ND		mg/Kg	0.14	1	372906	06/03/25	06/03/25	DXC
Method: EPA 8015M Prep Method: EPA 3580M									
GRO C8-C10	ND		mg/Kg	9.9	0.99	372931	06/03/25	06/05/25	DIB
DRO C10-C28	ND		mg/Kg	9.9	0.99	372931	06/03/25	06/05/25	DIB
ORO C28-C44	ND		mg/Kg	20	0.99	372931	06/03/25	06/05/25	DIB
Jet Fuel A C10-C16	ND		mg/Kg	9.9	0.99	372931	06/03/25	06/05/25	DIB
Surrogates				**Limits**					
n-Triacontane	114%		%REC	70-130	0.99	372931	06/03/25	06/05/25	DIB
Method: EPA 8260B Prep Method: EPA 5030B									
3-Chloropropene	ND		ug/Kg	5.0	0.99	373124	06/05/25	06/05/25	EJB
Freon 12	ND		ug/Kg	5.0	0.99	373124	06/05/25	06/05/25	EJB
Chloromethane	ND		ug/Kg	5.0	0.99	373124	06/05/25	06/05/25	EJB
Vinyl Chloride	ND		ug/Kg	5.0	0.99	373124	06/05/25	06/05/25	EJB
Bromomethane	ND		ug/Kg	5.0	0.99	373124	06/05/25	06/05/25	EJB
Chloroethane	ND		ug/Kg	5.0	0.99	373124	06/05/25	06/05/25	EJB
Trichlorofluoromethane	ND		ug/Kg	5.0	0.99	373124	06/05/25	06/05/25	EJB
Acetone	ND		ug/Kg	99	0.99	373124	06/05/25	06/05/25	EJB
Freon 113	ND		ug/Kg	5.0	0.99	373124	06/05/25	06/05/25	EJB
1,1-Dichloroethene	ND		ug/Kg	5.0	0.99	373124	06/05/25	06/05/25	EJB
Methylene Chloride	ND		ug/Kg	7.3	0.99	373124	06/05/25	06/05/25	EJB
MTBE	ND		ug/Kg	5.0	0.99	373124	06/05/25	06/05/25	EJB
trans-1,2-Dichloroethene	ND		ug/Kg	5.0	0.99	373124	06/05/25	06/05/25	EJB
1,1-Dichloroethane	ND		ug/Kg	5.0	0.99	373124	06/05/25	06/05/25	EJB
2-Butanone	ND		ug/Kg	99	0.99	373124	06/05/25	06/05/25	EJB
cis-1,2-Dichloroethene	ND		ug/Kg	5.0	0.99	373124	06/05/25	06/05/25	EJB

Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

Analysis Results for 534374

534374-005 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
2,2-Dichloropropane	ND		ug/Kg	5.0	0.99	373124	06/05/25	06/05/25	EJB
Chloroform	ND		ug/Kg	5.0	0.99	373124	06/05/25	06/05/25	EJB
Bromochloromethane	ND		ug/Kg	5.0	0.99	373124	06/05/25	06/05/25	EJB
1,1,1-Trichloroethane	ND		ug/Kg	5.0	0.99	373124	06/05/25	06/05/25	EJB
1,1-Dichloropropene	ND		ug/Kg	5.0	0.99	373124	06/05/25	06/05/25	EJB
Carbon Tetrachloride	ND		ug/Kg	5.0	0.99	373124	06/05/25	06/05/25	EJB
1,2-Dichloroethane	ND		ug/Kg	5.0	0.99	373124	06/05/25	06/05/25	EJB
Benzene	ND		ug/Kg	5.0	0.99	373124	06/05/25	06/05/25	EJB
Trichloroethene	ND		ug/Kg	5.0	0.99	373124	06/05/25	06/05/25	EJB
1,2-Dichloropropane	ND		ug/Kg	5.0	0.99	373124	06/05/25	06/05/25	EJB
Bromodichloromethane	ND		ug/Kg	5.0	0.99	373124	06/05/25	06/05/25	EJB
Dibromomethane	ND		ug/Kg	5.0	0.99	373124	06/05/25	06/05/25	EJB
4-Methyl-2-Pentanone	ND		ug/Kg	5.0	0.99	373124	06/05/25	06/05/25	EJB
cis-1,3-Dichloropropene	ND		ug/Kg	5.0	0.99	373124	06/05/25	06/05/25	EJB
Toluene	ND		ug/Kg	5.0	0.99	373124	06/05/25	06/05/25	EJB
trans-1,3-Dichloropropene	ND		ug/Kg	5.0	0.99	373124	06/05/25	06/05/25	EJB
1,1,2-Trichloroethane	ND		ug/Kg	5.0	0.99	373124	06/05/25	06/05/25	EJB
1,3-Dichloropropane	ND		ug/Kg	5.0	0.99	373124	06/05/25	06/05/25	EJB
Tetrachloroethene	ND		ug/Kg	5.0	0.99	373124	06/05/25	06/05/25	EJB
Dibromochloromethane	ND		ug/Kg	5.0	0.99	373124	06/05/25	06/05/25	EJB
1,2-Dibromoethane	ND		ug/Kg	5.0	0.99	373124	06/05/25	06/05/25	EJB
Chlorobenzene	ND		ug/Kg	5.0	0.99	373124	06/05/25	06/05/25	EJB
1,1,1,2-Tetrachloroethane	ND		ug/Kg	5.0	0.99	373124	06/05/25	06/05/25	EJB
Ethylbenzene	ND		ug/Kg	5.0	0.99	373124	06/05/25	06/05/25	EJB
m,p-Xylenes	ND		ug/Kg	9.9	0.99	373124	06/05/25	06/05/25	EJB
o-Xylene	ND		ug/Kg	5.0	0.99	373124	06/05/25	06/05/25	EJB
Styrene	ND		ug/Kg	5.0	0.99	373124	06/05/25	06/05/25	EJB
Bromoform	ND		ug/Kg	5.0	0.99	373124	06/05/25	06/05/25	EJB
Isopropylbenzene	ND		ug/Kg	5.0	0.99	373124	06/05/25	06/05/25	EJB
1,1,2,2-Tetrachloroethane	ND		ug/Kg	5.0	0.99	373124	06/05/25	06/05/25	EJB
1,2,3-Trichloropropane	ND		ug/Kg	5.0	0.99	373124	06/05/25	06/05/25	EJB
Propylbenzene	ND		ug/Kg	5.0	0.99	373124	06/05/25	06/05/25	EJB
Bromobenzene	ND		ug/Kg	5.0	0.99	373124	06/05/25	06/05/25	EJB
1,3,5-Trimethylbenzene	ND		ug/Kg	5.0	0.99	373124	06/05/25	06/05/25	EJB
2-Chlorotoluene	ND		ug/Kg	5.0	0.99	373124	06/05/25	06/05/25	EJB
4-Chlorotoluene	ND		ug/Kg	5.0	0.99	373124	06/05/25	06/05/25	EJB
tert-Butylbenzene	ND		ug/Kg	5.0	0.99	373124	06/05/25	06/05/25	EJB
1,2,4-Trimethylbenzene	ND		ug/Kg	5.0	0.99	373124	06/05/25	06/05/25	EJB
sec-Butylbenzene	ND		ug/Kg	5.0	0.99	373124	06/05/25	06/05/25	EJB
para-Isopropyl Toluene	ND		ug/Kg	5.0	0.99	373124	06/05/25	06/05/25	EJB
1,3-Dichlorobenzene	ND		ug/Kg	5.0	0.99	373124	06/05/25	06/05/25	EJB
1,4-Dichlorobenzene	ND		ug/Kg	5.0	0.99	373124	06/05/25	06/05/25	EJB
n-Butylbenzene	ND		ug/Kg	5.0	0.99	373124	06/05/25	06/05/25	EJB
1,2-Dichlorobenzene	ND		ug/Kg	5.0	0.99	373124	06/05/25	06/05/25	EJB
1,2-Dibromo-3-Chloropropane	ND		ug/Kg	5.0	0.99	373124	06/05/25	06/05/25	EJB
1,2,4-Trichlorobenzene	ND		ug/Kg	5.0	0.99	373124	06/05/25	06/05/25	EJB
Hexachlorobutadiene	ND		ug/Kg	5.0	0.99	373124	06/05/25	06/05/25	EJB
Naphthalene	ND		ug/Kg	5.0	0.99	373124	06/05/25	06/05/25	EJB
1,2,3-Trichlorobenzene	ND		ug/Kg	5.0	0.99	373124	06/05/25	06/05/25	EJB
cis-1,4-Dichloro-2-butene	ND		ug/Kg	5.0	0.99	373124	06/05/25	06/05/25	EJB
trans-1,4-Dichloro-2-butene	ND		ug/Kg	5.0	0.99	373124	06/05/25	06/05/25	EJB
Xylene (total)	ND		ug/Kg	5.0	0.99	373124	06/05/25	06/05/25	EJB

Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

Analysis Results for 534374

534374-005 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Surrogates				**Limits**					
Dibromofluoromethane	103%		%REC	70-145	0.99	373124	06/05/25	06/05/25	EJB
1,2-Dichloroethane-d4	104%		%REC	70-145	0.99	373124	06/05/25	06/05/25	EJB
Toluene-d8	101%		%REC	70-145	0.99	373124	06/05/25	06/05/25	EJB
Bromofluorobenzene	98%		%REC	70-145	0.99	373124	06/05/25	06/05/25	EJB
Method: EPA 8270C-SIM Prep Method: EPA 3546									
1-Methylnaphthalene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
2-Methylnaphthalene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Naphthalene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Acenaphthylene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Acenaphthene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Fluorene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Phenanthrene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Anthracene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Fluoranthene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Pyrene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Benzo(a)anthracene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Chrysene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Benzo(b)fluoranthene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Benzo(k)fluoranthene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Benzo(a)pyrene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Indeno(1,2,3-cd)pyrene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Dibenz(a,h)anthracene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Benzo(g,h,i)perylene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Surrogates				**Limits**					
Nitrobenzene-d5	59%		%REC	27-125	1	372914	06/03/25	06/04/25	ZFA
2-Fluorobiphenyl	61%		%REC	30-120	1	372914	06/03/25	06/04/25	ZFA
Terphenyl-d14	72%		%REC	33-155	1	372914	06/03/25	06/04/25	ZFA

Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

Analysis Results for 534374

Sample ID: B-2-10	Lab ID: 534374-006	Collected: 05/30/25 11:25
	Matrix: Soil	

534374-006 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Antimony	ND		mg/Kg	2.9	0.96	372896	06/03/25	06/03/25	CAP
Arsenic	**2.7**		mg/Kg	0.96	0.96	372896	06/03/25	06/03/25	CAP
Barium	**41**		mg/Kg	0.96	0.96	372896	06/03/25	06/03/25	CAP
Beryllium	ND		mg/Kg	0.48	0.96	372896	06/03/25	06/03/25	CAP
Cadmium	ND		mg/Kg	0.48	0.96	372896	06/03/25	06/03/25	CAP
Chromium	**27**		mg/Kg	0.96	0.96	372896	06/03/25	06/03/25	CAP
Cobalt	**5.2**		mg/Kg	0.48	0.96	372896	06/03/25	06/03/25	CAP
Copper	**8.1**		mg/Kg	0.96	0.96	372896	06/03/25	06/03/25	CAP
Lead	**4.6**		mg/Kg	0.96	0.96	372896	06/03/25	06/03/25	CAP
Molybdenum	ND		mg/Kg	0.96	0.96	372896	06/03/25	06/03/25	CAP
Nickel	**5.8**		mg/Kg	0.96	0.96	372896	06/03/25	06/03/25	CAP
Selenium	ND		mg/Kg	2.9	0.96	372896	06/03/25	06/03/25	CAP
Silver	ND		mg/Kg	0.48	0.96	372896	06/03/25	06/03/25	CAP
Thallium	ND		mg/Kg	2.9	0.96	372896	06/03/25	06/03/25	CAP
Vanadium	**70**		mg/Kg	0.96	0.96	372896	06/03/25	06/03/25	CAP
Zinc	**26**		mg/Kg	4.8	0.96	372896	06/03/25	06/03/25	CAP
Method: EPA 7471A Prep Method: EPA 7471A									
Mercury	ND		mg/Kg	0.16	1.2	372906	06/03/25	06/03/25	DXC
Method: EPA 8015M Prep Method: EPA 3580M									
GRO C8-C10	ND		mg/Kg	9.9	0.99	372931	06/03/25	06/04/25	DIB
DRO C10-C28	ND		mg/Kg	9.9	0.99	372931	06/03/25	06/04/25	DIB
ORO C28-C44	ND		mg/Kg	20	0.99	372931	06/03/25	06/04/25	DIB
Jet Fuel A C10-C16	ND		mg/Kg	9.9	0.99	372931	06/03/25	06/04/25	DIB
Surrogates				**Limits**					
n-Triacontane	109%		%REC	70-130	0.99	372931	06/03/25	06/04/25	DIB
Method: EPA 8260B Prep Method: EPA 5030B									
3-Chloropropene	ND		ug/Kg	4.9	0.99	373124	06/05/25	06/05/25	EJB
Freon 12	ND		ug/Kg	4.9	0.99	373124	06/05/25	06/05/25	EJB
Chloromethane	ND		ug/Kg	4.9	0.99	373124	06/05/25	06/05/25	EJB
Vinyl Chloride	ND		ug/Kg	4.9	0.99	373124	06/05/25	06/05/25	EJB
Bromomethane	ND		ug/Kg	4.9	0.99	373124	06/05/25	06/05/25	EJB
Chloroethane	ND		ug/Kg	4.9	0.99	373124	06/05/25	06/05/25	EJB
Trichlorofluoromethane	ND		ug/Kg	4.9	0.99	373124	06/05/25	06/05/25	EJB
Acetone	ND		ug/Kg	99	0.99	373124	06/05/25	06/05/25	EJB
Freon 113	ND		ug/Kg	4.9	0.99	373124	06/05/25	06/05/25	EJB
1,1-Dichloroethene	ND		ug/Kg	4.9	0.99	373124	06/05/25	06/05/25	EJB
Methylene Chloride	ND		ug/Kg	7.2	0.99	373124	06/05/25	06/05/25	EJB
MTBE	ND		ug/Kg	4.9	0.99	373124	06/05/25	06/05/25	EJB
trans-1,2-Dichloroethene	ND		ug/Kg	4.9	0.99	373124	06/05/25	06/05/25	EJB
1,1-Dichloroethane	ND		ug/Kg	4.9	0.99	373124	06/05/25	06/05/25	EJB
2-Butanone	ND		ug/Kg	99	0.99	373124	06/05/25	06/05/25	EJB
cis-1,2-Dichloroethene	ND		ug/Kg	4.9	0.99	373124	06/05/25	06/05/25	EJB

Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

Analysis Results for 534374

534374-006 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
2,2-Dichloropropane	ND		ug/Kg	4.9	0.99	373124	06/05/25	06/05/25	EJB
Chloroform	ND		ug/Kg	4.9	0.99	373124	06/05/25	06/05/25	EJB
Bromochloromethane	ND		ug/Kg	4.9	0.99	373124	06/05/25	06/05/25	EJB
1,1,1-Trichloroethane	ND		ug/Kg	4.9	0.99	373124	06/05/25	06/05/25	EJB
1,1-Dichloropropene	ND		ug/Kg	4.9	0.99	373124	06/05/25	06/05/25	EJB
Carbon Tetrachloride	ND		ug/Kg	4.9	0.99	373124	06/05/25	06/05/25	EJB
1,2-Dichloroethane	ND		ug/Kg	4.9	0.99	373124	06/05/25	06/05/25	EJB
Benzene	ND		ug/Kg	4.9	0.99	373124	06/05/25	06/05/25	EJB
Trichloroethene	ND		ug/Kg	4.9	0.99	373124	06/05/25	06/05/25	EJB
1,2-Dichloropropane	ND		ug/Kg	4.9	0.99	373124	06/05/25	06/05/25	EJB
Bromodichloromethane	ND		ug/Kg	4.9	0.99	373124	06/05/25	06/05/25	EJB
Dibromomethane	ND		ug/Kg	4.9	0.99	373124	06/05/25	06/05/25	EJB
4-Methyl-2-Pentanone	ND		ug/Kg	4.9	0.99	373124	06/05/25	06/05/25	EJB
cis-1,3-Dichloropropene	ND		ug/Kg	4.9	0.99	373124	06/05/25	06/05/25	EJB
Toluene	ND		ug/Kg	4.9	0.99	373124	06/05/25	06/05/25	EJB
trans-1,3-Dichloropropene	ND		ug/Kg	4.9	0.99	373124	06/05/25	06/05/25	EJB
1,1,2-Trichloroethane	ND		ug/Kg	4.9	0.99	373124	06/05/25	06/05/25	EJB
1,3-Dichloropropane	ND		ug/Kg	4.9	0.99	373124	06/05/25	06/05/25	EJB
Tetrachloroethene	ND		ug/Kg	4.9	0.99	373124	06/05/25	06/05/25	EJB
Dibromochloromethane	ND		ug/Kg	4.9	0.99	373124	06/05/25	06/05/25	EJB
1,2-Dibromoethane	ND		ug/Kg	4.9	0.99	373124	06/05/25	06/05/25	EJB
Chlorobenzene	ND		ug/Kg	4.9	0.99	373124	06/05/25	06/05/25	EJB
1,1,1,2-Tetrachloroethane	ND		ug/Kg	4.9	0.99	373124	06/05/25	06/05/25	EJB
Ethylbenzene	ND		ug/Kg	4.9	0.99	373124	06/05/25	06/05/25	EJB
m,p-Xylenes	ND		ug/Kg	9.9	0.99	373124	06/05/25	06/05/25	EJB
o-Xylene	ND		ug/Kg	4.9	0.99	373124	06/05/25	06/05/25	EJB
Styrene	ND		ug/Kg	4.9	0.99	373124	06/05/25	06/05/25	EJB
Bromoform	ND		ug/Kg	4.9	0.99	373124	06/05/25	06/05/25	EJB
Isopropylbenzene	ND		ug/Kg	4.9	0.99	373124	06/05/25	06/05/25	EJB
1,1,2,2-Tetrachloroethane	ND		ug/Kg	4.9	0.99	373124	06/05/25	06/05/25	EJB
1,2,3-Trichloropropane	ND		ug/Kg	4.9	0.99	373124	06/05/25	06/05/25	EJB
Propylbenzene	ND		ug/Kg	4.9	0.99	373124	06/05/25	06/05/25	EJB
Bromobenzene	ND		ug/Kg	4.9	0.99	373124	06/05/25	06/05/25	EJB
1,3,5-Trimethylbenzene	ND		ug/Kg	4.9	0.99	373124	06/05/25	06/05/25	EJB
2-Chlorotoluene	ND		ug/Kg	4.9	0.99	373124	06/05/25	06/05/25	EJB
4-Chlorotoluene	ND		ug/Kg	4.9	0.99	373124	06/05/25	06/05/25	EJB
tert-Butylbenzene	ND		ug/Kg	4.9	0.99	373124	06/05/25	06/05/25	EJB
1,2,4-Trimethylbenzene	ND		ug/Kg	4.9	0.99	373124	06/05/25	06/05/25	EJB
sec-Butylbenzene	ND		ug/Kg	4.9	0.99	373124	06/05/25	06/05/25	EJB
para-Isopropyl Toluene	ND		ug/Kg	4.9	0.99	373124	06/05/25	06/05/25	EJB
1,3-Dichlorobenzene	ND		ug/Kg	4.9	0.99	373124	06/05/25	06/05/25	EJB
1,4-Dichlorobenzene	ND		ug/Kg	4.9	0.99	373124	06/05/25	06/05/25	EJB
n-Butylbenzene	ND		ug/Kg	4.9	0.99	373124	06/05/25	06/05/25	EJB
1,2-Dichlorobenzene	ND		ug/Kg	4.9	0.99	373124	06/05/25	06/05/25	EJB
1,2-Dibromo-3-Chloropropane	ND		ug/Kg	4.9	0.99	373124	06/05/25	06/05/25	EJB
1,2,4-Trichlorobenzene	ND		ug/Kg	4.9	0.99	373124	06/05/25	06/05/25	EJB
Hexachlorobutadiene	ND		ug/Kg	4.9	0.99	373124	06/05/25	06/05/25	EJB
Naphthalene	ND		ug/Kg	4.9	0.99	373124	06/05/25	06/05/25	EJB
1,2,3-Trichlorobenzene	ND		ug/Kg	4.9	0.99	373124	06/05/25	06/05/25	EJB
cis-1,4-Dichloro-2-butene	ND		ug/Kg	4.9	0.99	373124	06/05/25	06/05/25	EJB
trans-1,4-Dichloro-2-butene	ND		ug/Kg	4.9	0.99	373124	06/05/25	06/05/25	EJB
Xylene (total)	ND		ug/Kg	4.9	0.99	373124	06/05/25	06/05/25	EJB

Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

Analysis Results for 534374

534374-006 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Surrogates				**Limits**					
Dibromofluoromethane	102%		%REC	70-145	0.99	373124	06/05/25	06/05/25	EJB
1,2-Dichloroethane-d4	104%		%REC	70-145	0.99	373124	06/05/25	06/05/25	EJB
Toluene-d8	98%		%REC	70-145	0.99	373124	06/05/25	06/05/25	EJB
Bromofluorobenzene	97%		%REC	70-145	0.99	373124	06/05/25	06/05/25	EJB
Method: EPA 8270C-SIM Prep Method: EPA 3546									
1-Methylnaphthalene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
2-Methylnaphthalene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Naphthalene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Acenaphthylene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Acenaphthene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Fluorene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Phenanthrene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Anthracene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Fluoranthene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Pyrene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Benzo(a)anthracene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Chrysene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Benzo(b)fluoranthene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Benzo(k)fluoranthene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Benzo(a)pyrene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Indeno(1,2,3-cd)pyrene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Dibenz(a,h)anthracene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Benzo(g,h,i)perylene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Surrogates				**Limits**					
Nitrobenzene-d5	53%		%REC	27-125	1	372914	06/03/25	06/04/25	ZFA
2-Fluorobiphenyl	52%		%REC	30-120	1	372914	06/03/25	06/04/25	ZFA
Terphenyl-d14	72%		%REC	33-155	1	372914	06/03/25	06/04/25	ZFA

Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

Analysis Results for 534374

Sample ID: B-2-15	Lab ID: 534374-007	Collected: 05/30/25 11:42
	Matrix: Soil	

534374-007 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Antimony	ND		mg/Kg	3.0	0.99	372896	06/03/25	06/03/25	CAP
Arsenic	**15**		mg/Kg	0.99	0.99	372896	06/03/25	06/03/25	CAP
Barium	**75**		mg/Kg	0.99	0.99	372896	06/03/25	06/03/25	CAP
Beryllium	ND		mg/Kg	0.50	0.99	372896	06/03/25	06/03/25	CAP
Cadmium	ND		mg/Kg	0.50	0.99	372896	06/03/25	06/03/25	CAP
Chromium	**33**		mg/Kg	0.99	0.99	372896	06/03/25	06/03/25	CAP
Cobalt	**3.6**		mg/Kg	0.50	0.99	372896	06/03/25	06/03/25	CAP
Copper	**7.2**		mg/Kg	0.99	0.99	372896	06/03/25	06/03/25	CAP
Lead	**11**		mg/Kg	0.99	0.99	372896	06/03/25	06/03/25	CAP
Molybdenum	**1.1**		mg/Kg	0.99	0.99	372896	06/03/25	06/03/25	CAP
Nickel	**4.9**		mg/Kg	0.99	0.99	372896	06/03/25	06/03/25	CAP
Selenium	ND		mg/Kg	3.0	0.99	372896	06/03/25	06/03/25	CAP
Silver	ND		mg/Kg	0.50	0.99	372896	06/03/25	06/03/25	CAP
Thallium	ND		mg/Kg	3.0	0.99	372896	06/03/25	06/03/25	CAP
Vanadium	**42**		mg/Kg	0.99	0.99	372896	06/03/25	06/03/25	CAP
Zinc	**26**		mg/Kg	5.0	0.99	372896	06/03/25	06/03/25	CAP
Method: EPA 7471A Prep Method: EPA 7471A									
Mercury	ND		mg/Kg	0.17	1.2	372906	06/03/25	06/03/25	DXC
Method: EPA 8015M Prep Method: EPA 3580M									
GRO C8-C10	ND		mg/Kg	9.9	0.99	372931	06/03/25	06/04/25	DIB
DRO C10-C28	ND		mg/Kg	9.9	0.99	372931	06/03/25	06/04/25	DIB
ORO C28-C44	ND		mg/Kg	20	0.99	372931	06/03/25	06/04/25	DIB
Jet Fuel A C10-C16	ND		mg/Kg	9.9	0.99	372931	06/03/25	06/04/25	DIB
Surrogates				**Limits**					
n-Triacontane	111%		%REC	70-130	0.99	372931	06/03/25	06/04/25	DIB
Method: EPA 8260B Prep Method: EPA 5030B									
3-Chloropropene	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
Freon 12	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
Chloromethane	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
Vinyl Chloride	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
Bromomethane	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
Chloroethane	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
Trichlorofluoromethane	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
Acetone	ND		ug/Kg	100	1	373124	06/05/25	06/05/25	EJB
Freon 113	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
1,1-Dichloroethene	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
Methylene Chloride	ND		ug/Kg	7.3	1	373124	06/05/25	06/05/25	EJB
MTBE	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
trans-1,2-Dichloroethene	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
1,1-Dichloroethane	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
2-Butanone	ND		ug/Kg	100	1	373124	06/05/25	06/05/25	EJB
cis-1,2-Dichloroethene	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB

Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

Analysis Results for 534374

534374-007 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
2,2-Dichloropropane	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
Chloroform	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
Bromochloromethane	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
1,1,1-Trichloroethane	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
1,1-Dichloropropene	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
Carbon Tetrachloride	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
1,2-Dichloroethane	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
Benzene	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
Trichloroethene	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
1,2-Dichloropropane	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
Bromodichloromethane	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
Dibromomethane	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
4-Methyl-2-Pentanone	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
cis-1,3-Dichloropropene	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
Toluene	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
trans-1,3-Dichloropropene	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
1,1,2-Trichloroethane	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
1,3-Dichloropropane	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
Tetrachloroethene	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
Dibromochloromethane	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
1,2-Dibromoethane	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
Chlorobenzene	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
1,1,1,2-Tetrachloroethane	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
Ethylbenzene	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
m,p-Xylenes	ND		ug/Kg	10	1	373124	06/05/25	06/05/25	EJB
o-Xylene	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
Styrene	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
Bromoform	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
Isopropylbenzene	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
1,1,2,2-Tetrachloroethane	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
1,2,3-Trichloropropane	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
Propylbenzene	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
Bromobenzene	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
1,3,5-Trimethylbenzene	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
2-Chlorotoluene	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
4-Chlorotoluene	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
tert-Butylbenzene	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
1,2,4-Trimethylbenzene	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
sec-Butylbenzene	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
para-Isopropyl Toluene	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
1,3-Dichlorobenzene	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
1,4-Dichlorobenzene	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
n-Butylbenzene	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
1,2-Dichlorobenzene	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
1,2-Dibromo-3-Chloropropane	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
1,2,4-Trichlorobenzene	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
Hexachlorobutadiene	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
Naphthalene	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
1,2,3-Trichlorobenzene	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
cis-1,4-Dichloro-2-butene	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
trans-1,4-Dichloro-2-butene	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB
Xylene (total)	ND		ug/Kg	5.0	1	373124	06/05/25	06/05/25	EJB

Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

Analysis Results for 534374

534374-007 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Surrogates				**Limits**					
Dibromofluoromethane	102%		%REC	70-145	1	373124	06/05/25	06/05/25	EJB
1,2-Dichloroethane-d4	107%		%REC	70-145	1	373124	06/05/25	06/05/25	EJB
Toluene-d8	96%		%REC	70-145	1	373124	06/05/25	06/05/25	EJB
Bromofluorobenzene	96%		%REC	70-145	1	373124	06/05/25	06/05/25	EJB
Method: EPA 8270C-SIM Prep Method: EPA 3546									
1-Methylnaphthalene	ND		ug/Kg	9.9	0.99	372914	06/03/25	06/04/25	ZFA
2-Methylnaphthalene	ND		ug/Kg	9.9	0.99	372914	06/03/25	06/04/25	ZFA
Naphthalene	ND		ug/Kg	9.9	0.99	372914	06/03/25	06/04/25	ZFA
Acenaphthylene	ND		ug/Kg	9.9	0.99	372914	06/03/25	06/04/25	ZFA
Acenaphthene	ND		ug/Kg	9.9	0.99	372914	06/03/25	06/04/25	ZFA
Fluorene	ND		ug/Kg	9.9	0.99	372914	06/03/25	06/04/25	ZFA
Phenanthrene	ND		ug/Kg	9.9	0.99	372914	06/03/25	06/04/25	ZFA
Anthracene	ND		ug/Kg	9.9	0.99	372914	06/03/25	06/04/25	ZFA
Fluoranthene	ND		ug/Kg	9.9	0.99	372914	06/03/25	06/04/25	ZFA
Pyrene	ND		ug/Kg	9.9	0.99	372914	06/03/25	06/04/25	ZFA
Benzo(a)anthracene	ND		ug/Kg	9.9	0.99	372914	06/03/25	06/04/25	ZFA
Chrysene	ND		ug/Kg	9.9	0.99	372914	06/03/25	06/04/25	ZFA
Benzo(b)fluoranthene	ND		ug/Kg	9.9	0.99	372914	06/03/25	06/04/25	ZFA
Benzo(k)fluoranthene	ND		ug/Kg	9.9	0.99	372914	06/03/25	06/04/25	ZFA
Benzo(a)pyrene	ND		ug/Kg	9.9	0.99	372914	06/03/25	06/04/25	ZFA
Indeno(1,2,3-cd)pyrene	ND		ug/Kg	9.9	0.99	372914	06/03/25	06/04/25	ZFA
Dibenz(a,h)anthracene	ND		ug/Kg	9.9	0.99	372914	06/03/25	06/04/25	ZFA
Benzo(g,h,i)perylene	ND		ug/Kg	9.9	0.99	372914	06/03/25	06/04/25	ZFA
Surrogates				**Limits**					
Nitrobenzene-d5	50%		%REC	27-125	0.99	372914	06/03/25	06/04/25	ZFA
2-Fluorobiphenyl	51%		%REC	30-120	0.99	372914	06/03/25	06/04/25	ZFA
Terphenyl-d14	73%		%REC	33-155	0.99	372914	06/03/25	06/04/25	ZFA

Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

Analysis Results for 534374

Sample ID: B-3-0.5	Lab ID: 534374-008	Collected: 05/30/25 12:36

534374-008 Analyte	Result	Qual	Units	RL	Matrix	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B										
Antimony	ND		mg/Kg	2.9	Soil	0.98	372896	06/03/25	06/03/25	CAP
Arsenic	**7.0**		mg/Kg	0.98	Soil	0.98	372896	06/03/25	06/03/25	CAP
Barium	**25**		mg/Kg	0.98	Soil	0.98	372896	06/03/25	06/03/25	CAP
Beryllium	ND		mg/Kg	0.49	Soil	0.98	372896	06/03/25	06/03/25	CAP
Cadmium	**1.3**		mg/Kg	0.49	Soil	0.98	372896	06/03/25	06/03/25	CAP
Chromium	**38**		mg/Kg	0.98	Soil	0.98	372896	06/03/25	06/03/25	CAP
Cobalt	**2.2**		mg/Kg	0.49	Soil	0.98	372896	06/03/25	06/03/25	CAP
Copper	**8.4**		mg/Kg	0.98	Soil	0.98	372896	06/03/25	06/03/25	CAP
Lead	**51**		mg/Kg	0.98	Soil	0.98	372896	06/03/25	06/03/25	CAP
Molybdenum	ND		mg/Kg	0.98	Soil	0.98	372896	06/03/25	06/03/25	CAP
Nickel	**9.2**		mg/Kg	0.98	Soil	0.98	372896	06/03/25	06/03/25	CAP
Selenium	ND		mg/Kg	2.9	Soil	0.98	372896	06/03/25	06/03/25	CAP
Silver	ND		mg/Kg	0.49	Soil	0.98	372896	06/03/25	06/03/25	CAP
Thallium	ND		mg/Kg	2.9	Soil	0.98	372896	06/03/25	06/03/25	CAP
Vanadium	**91**		mg/Kg	0.98	Soil	0.98	372896	06/03/25	06/03/25	CAP
Zinc	**30**		mg/Kg	4.9	Soil	0.98	372896	06/03/25	06/03/25	CAP
Method: EPA 6010B Prep Method: METHOD										
Lead	**0.20**		mg/L	0.15	WET Leachate	10	373797	06/12/25	06/12/25	CAP
Method: EPA 7471A Prep Method: EPA 7471A										
Mercury	ND		mg/Kg	0.16	Soil	1.2	372906	06/03/25	06/03/25	DXC
Method: EPA 8015M Prep Method: EPA 3580M										
GRO C8-C10	ND		mg/Kg	10	Soil	1	372931	06/03/25	06/04/25	DIB
DRO C10-C28	**400**		mg/Kg	10	Soil	1	372931	06/03/25	06/04/25	DIB
ORO C28-C44	**1,100**		mg/Kg	100	Soil	5	372931	06/03/25	06/06/25	KMB
Jet Fuel A C10-C16	ND		mg/Kg	10	Soil	1	372931	06/03/25	06/04/25	DIB
Surrogates				**Limits**						
n-Triacontane	104%		%REC	70-130	Soil	1	372931	06/03/25	06/04/25	DIB
Method: EPA 8260B Prep Method: EPA 5030B										
3-Chloropropene	ND		ug/Kg	5.1	Soil	1	373124	06/05/25	06/05/25	EJB
Freon 12	ND		ug/Kg	5.1	Soil	1	373124	06/05/25	06/05/25	EJB
Chloromethane	ND		ug/Kg	5.1	Soil	1	373124	06/05/25	06/05/25	EJB
Vinyl Chloride	ND		ug/Kg	5.1	Soil	1	373124	06/05/25	06/05/25	EJB
Bromomethane	ND		ug/Kg	5.1	Soil	1	373124	06/05/25	06/05/25	EJB
Chloroethane	ND		ug/Kg	5.1	Soil	1	373124	06/05/25	06/05/25	EJB
Trichlorofluoromethane	ND		ug/Kg	5.1	Soil	1	373124	06/05/25	06/05/25	EJB
Acetone	ND		ug/Kg	100	Soil	1	373124	06/05/25	06/05/25	EJB
Freon 113	ND		ug/Kg	5.1	Soil	1	373124	06/05/25	06/05/25	EJB
1,1-Dichloroethene	ND		ug/Kg	5.1	Soil	1	373124	06/05/25	06/05/25	EJB
Methylene Chloride	ND		ug/Kg	7.5	Soil	1	373124	06/05/25	06/05/25	EJB
MTBE	ND		ug/Kg	5.1	Soil	1	373124	06/05/25	06/05/25	EJB
trans-1,2-Dichloroethene	ND		ug/Kg	5.1	Soil	1	373124	06/05/25	06/05/25	EJB
1,1-Dichloroethane	ND		ug/Kg	5.1	Soil	1	373124	06/05/25	06/05/25	EJB

Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

Analysis Results for 534374

534374-008 Analyte	Result	Qual	Units	RL	Matrix	DF	Batch	Prepared	Analyzed	Chemist
2-Butanone	ND		ug/Kg	100	Soil	1	373124	06/05/25	06/05/25	EJB
cis-1,2-Dichloroethene	ND		ug/Kg	5.1	Soil	1	373124	06/05/25	06/05/25	EJB
2,2-Dichloropropane	ND		ug/Kg	5.1	Soil	1	373124	06/05/25	06/05/25	EJB
Chloroform	ND		ug/Kg	5.1	Soil	1	373124	06/05/25	06/05/25	EJB
Bromochloromethane	ND		ug/Kg	5.1	Soil	1	373124	06/05/25	06/05/25	EJB
1,1,1-Trichloroethane	ND		ug/Kg	5.1	Soil	1	373124	06/05/25	06/05/25	EJB
1,1-Dichloropropene	ND		ug/Kg	5.1	Soil	1	373124	06/05/25	06/05/25	EJB
Carbon Tetrachloride	ND		ug/Kg	5.1	Soil	1	373124	06/05/25	06/05/25	EJB
1,2-Dichloroethane	ND		ug/Kg	5.1	Soil	1	373124	06/05/25	06/05/25	EJB
Benzene	ND		ug/Kg	5.1	Soil	1	373124	06/05/25	06/05/25	EJB
Trichloroethene	ND		ug/Kg	5.1	Soil	1	373124	06/05/25	06/05/25	EJB
1,2-Dichloropropane	ND		ug/Kg	5.1	Soil	1	373124	06/05/25	06/05/25	EJB
Bromodichloromethane	ND		ug/Kg	5.1	Soil	1	373124	06/05/25	06/05/25	EJB
Dibromomethane	ND		ug/Kg	5.1	Soil	1	373124	06/05/25	06/05/25	EJB
4-Methyl-2-Pentanone	ND		ug/Kg	5.1	Soil	1	373124	06/05/25	06/05/25	EJB
cis-1,3-Dichloropropene	ND		ug/Kg	5.1	Soil	1	373124	06/05/25	06/05/25	EJB
Toluene	ND		ug/Kg	5.1	Soil	1	373124	06/05/25	06/05/25	EJB
trans-1,3-Dichloropropene	ND		ug/Kg	5.1	Soil	1	373124	06/05/25	06/05/25	EJB
1,1,2-Trichloroethane	ND		ug/Kg	5.1	Soil	1	373124	06/05/25	06/05/25	EJB
1,3-Dichloropropane	ND		ug/Kg	5.1	Soil	1	373124	06/05/25	06/05/25	EJB
Tetrachloroethene	ND		ug/Kg	5.1	Soil	1	373124	06/05/25	06/05/25	EJB
Dibromochloromethane	ND		ug/Kg	5.1	Soil	1	373124	06/05/25	06/05/25	EJB
1,2-Dibromoethane	ND		ug/Kg	5.1	Soil	1	373124	06/05/25	06/05/25	EJB
Chlorobenzene	ND		ug/Kg	5.1	Soil	1	373124	06/05/25	06/05/25	EJB
1,1,1,2-Tetrachloroethane	ND		ug/Kg	5.1	Soil	1	373124	06/05/25	06/05/25	EJB
Ethylbenzene	ND		ug/Kg	5.1	Soil	1	373124	06/05/25	06/05/25	EJB
m,p-Xylenes	ND		ug/Kg	10	Soil	1	373124	06/05/25	06/05/25	EJB
o-Xylene	ND		ug/Kg	5.1	Soil	1	373124	06/05/25	06/05/25	EJB
Styrene	ND		ug/Kg	5.1	Soil	1	373124	06/05/25	06/05/25	EJB
Bromoform	ND		ug/Kg	5.1	Soil	1	373124	06/05/25	06/05/25	EJB
Isopropylbenzene	ND		ug/Kg	5.1	Soil	1	373124	06/05/25	06/05/25	EJB
1,1,2,2-Tetrachloroethane	ND		ug/Kg	5.1	Soil	1	373124	06/05/25	06/05/25	EJB
1,2,3-Trichloropropane	ND		ug/Kg	5.1	Soil	1	373124	06/05/25	06/05/25	EJB
Propylbenzene	ND		ug/Kg	5.1	Soil	1	373124	06/05/25	06/05/25	EJB
Bromobenzene	ND		ug/Kg	5.1	Soil	1	373124	06/05/25	06/05/25	EJB
1,3,5-Trimethylbenzene	ND		ug/Kg	5.1	Soil	1	373124	06/05/25	06/05/25	EJB
2-Chlorotoluene	ND		ug/Kg	5.1	Soil	1	373124	06/05/25	06/05/25	EJB
4-Chlorotoluene	ND		ug/Kg	5.1	Soil	1	373124	06/05/25	06/05/25	EJB
tert-Butylbenzene	ND		ug/Kg	5.1	Soil	1	373124	06/05/25	06/05/25	EJB
1,2,4-Trimethylbenzene	ND		ug/Kg	5.1	Soil	1	373124	06/05/25	06/05/25	EJB
sec-Butylbenzene	ND		ug/Kg	5.1	Soil	1	373124	06/05/25	06/05/25	EJB
para-Isopropyl Toluene	ND		ug/Kg	5.1	Soil	1	373124	06/05/25	06/05/25	EJB
1,3-Dichlorobenzene	ND		ug/Kg	5.1	Soil	1	373124	06/05/25	06/05/25	EJB
1,4-Dichlorobenzene	ND		ug/Kg	5.1	Soil	1	373124	06/05/25	06/05/25	EJB
n-Butylbenzene	ND		ug/Kg	5.1	Soil	1	373124	06/05/25	06/05/25	EJB
1,2-Dichlorobenzene	ND		ug/Kg	5.1	Soil	1	373124	06/05/25	06/05/25	EJB
1,2-Dibromo-3-Chloropropane	ND		ug/Kg	5.1	Soil	1	373124	06/05/25	06/05/25	EJB
1,2,4-Trichlorobenzene	ND		ug/Kg	5.1	Soil	1	373124	06/05/25	06/05/25	EJB
Hexachlorobutadiene	ND		ug/Kg	5.1	Soil	1	373124	06/05/25	06/05/25	EJB
Naphthalene	ND		ug/Kg	5.1	Soil	1	373124	06/05/25	06/05/25	EJB
1,2,3-Trichlorobenzene	ND		ug/Kg	5.1	Soil	1	373124	06/05/25	06/05/25	EJB
cis-1,4-Dichloro-2-butene	ND		ug/Kg	5.1	Soil	1	373124	06/05/25	06/05/25	EJB

Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

Analysis Results for 534374

534374-008 Analyte	Result	Qual	Units	RL	Matrix	DF	Batch	Prepared	Analyzed	Chemist
trans-1,4-Dichloro-2-butene	ND		ug/Kg	5.1	Soil	1	373124	06/05/25	06/05/25	EJB
Xylene (total)	ND		ug/Kg	5.1	Soil	1	373124	06/05/25	06/05/25	EJB
Surrogates				**Limits**						
Dibromofluoromethane	105%		%REC	70-145	Soil	1	373124	06/05/25	06/05/25	EJB
1,2-Dichloroethane-d4	108%		%REC	70-145	Soil	1	373124	06/05/25	06/05/25	EJB
Toluene-d8	97%		%REC	70-145	Soil	1	373124	06/05/25	06/05/25	EJB
Bromofluorobenzene	97%		%REC	70-145	Soil	1	373124	06/05/25	06/05/25	EJB
Method: EPA 8270C-SIM Prep Method: EPA 3546										
1-Methylnaphthalene	ND		ug/Kg	10	Soil	1	372914	06/03/25	06/04/25	ZFA
2-Methylnaphthalene	ND		ug/Kg	10	Soil	1	372914	06/03/25	06/04/25	ZFA
Naphthalene	ND		ug/Kg	10	Soil	1	372914	06/03/25	06/04/25	ZFA
Acenaphthylene	ND		ug/Kg	10	Soil	1	372914	06/03/25	06/04/25	ZFA
Acenaphthene	ND		ug/Kg	10	Soil	1	372914	06/03/25	06/04/25	ZFA
Fluorene	ND		ug/Kg	10	Soil	1	372914	06/03/25	06/04/25	ZFA
Phenanthrene	ND		ug/Kg	10	Soil	1	372914	06/03/25	06/04/25	ZFA
Anthracene	ND		ug/Kg	10	Soil	1	372914	06/03/25	06/04/25	ZFA
Fluoranthene	ND		ug/Kg	10	Soil	1	372914	06/03/25	06/04/25	ZFA
Pyrene	ND		ug/Kg	10	Soil	1	372914	06/03/25	06/04/25	ZFA
Benzo(a)anthracene	ND		ug/Kg	10	Soil	1	372914	06/03/25	06/04/25	ZFA
Chrysene	ND		ug/Kg	10	Soil	1	372914	06/03/25	06/04/25	ZFA
Benzo(b)fluoranthene	**11**		ug/Kg	10	Soil	1	372914	06/03/25	06/04/25	ZFA
Benzo(k)fluoranthene	ND		ug/Kg	10	Soil	1	372914	06/03/25	06/04/25	ZFA
Benzo(a)pyrene	ND		ug/Kg	10	Soil	1	372914	06/03/25	06/04/25	ZFA
Indeno(1,2,3-cd)pyrene	**14**		ug/Kg	10	Soil	1	372914	06/03/25	06/04/25	ZFA
Dibenz(a,h)anthracene	ND		ug/Kg	10	Soil	1	372914	06/03/25	06/04/25	ZFA
Benzo(g,h,i)perylene	**23**		ug/Kg	10	Soil	1	372914	06/03/25	06/04/25	ZFA
Surrogates				**Limits**						
Nitrobenzene-d5	54%		%REC	27-125	Soil	1	372914	06/03/25	06/04/25	ZFA
2-Fluorobiphenyl	56%		%REC	30-120	Soil	1	372914	06/03/25	06/04/25	ZFA
Terphenyl-d14	61%		%REC	33-155	Soil	1	372914	06/03/25	06/04/25	ZFA

Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

Analysis Results for 534374

Sample ID: B-3-5	Lab ID: 534374-009	Collected: 05/30/25 12:54
	Matrix: Soil	

534374-009 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Antimony	ND		mg/Kg	2.9	0.97	372896	06/03/25	06/03/25	CAP
Arsenic	**2.6**		mg/Kg	0.97	0.97	372896	06/03/25	06/03/25	CAP
Barium	**20**		mg/Kg	0.97	0.97	372896	06/03/25	06/03/25	CAP
Beryllium	ND		mg/Kg	0.49	0.97	372896	06/03/25	06/03/25	CAP
Cadmium	ND		mg/Kg	0.49	0.97	372896	06/03/25	06/03/25	CAP
Chromium	**16**		mg/Kg	0.97	0.97	372896	06/03/25	06/03/25	CAP
Cobalt	**2.5**		mg/Kg	0.49	0.97	372896	06/03/25	06/03/25	CAP
Copper	**3.7**		mg/Kg	0.97	0.97	372896	06/03/25	06/03/25	CAP
Lead	**4.9**		mg/Kg	0.97	0.97	372896	06/03/25	06/03/25	CAP
Molybdenum	ND		mg/Kg	0.97	0.97	372896	06/03/25	06/03/25	CAP
Nickel	**4.0**		mg/Kg	0.97	0.97	372896	06/03/25	06/03/25	CAP
Selenium	ND		mg/Kg	2.9	0.97	372896	06/03/25	06/03/25	CAP
Silver	ND		mg/Kg	0.49	0.97	372896	06/03/25	06/03/25	CAP
Thallium	ND		mg/Kg	2.9	0.97	372896	06/03/25	06/03/25	CAP
Vanadium	**35**		mg/Kg	0.97	0.97	372896	06/03/25	06/03/25	CAP
Zinc	**9.9**		mg/Kg	4.9	0.97	372896	06/03/25	06/03/25	CAP
Method: EPA 7471A Prep Method: EPA 7471A									
Mercury	ND		mg/Kg	0.15	1.1	372906	06/03/25	06/03/25	DXC
Method: EPA 8015M Prep Method: EPA 3580M									
GRO C8-C10	ND		mg/Kg	9.9	0.99	372931	06/03/25	06/05/25	DIB
DRO C10-C28	ND		mg/Kg	9.9	0.99	372931	06/03/25	06/05/25	DIB
ORO C28-C44	ND		mg/Kg	20	0.99	372931	06/03/25	06/05/25	DIB
Jet Fuel A C10-C16	ND		mg/Kg	9.9	0.99	372931	06/03/25	06/05/25	DIB
Surrogates				**Limits**					
n-Triacontane	114%		%REC	70-130	0.99	372931	06/03/25	06/05/25	DIB
Method: EPA 8260B Prep Method: EPA 5030B									
3-Chloropropene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Freon 12	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Chloromethane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Vinyl Chloride	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Bromomethane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Chloroethane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Trichlorofluoromethane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Acetone	ND		ug/Kg	100	1	373211	06/06/25	06/06/25	ZST
Freon 113	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,1-Dichloroethene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Methylene Chloride	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
MTBE	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
trans-1,2-Dichloroethene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,1-Dichloroethane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
2-Butanone	ND		ug/Kg	100	1	373211	06/06/25	06/06/25	ZST
cis-1,2-Dichloroethene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST

Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

Analysis Results for 534374

534374-009 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
2,2-Dichloropropane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Chloroform	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Bromochloromethane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,1,1-Trichloroethane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,1-Dichloropropene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Carbon Tetrachloride	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,2-Dichloroethane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Benzene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Trichloroethene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,2-Dichloropropane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Bromodichloromethane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Dibromomethane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
4-Methyl-2-Pentanone	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
cis-1,3-Dichloropropene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Toluene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
trans-1,3-Dichloropropene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,1,2-Trichloroethane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,3-Dichloropropane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Tetrachloroethene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Dibromochloromethane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,2-Dibromoethane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Chlorobenzene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,1,1,2-Tetrachloroethane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Ethylbenzene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
m,p-Xylenes	ND		ug/Kg	10	1	373211	06/06/25	06/06/25	ZST
o-Xylene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Styrene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Bromoform	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Isopropylbenzene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,1,2,2-Tetrachloroethane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,2,3-Trichloropropane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Propylbenzene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Bromobenzene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,3,5-Trimethylbenzene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
2-Chlorotoluene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
4-Chlorotoluene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
tert-Butylbenzene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,2,4-Trimethylbenzene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
sec-Butylbenzene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
para-Isopropyl Toluene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,3-Dichlorobenzene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,4-Dichlorobenzene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
n-Butylbenzene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,2-Dichlorobenzene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,2-Dibromo-3-Chloropropane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,2,4-Trichlorobenzene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Hexachlorobutadiene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Naphthalene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,2,3-Trichlorobenzene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
cis-1,4-Dichloro-2-butene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
trans-1,4-Dichloro-2-butene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Xylene (total)	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST

Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

Analysis Results for 534374

534374-009 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Surrogates				**Limits**					
Dibromofluoromethane	95%		%REC	70-145	1	373211	06/06/25	06/06/25	ZST
1,2-Dichloroethane-d4	86%		%REC	70-145	1	373211	06/06/25	06/06/25	ZST
Toluene-d8	99%		%REC	70-145	1	373211	06/06/25	06/06/25	ZST
Bromofluorobenzene	101%		%REC	70-145	1	373211	06/06/25	06/06/25	ZST
Method: EPA 8270C-SIM Prep Method: EPA 3546									
1-Methylnaphthalene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
2-Methylnaphthalene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Naphthalene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Acenaphthylene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Acenaphthene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Fluorene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Phenanthrene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Anthracene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Fluoranthene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Pyrene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Benzo(a)anthracene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Chrysene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Benzo(b)fluoranthene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Benzo(k)fluoranthene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Benzo(a)pyrene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Indeno(1,2,3-cd)pyrene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Dibenz(a,h)anthracene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Benzo(g,h,i)perylene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Surrogates				**Limits**					
Nitrobenzene-d5	57%		%REC	27-125	1	372914	06/03/25	06/04/25	ZFA
2-Fluorobiphenyl	57%		%REC	30-120	1	372914	06/03/25	06/04/25	ZFA
Terphenyl-d14	72%		%REC	33-155	1	372914	06/03/25	06/04/25	ZFA

Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

Analysis Results for 534374

Sample ID: B-3-10	Lab ID: 534374-010	Collected: 05/30/25 13:34
	Matrix: Soil	

534374-010 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Antimony	ND		mg/Kg	3.0	1	372896	06/03/25	06/03/25	CAP
Arsenic	**1.6**		mg/Kg	1.0	1	372896	06/03/25	06/03/25	CAP
Barium	**27**		mg/Kg	1.0	1	372896	06/03/25	06/03/25	CAP
Beryllium	ND		mg/Kg	0.50	1	372896	06/03/25	06/03/25	CAP
Cadmium	ND		mg/Kg	0.50	1	372896	06/03/25	06/03/25	CAP
Chromium	**10**		mg/Kg	1.0	1	372896	06/03/25	06/03/25	CAP
Cobalt	**2.2**		mg/Kg	0.50	1	372896	06/03/25	06/03/25	CAP
Copper	**2.3**		mg/Kg	1.0	1	372896	06/03/25	06/03/25	CAP
Lead	**2.1**		mg/Kg	1.0	1	372896	06/03/25	06/03/25	CAP
Molybdenum	ND		mg/Kg	1.0	1	372896	06/03/25	06/03/25	CAP
Nickel	**2.8**		mg/Kg	1.0	1	372896	06/03/25	06/03/25	CAP
Selenium	ND		mg/Kg	3.0	1	372896	06/03/25	06/03/25	CAP
Silver	ND		mg/Kg	0.50	1	372896	06/03/25	06/03/25	CAP
Thallium	ND		mg/Kg	3.0	1	372896	06/03/25	06/03/25	CAP
Vanadium	**31**		mg/Kg	1.0	1	372896	06/03/25	06/03/25	CAP
Zinc	**11**		mg/Kg	5.0	1	372896	06/03/25	06/03/25	CAP
Method: EPA 7471A Prep Method: EPA 7471A									
Mercury	ND		mg/Kg	0.14	1	372906	06/03/25	06/03/25	DXC
Method: EPA 8015M Prep Method: EPA 3580M									
GRO C8-C10	ND		mg/Kg	10	1	372931	06/03/25	06/05/25	DIB
DRO C10-C28	ND		mg/Kg	10	1	372931	06/03/25	06/05/25	DIB
ORO C28-C44	ND		mg/Kg	20	1	372931	06/03/25	06/05/25	DIB
Jet Fuel A C10-C16	ND		mg/Kg	10	1	372931	06/03/25	06/05/25	DIB
Surrogates				**Limits**					
n-Triacontane	118%		%REC	70-130	1	372931	06/03/25	06/05/25	DIB
Method: EPA 8260B Prep Method: EPA 5030B									
3-Chloropropene	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
Freon 12	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
Chloromethane	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
Vinyl Chloride	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
Bromomethane	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
Chloroethane	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
Trichlorofluoromethane	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
Acetone	ND		ug/Kg	98	0.98	373211	06/06/25	06/06/25	ZST
Freon 113	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
1,1-Dichloroethene	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
Methylene Chloride	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
MTBE	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
trans-1,2-Dichloroethene	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
1,1-Dichloroethane	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
2-Butanone	ND		ug/Kg	98	0.98	373211	06/06/25	06/06/25	ZST
cis-1,2-Dichloroethene	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST

Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

Analysis Results for 534374

534374-010 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
2,2-Dichloropropane	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
Chloroform	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
Bromochloromethane	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
1,1,1-Trichloroethane	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
1,1-Dichloropropene	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
Carbon Tetrachloride	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
1,2-Dichloroethane	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
Benzene	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
Trichloroethene	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
1,2-Dichloropropane	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
Bromodichloromethane	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
Dibromomethane	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
4-Methyl-2-Pentanone	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
cis-1,3-Dichloropropene	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
Toluene	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
trans-1,3-Dichloropropene	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
1,1,2-Trichloroethane	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
1,3-Dichloropropane	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
Tetrachloroethene	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
Dibromochloromethane	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
1,2-Dibromoethane	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
Chlorobenzene	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
1,1,1,2-Tetrachloroethane	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
Ethylbenzene	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
m,p-Xylenes	ND		ug/Kg	9.8	0.98	373211	06/06/25	06/06/25	ZST
o-Xylene	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
Styrene	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
Bromoform	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
Isopropylbenzene	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
1,1,2,2-Tetrachloroethane	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
1,2,3-Trichloropropane	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
Propylbenzene	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
Bromobenzene	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
1,3,5-Trimethylbenzene	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
2-Chlorotoluene	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
4-Chlorotoluene	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
tert-Butylbenzene	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
1,2,4-Trimethylbenzene	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
sec-Butylbenzene	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
para-Isopropyl Toluene	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
1,3-Dichlorobenzene	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
1,4-Dichlorobenzene	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
n-Butylbenzene	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
1,2-Dichlorobenzene	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
1,2-Dibromo-3-Chloropropane	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
1,2,4-Trichlorobenzene	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
Hexachlorobutadiene	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
Naphthalene	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
1,2,3-Trichlorobenzene	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
cis-1,4-Dichloro-2-butene	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
trans-1,4-Dichloro-2-butene	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
Xylene (total)	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST

Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

Analysis Results for 534374

534374-010 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Surrogates				**Limits**					
Dibromofluoromethane	92%		%REC	70-145	0.98	373211	06/06/25	06/06/25	ZST
1,2-Dichloroethane-d4	88%		%REC	70-145	0.98	373211	06/06/25	06/06/25	ZST
Toluene-d8	102%		%REC	70-145	0.98	373211	06/06/25	06/06/25	ZST
Bromofluorobenzene	99%		%REC	70-145	0.98	373211	06/06/25	06/06/25	ZST
Method: EPA 8270C-SIM Prep Method: EPA 3546									
1-Methylnaphthalene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
2-Methylnaphthalene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Naphthalene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Acenaphthylene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Acenaphthene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Fluorene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Phenanthrene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Anthracene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Fluoranthene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Pyrene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Benzo(a)anthracene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Chrysene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Benzo(b)fluoranthene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Benzo(k)fluoranthene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Benzo(a)pyrene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Indeno(1,2,3-cd)pyrene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Dibenz(a,h)anthracene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Benzo(g,h,i)perylene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Surrogates				**Limits**					
Nitrobenzene-d5	48%		%REC	27-125	1	372914	06/03/25	06/04/25	ZFA
2-Fluorobiphenyl	48%		%REC	30-120	1	372914	06/03/25	06/04/25	ZFA
Terphenyl-d14	72%		%REC	33-155	1	372914	06/03/25	06/04/25	ZFA

Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

Analysis Results for 534374

Sample ID: B-3-15	Lab ID: 534374-011	Collected: 05/30/25 13:51
	Matrix: Soil	

534374-011 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Antimony	ND		mg/Kg	2.9	0.96	372896	06/03/25	06/03/25	CAP
Arsenic	**8.2**		mg/Kg	0.96	0.96	372896	06/03/25	06/03/25	CAP
Barium	**76**		mg/Kg	0.96	0.96	372896	06/03/25	06/03/25	CAP
Beryllium	**0.72**		mg/Kg	0.48	0.96	372896	06/03/25	06/03/25	CAP
Cadmium	ND		mg/Kg	0.48	0.96	372896	06/03/25	06/03/25	CAP
Chromium	**15**		mg/Kg	0.96	0.96	372896	06/03/25	06/03/25	CAP
Cobalt	**3.7**		mg/Kg	0.48	0.96	372896	06/03/25	06/03/25	CAP
Copper	**7.9**		mg/Kg	0.96	0.96	372896	06/03/25	06/03/25	CAP
Lead	**9.0**		mg/Kg	0.96	0.96	372896	06/03/25	06/03/25	CAP
Molybdenum	ND		mg/Kg	0.96	0.96	372896	06/03/25	06/03/25	CAP
Nickel	**8.0**		mg/Kg	0.96	0.96	372896	06/03/25	06/03/25	CAP
Selenium	ND		mg/Kg	2.9	0.96	372896	06/03/25	06/03/25	CAP
Silver	ND		mg/Kg	0.48	0.96	372896	06/03/25	06/03/25	CAP
Thallium	ND		mg/Kg	2.9	0.96	372896	06/03/25	06/03/25	CAP
Vanadium	**62**		mg/Kg	0.96	0.96	372896	06/03/25	06/03/25	CAP
Zinc	**44**		mg/Kg	4.8	0.96	372896	06/03/25	06/03/25	CAP
Method: EPA 7471A Prep Method: EPA 7471A									
Mercury	ND		mg/Kg	0.14	1	372906	06/03/25	06/03/25	DXC
Method: EPA 8015M Prep Method: EPA 3580M									
GRO C8-C10	ND		mg/Kg	10	1	372931	06/03/25	06/05/25	DIB
DRO C10-C28	ND		mg/Kg	10	1	372931	06/03/25	06/05/25	DIB
ORO C28-C44	ND		mg/Kg	20	1	372931	06/03/25	06/05/25	DIB
Jet Fuel A C10-C16	ND		mg/Kg	10	1	372931	06/03/25	06/05/25	DIB
Surrogates				**Limits**					
n-Triacontane	116%		%REC	70-130	1	372931	06/03/25	06/05/25	DIB
Method: EPA 8260B Prep Method: EPA 5030B									
3-Chloropropene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Freon 12	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Chloromethane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Vinyl Chloride	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Bromomethane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Chloroethane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Trichlorofluoromethane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Acetone	ND		ug/Kg	100	1	373211	06/06/25	06/06/25	ZST
Freon 113	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,1-Dichloroethene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Methylene Chloride	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
MTBE	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
trans-1,2-Dichloroethene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,1-Dichloroethane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
2-Butanone	ND		ug/Kg	100	1	373211	06/06/25	06/06/25	ZST
cis-1,2-Dichloroethene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST

Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

Analysis Results for 534374

534374-011 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
2,2-Dichloropropane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Chloroform	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Bromochloromethane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,1,1-Trichloroethane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,1-Dichloropropene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Carbon Tetrachloride	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,2-Dichloroethane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Benzene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Trichloroethene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,2-Dichloropropane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Bromodichloromethane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Dibromomethane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
4-Methyl-2-Pentanone	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
cis-1,3-Dichloropropene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Toluene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
trans-1,3-Dichloropropene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,1,2-Trichloroethane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,3-Dichloropropane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Tetrachloroethene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Dibromochloromethane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,2-Dibromoethane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Chlorobenzene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,1,1,2-Tetrachloroethane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Ethylbenzene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
m,p-Xylenes	ND		ug/Kg	10	1	373211	06/06/25	06/06/25	ZST
o-Xylene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Styrene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Bromoform	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Isopropylbenzene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,1,2,2-Tetrachloroethane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,2,3-Trichloropropane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Propylbenzene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Bromobenzene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,3,5-Trimethylbenzene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
2-Chlorotoluene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
4-Chlorotoluene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
tert-Butylbenzene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,2,4-Trimethylbenzene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
sec-Butylbenzene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
para-Isopropyl Toluene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,3-Dichlorobenzene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,4-Dichlorobenzene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
n-Butylbenzene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,2-Dichlorobenzene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,2-Dibromo-3-Chloropropane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,2,4-Trichlorobenzene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Hexachlorobutadiene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Naphthalene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,2,3-Trichlorobenzene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
cis-1,4-Dichloro-2-butene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
trans-1,4-Dichloro-2-butene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Xylene (total)	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST

Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

Analysis Results for 534374

534374-011 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Surrogates				**Limits**					
Dibromofluoromethane	92%		%REC	70-145	1	373211	06/06/25	06/06/25	ZST
1,2-Dichloroethane-d4	88%		%REC	70-145	1	373211	06/06/25	06/06/25	ZST
Toluene-d8	103%		%REC	70-145	1	373211	06/06/25	06/06/25	ZST
Bromofluorobenzene	103%		%REC	70-145	1	373211	06/06/25	06/06/25	ZST
Method: EPA 8270C-SIM Prep Method: EPA 3546									
1-Methylnaphthalene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
2-Methylnaphthalene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Naphthalene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Acenaphthylene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Acenaphthene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Fluorene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Phenanthrene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Anthracene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Fluoranthene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Pyrene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Benzo(a)anthracene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Chrysene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Benzo(b)fluoranthene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Benzo(k)fluoranthene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Benzo(a)pyrene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Indeno(1,2,3-cd)pyrene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Dibenz(a,h)anthracene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Benzo(g,h,i)perylene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Surrogates				**Limits**					
Nitrobenzene-d5	41%		%REC	27-125	1	372914	06/03/25	06/04/25	ZFA
2-Fluorobiphenyl	42%		%REC	30-120	1	372914	06/03/25	06/04/25	ZFA
Terphenyl-d14	53%		%REC	33-155	1	372914	06/03/25	06/04/25	ZFA

Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

Analysis Results for 534374

Sample ID: B-3-18	Lab ID: 534374-012	Collected: 05/30/25 14:05
	Matrix: Soil	

534374-012 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Antimony	ND		mg/Kg	2.9	0.97	372896	06/03/25	06/03/25	CAP
Arsenic	**1.9**		mg/Kg	0.97	0.97	372896	06/03/25	06/03/25	CAP
Barium	**56**		mg/Kg	0.97	0.97	372896	06/03/25	06/03/25	CAP
Beryllium	ND		mg/Kg	0.49	0.97	372896	06/03/25	06/03/25	CAP
Cadmium	ND		mg/Kg	0.49	0.97	372896	06/03/25	06/03/25	CAP
Chromium	**10**		mg/Kg	0.97	0.97	372896	06/03/25	06/03/25	CAP
Cobalt	**6.1**		mg/Kg	0.49	0.97	372896	06/03/25	06/03/25	CAP
Copper	**9.4**		mg/Kg	0.97	0.97	372896	06/03/25	06/03/25	CAP
Lead	**15**		mg/Kg	0.97	0.97	372896	06/03/25	06/03/25	CAP
Molybdenum	ND		mg/Kg	0.97	0.97	372896	06/03/25	06/03/25	CAP
Nickel	**6.3**		mg/Kg	0.97	0.97	372896	06/03/25	06/03/25	CAP
Selenium	ND		mg/Kg	2.9	0.97	372896	06/03/25	06/03/25	CAP
Silver	ND		mg/Kg	0.49	0.97	372896	06/03/25	06/03/25	CAP
Thallium	ND		mg/Kg	2.9	0.97	372896	06/03/25	06/03/25	CAP
Vanadium	**29**		mg/Kg	0.97	0.97	372896	06/03/25	06/03/25	CAP
Zinc	**45**		mg/Kg	4.9	0.97	372896	06/03/25	06/03/25	CAP
Method: EPA 7471A Prep Method: EPA 7471A									
Mercury	ND		mg/Kg	0.16	1.1	372906	06/03/25	06/03/25	DXC
Method: EPA 8015M Prep Method: EPA 3580M									
GRO C8-C10	ND		mg/Kg	10	1	372931	06/03/25	06/05/25	DIB
DRO C10-C28	ND		mg/Kg	10	1	372931	06/03/25	06/05/25	DIB
ORO C28-C44	ND		mg/Kg	20	1	372931	06/03/25	06/05/25	DIB
Jet Fuel A C10-C16	ND		mg/Kg	10	1	372931	06/03/25	06/05/25	DIB
Surrogates				**Limits**					
n-Triacontane	112%		%REC	70-130	1	372931	06/03/25	06/05/25	DIB
Method: EPA 8260B Prep Method: EPA 5030B									
3-Chloropropene	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
Freon 12	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
Chloromethane	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
Vinyl Chloride	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
Bromomethane	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
Chloroethane	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
Trichlorofluoromethane	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
Acetone	ND		ug/Kg	100	1	373211	06/06/25	06/06/25	ZST
Freon 113	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
1,1-Dichloroethene	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
Methylene Chloride	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
MTBE	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
trans-1,2-Dichloroethene	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
1,1-Dichloroethane	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
2-Butanone	ND		ug/Kg	100	1	373211	06/06/25	06/06/25	ZST
cis-1,2-Dichloroethene	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST

Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

Analysis Results for 534374

534374-012 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
2,2-Dichloropropane	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
Chloroform	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
Bromochloromethane	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
1,1,1-Trichloroethane	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
1,1-Dichloropropene	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
Carbon Tetrachloride	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
1,2-Dichloroethane	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
Benzene	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
Trichloroethene	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
1,2-Dichloropropane	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
Bromodichloromethane	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
Dibromomethane	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
4-Methyl-2-Pentanone	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
cis-1,3-Dichloropropene	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
Toluene	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
trans-1,3-Dichloropropene	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
1,1,2-Trichloroethane	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
1,3-Dichloropropane	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
Tetrachloroethene	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
Dibromochloromethane	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
1,2-Dibromoethane	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
Chlorobenzene	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
1,1,1,2-Tetrachloroethane	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
Ethylbenzene	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
m,p-Xylenes	ND		ug/Kg	10	1	373211	06/06/25	06/06/25	ZST
o-Xylene	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
Styrene	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
Bromoform	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
Isopropylbenzene	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
1,1,2,2-Tetrachloroethane	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
1,2,3-Trichloropropane	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
Propylbenzene	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
Bromobenzene	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
1,3,5-Trimethylbenzene	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
2-Chlorotoluene	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
4-Chlorotoluene	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
tert-Butylbenzene	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
1,2,4-Trimethylbenzene	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
sec-Butylbenzene	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
para-Isopropyl Toluene	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
1,3-Dichlorobenzene	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
1,4-Dichlorobenzene	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
n-Butylbenzene	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
1,2-Dichlorobenzene	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
1,2-Dibromo-3-Chloropropane	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
1,2,4-Trichlorobenzene	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
Hexachlorobutadiene	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
Naphthalene	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
1,2,3-Trichlorobenzene	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
cis-1,4-Dichloro-2-butene	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
trans-1,4-Dichloro-2-butene	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
Xylene (total)	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST

Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

Analysis Results for 534374

534374-012 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Surrogates				**Limits**					
Dibromofluoromethane	93%		%REC	70-145	1	373211	06/06/25	06/06/25	ZST
1,2-Dichloroethane-d4	89%		%REC	70-145	1	373211	06/06/25	06/06/25	ZST
Toluene-d8	99%		%REC	70-145	1	373211	06/06/25	06/06/25	ZST
Bromofluorobenzene	98%		%REC	70-145	1	373211	06/06/25	06/06/25	ZST
Method: EPA 8270C-SIM Prep Method: EPA 3546									
1-Methylnaphthalene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
2-Methylnaphthalene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Naphthalene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Acenaphthylene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Acenaphthene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Fluorene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Phenanthrene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Anthracene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Fluoranthene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Pyrene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Benzo(a)anthracene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Chrysene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Benzo(b)fluoranthene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Benzo(k)fluoranthene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Benzo(a)pyrene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Indeno(1,2,3-cd)pyrene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Dibenz(a,h)anthracene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Benzo(g,h,i)perylene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Surrogates				**Limits**					
Nitrobenzene-d5	59%		%REC	27-125	1	372914	06/03/25	06/04/25	ZFA
2-Fluorobiphenyl	60%		%REC	30-120	1	372914	06/03/25	06/04/25	ZFA
Terphenyl-d14	69%		%REC	33-155	1	372914	06/03/25	06/04/25	ZFA

Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

Analysis Results for 534374

Sample ID: B-4-0.5	Lab ID: 534374-013	Collected: 05/30/25 14:40
	Matrix: Soil	

534374-013 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B									
Antimony	ND		mg/Kg	2.9	0.96	372896	06/03/25	06/03/25	CAP
Arsenic	**9.3**		mg/Kg	0.96	0.96	372896	06/03/25	06/03/25	CAP
Barium	**43**		mg/Kg	0.96	0.96	372896	06/03/25	06/03/25	CAP
Beryllium	ND		mg/Kg	0.48	0.96	372896	06/03/25	06/03/25	CAP
Cadmium	**1.1**		mg/Kg	0.48	0.96	372896	06/03/25	06/03/25	CAP
Chromium	**31**		mg/Kg	0.96	0.96	372896	06/03/25	06/03/25	CAP
Cobalt	**2.5**		mg/Kg	0.48	0.96	372896	06/03/25	06/03/25	CAP
Copper	**7.1**		mg/Kg	0.96	0.96	372896	06/03/25	06/03/25	CAP
Lead	**20**		mg/Kg	0.96	0.96	372896	06/03/25	06/03/25	CAP
Molybdenum	ND		mg/Kg	0.96	0.96	372896	06/03/25	06/03/25	CAP
Nickel	**9.9**		mg/Kg	0.96	0.96	372896	06/03/25	06/03/25	CAP
Selenium	ND		mg/Kg	2.9	0.96	372896	06/03/25	06/03/25	CAP
Silver	ND		mg/Kg	0.48	0.96	372896	06/03/25	06/03/25	CAP
Thallium	ND		mg/Kg	2.9	0.96	372896	06/03/25	06/03/25	CAP
Vanadium	**79**		mg/Kg	0.96	0.96	372896	06/03/25	06/03/25	CAP
Zinc	**43**		mg/Kg	4.8	0.96	372896	06/03/25	06/03/25	CAP
Method: EPA 7471A Prep Method: EPA 7471A									
Mercury	ND		mg/Kg	0.16	1.1	372906	06/03/25	06/03/25	DXC
Method: EPA 8015M Prep Method: EPA 3580M									
GRO C8-C10	ND		mg/Kg	99	9.9	372931	06/03/25	06/05/25	DIB
DRO C10-C28	**270**		mg/Kg	99	9.9	372931	06/03/25	06/05/25	DIB
ORO C28-C44	**940**		mg/Kg	200	9.9	372931	06/03/25	06/05/25	DIB
Jet Fuel A C10-C16	ND		mg/Kg	99	9.9	372931	06/03/25	06/05/25	DIB
Surrogates				**Limits**					
n-Triacontane	117%		%REC	70-130	9.9	372931	06/03/25	06/05/25	DIB
Method: EPA 8260B Prep Method: EPA 5030B									
3-Chloropropene	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
Freon 12	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
Chloromethane	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
Vinyl Chloride	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
Bromomethane	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
Chloroethane	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
Trichlorofluoromethane	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
Acetone	ND		ug/Kg	100	1	373211	06/06/25	06/06/25	ZST
Freon 113	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
1,1-Dichloroethene	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
Methylene Chloride	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
MTBE	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
trans-1,2-Dichloroethene	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
1,1-Dichloroethane	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
2-Butanone	ND		ug/Kg	100	1	373211	06/06/25	06/06/25	ZST
cis-1,2-Dichloroethene	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST

Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

Analysis Results for 534374

534374-013 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
2,2-Dichloropropane	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
Chloroform	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
Bromochloromethane	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
1,1,1-Trichloroethane	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
1,1-Dichloropropene	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
Carbon Tetrachloride	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
1,2-Dichloroethane	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
Benzene	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
Trichloroethene	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
1,2-Dichloropropane	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
Bromodichloromethane	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
Dibromomethane	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
4-Methyl-2-Pentanone	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
cis-1,3-Dichloropropene	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
Toluene	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
trans-1,3-Dichloropropene	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
1,1,2-Trichloroethane	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
1,3-Dichloropropane	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
Tetrachloroethene	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
Dibromochloromethane	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
1,2-Dibromoethane	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
Chlorobenzene	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
1,1,1,2-Tetrachloroethane	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
Ethylbenzene	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
m,p-Xylenes	ND		ug/Kg	10	1	373211	06/06/25	06/06/25	ZST
o-Xylene	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
Styrene	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
Bromoform	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
Isopropylbenzene	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
1,1,2,2-Tetrachloroethane	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
1,2,3-Trichloropropane	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
Propylbenzene	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
Bromobenzene	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
1,3,5-Trimethylbenzene	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
2-Chlorotoluene	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
4-Chlorotoluene	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
tert-Butylbenzene	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
1,2,4-Trimethylbenzene	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
sec-Butylbenzene	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
para-Isopropyl Toluene	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
1,3-Dichlorobenzene	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
1,4-Dichlorobenzene	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
n-Butylbenzene	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
1,2-Dichlorobenzene	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
1,2-Dibromo-3-Chloropropane	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
1,2,4-Trichlorobenzene	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
Hexachlorobutadiene	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
Naphthalene	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
1,2,3-Trichlorobenzene	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
cis-1,4-Dichloro-2-butene	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
trans-1,4-Dichloro-2-butene	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST
Xylene (total)	ND		ug/Kg	5.0	1	373211	06/06/25	06/06/25	ZST

Results for any subcontracted analyses are not included in this section.

Analysis Results for 534374

534374-013 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Surrogates				**Limits**					
Dibromofluoromethane	94%		%REC	70-145	1	373211	06/06/25	06/06/25	ZST
1,2-Dichloroethane-d4	88%		%REC	70-145	1	373211	06/06/25	06/06/25	ZST
Toluene-d8	102%		%REC	70-145	1	373211	06/06/25	06/06/25	ZST
Bromofluorobenzene	102%		%REC	70-145	1	373211	06/06/25	06/06/25	ZST
Method: EPA 8270C-SIM Prep Method: EPA 3546									
1-Methylnaphthalene	ND		ug/Kg	100	10	372914	06/03/25	06/04/25	ZFA
2-Methylnaphthalene	ND		ug/Kg	100	10	372914	06/03/25	06/04/25	ZFA
Naphthalene	ND		ug/Kg	100	10	372914	06/03/25	06/04/25	ZFA
Acenaphthylene	ND		ug/Kg	100	10	372914	06/03/25	06/04/25	ZFA
Acenaphthene	ND		ug/Kg	100	10	372914	06/03/25	06/04/25	ZFA
Fluorene	ND		ug/Kg	100	10	372914	06/03/25	06/04/25	ZFA
Phenanthrene	ND		ug/Kg	100	10	372914	06/03/25	06/04/25	ZFA
Anthracene	ND		ug/Kg	100	10	372914	06/03/25	06/04/25	ZFA
Fluoranthene	ND		ug/Kg	100	10	372914	06/03/25	06/04/25	ZFA
Pyrene	ND		ug/Kg	100	10	372914	06/03/25	06/04/25	ZFA
Benzo(a)anthracene	ND		ug/Kg	100	10	372914	06/03/25	06/04/25	ZFA
Chrysene	ND		ug/Kg	100	10	372914	06/03/25	06/04/25	ZFA
Benzo(b)fluoranthene	ND		ug/Kg	100	10	372914	06/03/25	06/04/25	ZFA
Benzo(k)fluoranthene	ND		ug/Kg	100	10	372914	06/03/25	06/04/25	ZFA
Benzo(a)pyrene	ND		ug/Kg	100	10	372914	06/03/25	06/04/25	ZFA
Indeno(1,2,3-cd)pyrene	ND		ug/Kg	100	10	372914	06/03/25	06/04/25	ZFA
Dibenz(a,h)anthracene	ND		ug/Kg	100	10	372914	06/03/25	06/04/25	ZFA
Benzo(g,h,i)perylene	ND		ug/Kg	100	10	372914	06/03/25	06/04/25	ZFA
Surrogates				**Limits**					
Nitrobenzene-d5	57%		%REC	27-125	10	372914	06/03/25	06/04/25	ZFA
2-Fluorobiphenyl	59%		%REC	30-120	10	372914	06/03/25	06/04/25	ZFA
Terphenyl-d14	73%		%REC	33-155	10	372914	06/03/25	06/04/25	ZFA

Results for any subcontracted analyses are not included in this section.

Analysis Results for 534374

Sample ID: B-4-5 **Lab ID: 534374-014** **Collected: 05/30/25 14:56**
Matrix: Soil

534374-014 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B									
Prep Method: EPA 3050B									
Antimony	ND		mg/Kg	2.9	0.97	372896	06/03/25	06/03/25	CAP
Arsenic	**3.6**		mg/Kg	0.97	0.97	372896	06/03/25	06/03/25	CAP
Barium	**43**		mg/Kg	0.97	0.97	372896	06/03/25	06/03/25	CAP
Beryllium	ND		mg/Kg	0.49	0.97	372896	06/03/25	06/03/25	CAP
Cadmium	ND		mg/Kg	0.49	0.97	372896	06/03/25	06/03/25	CAP
Chromium	**15**		mg/Kg	0.97	0.97	372896	06/03/25	06/03/25	CAP
Cobalt	**1.8**		mg/Kg	0.49	0.97	372896	06/03/25	06/03/25	CAP
Copper	**3.4**		mg/Kg	0.97	0.97	372896	06/03/25	06/03/25	CAP
Lead	**3.8**		mg/Kg	0.97	0.97	372896	06/03/25	06/03/25	CAP
Molybdenum	ND		mg/Kg	0.97	0.97	372896	06/03/25	06/03/25	CAP
Nickel	**4.4**		mg/Kg	0.97	0.97	372896	06/03/25	06/03/25	CAP
Selenium	ND		mg/Kg	2.9	0.97	372896	06/03/25	06/03/25	CAP
Silver	ND		mg/Kg	0.49	0.97	372896	06/03/25	06/03/25	CAP
Thallium	ND		mg/Kg	2.9	0.97	372896	06/03/25	06/03/25	CAP
Vanadium	**46**		mg/Kg	0.97	0.97	372896	06/03/25	06/03/25	CAP
Zinc	**11**		mg/Kg	4.9	0.97	372896	06/03/25	06/03/25	CAP
Method: EPA 7471A									
Prep Method: EPA 7471A									
Mercury	ND		mg/Kg	0.17	1.2	372906	06/03/25	06/03/25	DXC
Method: EPA 8015M									
Prep Method: EPA 3580M									
GRO C8-C10	ND		mg/Kg	9.9	0.99	372931	06/03/25	06/05/25	DIB
DRO C10-C28	ND		mg/Kg	9.9	0.99	372931	06/03/25	06/05/25	DIB
ORO C28-C44	ND		mg/Kg	20	0.99	372931	06/03/25	06/05/25	DIB
Jet Fuel A C10-C16	ND		mg/Kg	9.9	0.99	372931	06/03/25	06/05/25	DIB
Surrogates				**Limits**					
n-Triacontane	115%		%REC	70-130	0.99	372931	06/03/25	06/05/25	DIB
Method: EPA 8260B									
Prep Method: EPA 5030B									
3-Chloropropene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Freon 12	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Chloromethane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Vinyl Chloride	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Bromomethane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Chloroethane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Trichlorofluoromethane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Acetone	ND		ug/Kg	100	1	373211	06/06/25	06/06/25	ZST
Freon 113	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,1-Dichloroethene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Methylene Chloride	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
MTBE	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
trans-1,2-Dichloroethene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,1-Dichloroethane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
2-Butanone	ND		ug/Kg	100	1	373211	06/06/25	06/06/25	ZST
cis-1,2-Dichloroethene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST

Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

Analysis Results for 534374

534374-014 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
2,2-Dichloropropane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Chloroform	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Bromochloromethane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,1,1-Trichloroethane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,1-Dichloropropene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Carbon Tetrachloride	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,2-Dichloroethane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Benzene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Trichloroethene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,2-Dichloropropane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Bromodichloromethane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Dibromomethane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
4-Methyl-2-Pentanone	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
cis-1,3-Dichloropropene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Toluene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
trans-1,3-Dichloropropene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,1,2-Trichloroethane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,3-Dichloropropane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Tetrachloroethene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Dibromochloromethane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,2-Dibromoethane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Chlorobenzene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,1,1,2-Tetrachloroethane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Ethylbenzene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
m,p-Xylenes	ND		ug/Kg	10	1	373211	06/06/25	06/06/25	ZST
o-Xylene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Styrene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Bromoform	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Isopropylbenzene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,1,2,2-Tetrachloroethane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,2,3-Trichloropropane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Propylbenzene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Bromobenzene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,3,5-Trimethylbenzene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
2-Chlorotoluene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
4-Chlorotoluene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
tert-Butylbenzene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,2,4-Trimethylbenzene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
sec-Butylbenzene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
para-Isopropyl Toluene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,3-Dichlorobenzene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,4-Dichlorobenzene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
n-Butylbenzene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,2-Dichlorobenzene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,2-Dibromo-3-Chloropropane	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,2,4-Trichlorobenzene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Hexachlorobutadiene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Naphthalene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
1,2,3-Trichlorobenzene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
cis-1,4-Dichloro-2-butene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
trans-1,4-Dichloro-2-butene	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST
Xylene (total)	ND		ug/Kg	5.1	1	373211	06/06/25	06/06/25	ZST

Results for any subcontracted analyses are not included in this section.

Analysis Results for 534374

534374-014 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Surrogates				**Limits**					
Dibromofluoromethane	95%		%REC	70-145	1	373211	06/06/25	06/06/25	ZST
1,2-Dichloroethane-d4	89%		%REC	70-145	1	373211	06/06/25	06/06/25	ZST
Toluene-d8	100%		%REC	70-145	1	373211	06/06/25	06/06/25	ZST
Bromofluorobenzene	103%		%REC	70-145	1	373211	06/06/25	06/06/25	ZST
Method: EPA 8270C-SIM Prep Method: EPA 3546									
1-Methylnaphthalene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
2-Methylnaphthalene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Naphthalene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Acenaphthylene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Acenaphthene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Fluorene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Phenanthrene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Anthracene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Fluoranthene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Pyrene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Benzo(a)anthracene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Chrysene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Benzo(b)fluoranthene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Benzo(k)fluoranthene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Benzo(a)pyrene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Indeno(1,2,3-cd)pyrene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Dibenz(a,h)anthracene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Benzo(g,h,i)perylene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Surrogates				**Limits**					
Nitrobenzene-d5	61%		%REC	27-125	1	372914	06/03/25	06/04/25	ZFA
2-Fluorobiphenyl	62%		%REC	30-120	1	372914	06/03/25	06/04/25	ZFA
Terphenyl-d14	80%		%REC	33-155	1	372914	06/03/25	06/04/25	ZFA

Results for any subcontracted analyses are not included in this section.

Analysis Results for 534374

Sample ID: COMP-1 **Lab ID: 534374-015** **Collected: 05/30/25 15:27**
Matrix: Soil

534374-015 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B									
Prep Method: EPA 3050B									
Antimony	ND		mg/Kg	2.9	0.97	372896	06/03/25	06/03/25	CAP
Arsenic	**4.8**		mg/Kg	0.97	0.97	372896	06/03/25	06/03/25	CAP
Barium	**82**		mg/Kg	0.97	0.97	372896	06/03/25	06/03/25	CAP
Beryllium	ND		mg/Kg	0.49	0.97	372896	06/03/25	06/03/25	CAP
Cadmium	ND		mg/Kg	0.49	0.97	372896	06/03/25	06/03/25	CAP
Chromium	**100**		mg/Kg	0.97	0.97	372896	06/03/25	06/03/25	CAP
Cobalt	**2.3**		mg/Kg	0.49	0.97	372896	06/03/25	06/03/25	CAP
Copper	**5.9**		mg/Kg	0.97	0.97	372896	06/03/25	06/03/25	CAP
Lead	**5.7**		mg/Kg	0.97	0.97	372896	06/03/25	06/03/25	CAP
Molybdenum	ND		mg/Kg	0.97	0.97	372896	06/03/25	06/03/25	CAP
Nickel	**5.2**		mg/Kg	0.97	0.97	372896	06/03/25	06/03/25	CAP
Selenium	ND		mg/Kg	2.9	0.97	372896	06/03/25	06/03/25	CAP
Silver	ND		mg/Kg	0.49	0.97	372896	06/03/25	06/03/25	CAP
Thallium	ND		mg/Kg	2.9	0.97	372896	06/03/25	06/03/25	CAP
Vanadium	**40**		mg/Kg	0.97	0.97	372896	06/03/25	06/03/25	CAP
Zinc	**15**		mg/Kg	4.9	0.97	372896	06/03/25	06/03/25	CAP
Method: EPA 7471A									
Prep Method: EPA 7471A									
Mercury	ND		mg/Kg	0.16	1.2	372906	06/03/25	06/03/25	DXC
Method: EPA 8015M									
Prep Method: EPA 3580M									
GRO C8-C10	ND		mg/Kg	9.9	0.99	372931	06/03/25	06/05/25	DIB
DRO C10-C28	**22**		mg/Kg	9.9	0.99	372931	06/03/25	06/05/25	DIB
ORO C28-C44	**70**		mg/Kg	20	0.99	372931	06/03/25	06/05/25	DIB
Jet Fuel A C10-C16	ND		mg/Kg	9.9	0.99	372931	06/03/25	06/05/25	DIB
Surrogates				**Limits**					
n-Triacontane	116%		%REC	70-130	0.99	372931	06/03/25	06/05/25	DIB
Method: EPA 8260B									
Prep Method: EPA 5030B									
3-Chloropropene	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
Freon 12	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
Chloromethane	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
Vinyl Chloride	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
Bromomethane	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
Chloroethane	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
Trichlorofluoromethane	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
Acetone	ND		ug/Kg	98	0.98	373211	06/06/25	06/06/25	ZST
Freon 113	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
1,1-Dichloroethene	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
Methylene Chloride	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
MTBE	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
trans-1,2-Dichloroethene	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
1,1-Dichloroethane	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
2-Butanone	ND		ug/Kg	98	0.98	373211	06/06/25	06/06/25	ZST
cis-1,2-Dichloroethene	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST

Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

Analysis Results for 534374

534374-015 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
2,2-Dichloropropane	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
Chloroform	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
Bromochloromethane	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
1,1,1-Trichloroethane	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
1,1-Dichloropropene	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
Carbon Tetrachloride	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
1,2-Dichloroethane	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
Benzene	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
Trichloroethene	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
1,2-Dichloropropane	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
Bromodichloromethane	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
Dibromomethane	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
4-Methyl-2-Pentanone	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
cis-1,3-Dichloropropene	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
Toluene	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
trans-1,3-Dichloropropene	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
1,1,2-Trichloroethane	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
1,3-Dichloropropane	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
Tetrachloroethene	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
Dibromochloromethane	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
1,2-Dibromoethane	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
Chlorobenzene	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
1,1,1,2-Tetrachloroethane	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
Ethylbenzene	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
m,p-Xylenes	ND		ug/Kg	9.8	0.98	373211	06/06/25	06/06/25	ZST
o-Xylene	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
Styrene	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
Bromoform	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
Isopropylbenzene	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
1,1,2,2-Tetrachloroethane	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
1,2,3-Trichloropropane	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
Propylbenzene	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
Bromobenzene	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
1,3,5-Trimethylbenzene	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
2-Chlorotoluene	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
4-Chlorotoluene	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
tert-Butylbenzene	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
1,2,4-Trimethylbenzene	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
sec-Butylbenzene	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
para-Isopropyl Toluene	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
1,3-Dichlorobenzene	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
1,4-Dichlorobenzene	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
n-Butylbenzene	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
1,2-Dichlorobenzene	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
1,2-Dibromo-3-Chloropropane	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
1,2,4-Trichlorobenzene	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
Hexachlorobutadiene	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
Naphthalene	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
1,2,3-Trichlorobenzene	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
cis-1,4-Dichloro-2-butene	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
trans-1,4-Dichloro-2-butene	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST
Xylene (total)	ND		ug/Kg	4.9	0.98	373211	06/06/25	06/06/25	ZST

Results for any subcontracted analyses are not included in this section.

Analysis Results for 534374

534374-015 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Surrogates				**Limits**					
Dibromofluoromethane	91%		%REC	70-145	0.98	373211	06/06/25	06/06/25	ZST
1,2-Dichloroethane-d4	89%		%REC	70-145	0.98	373211	06/06/25	06/06/25	ZST
Toluene-d8	101%		%REC	70-145	0.98	373211	06/06/25	06/06/25	ZST
Bromofluorobenzene	100%		%REC	70-145	0.98	373211	06/06/25	06/06/25	ZST
Method: EPA 8270C-SIM Prep Method: EPA 3546									
1-Methylnaphthalene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
2-Methylnaphthalene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Naphthalene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Acenaphthylene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Acenaphthene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Fluorene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Phenanthrene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Anthracene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Fluoranthene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Pyrene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Benzo(a)anthracene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Chrysene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Benzo(b)fluoranthene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Benzo(k)fluoranthene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Benzo(a)pyrene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Indeno(1,2,3-cd)pyrene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Dibenz(a,h)anthracene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Benzo(g,h,i)perylene	ND		ug/Kg	10	1	372914	06/03/25	06/04/25	ZFA
Surrogates				**Limits**					
Nitrobenzene-d5	61%		%REC	27-125	1	372914	06/03/25	06/04/25	ZFA
2-Fluorobiphenyl	62%		%REC	30-120	1	372914	06/03/25	06/04/25	ZFA
Terphenyl-d14	73%		%REC	33-155	1	372914	06/03/25	06/04/25	ZFA

* Value is outside QC limits
ND Not Detected

Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

Batch QC

Type: Blank	**Lab ID: QC1265554**	**Batch: 373797**
Matrix: WET Leachate	**Method: EPA 6010B**	**Prep Method: METHOD**

QC1265554 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Lead	ND		mg/L	0.15	06/12/25	06/12/25

Type: Lab Control Sample	**Lab ID: QC1265555**	**Batch: 373797**
Matrix: WET Leachate	**Method: EPA 6010B**	**Prep Method: METHOD**

QC1265555 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Lead	4.139	4.000	mg/L	103%		80-120

Type: Lab Control Sample Duplicate	**Lab ID: QC1265556**	**Batch: 373797**
Matrix: WET Leachate	**Method: EPA 6010B**	**Prep Method: METHOD**

QC1265556 Analyte	Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim
Lead	4.274	4.000	mg/L	107%		80-120	3	20

Type: Blank	**Lab ID: QC1262638**	**Batch: 372896**
Matrix: Soil	**Method: EPA 6010B**	**Prep Method: EPA 3050B**

QC1262638 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Antimony	ND		mg/Kg	3.0	06/03/25	06/03/25
Arsenic	ND		mg/Kg	1.0	06/03/25	06/03/25
Barium	ND		mg/Kg	1.0	06/03/25	06/03/25
Beryllium	ND		mg/Kg	0.50	06/03/25	06/03/25
Cadmium	ND		mg/Kg	0.50	06/03/25	06/03/25
Chromium	ND		mg/Kg	1.0	06/03/25	06/03/25
Cobalt	ND		mg/Kg	0.50	06/03/25	06/03/25
Copper	ND		mg/Kg	1.0	06/03/25	06/03/25
Lead	ND		mg/Kg	1.0	06/03/25	06/03/25
Molybdenum	ND		mg/Kg	1.0	06/03/25	06/03/25
Nickel	ND		mg/Kg	1.0	06/03/25	06/03/25
Selenium	ND		mg/Kg	3.0	06/03/25	06/03/25
Silver	ND		mg/Kg	0.50	06/03/25	06/03/25
Thallium	ND		mg/Kg	3.0	06/03/25	06/03/25
Vanadium	ND		mg/Kg	1.0	06/03/25	06/03/25
Zinc	ND		mg/Kg	5.0	06/03/25	06/03/25

ENTHALPY ANALYTICAL

Batch QC

Type:	**Lab Control Sample**	**Lab ID:**	**QC1262639**	**Batch:**	**372896**
Matrix:	**Soil**	**Method:**	**EPA 6010B**	**Prep Method:**	**EPA 3050B**

QC1262639 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Antimony	100.2	100.0	mg/Kg	100%		80-120
Arsenic	102.8	100.0	mg/Kg	103%		80-120
Barium	104.9	100.0	mg/Kg	105%		80-120
Beryllium	104.7	100.0	mg/Kg	105%		80-120
Cadmium	106.5	100.0	mg/Kg	106%		80-120
Chromium	101.1	100.0	mg/Kg	101%		80-120
Cobalt	106.9	100.0	mg/Kg	107%		80-120
Copper	98.05	100.0	mg/Kg	98%		80-120
Lead	107.6	100.0	mg/Kg	108%		80-120
Molybdenum	99.53	100.0	mg/Kg	100%		80-120
Nickel	106.7	100.0	mg/Kg	107%		80-120
Selenium	101.5	100.0	mg/Kg	102%		80-120
Silver	50.49	50.00	mg/Kg	101%		80-120
Thallium	105.1	100.0	mg/Kg	105%		80-120
Vanadium	101.3	100.0	mg/Kg	101%		80-120
Zinc	105.5	100.0	mg/Kg	105%		80-120

Type:	**Matrix Spike**	**Lab ID:**	**QC1262640**	**Batch:**	**372896**
Matrix (Source ID):	**Miscell. (534457-001)**	**Method:**	**EPA 6010B**	**Prep Method:**	**EPA 3050B**

QC1262640 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Antimony	158.4	57.16	100.0	mg/Kg	101%		75-125	1
Arsenic	110.2	5.891	100.0	mg/Kg	104%		75-125	1
Barium	188.1	68.72	100.0	mg/Kg	119%		75-125	1
Beryllium	109.9	ND	100.0	mg/Kg	110%		75-125	1
Cadmium	112.9	ND	100.0	mg/Kg	113%		75-125	1
Chromium	111.0	4.591	100.0	mg/Kg	106%		75-125	1
Cobalt	116.9	6.181	100.0	mg/Kg	111%		75-125	1
Copper	171.5	61.59	100.0	mg/Kg	110%		75-125	1
Lead	114.4	1.065	100.0	mg/Kg	113%		75-125	1
Molybdenum	109.0	4.641	100.0	mg/Kg	104%		75-125	1
Nickel	115.8	2.799	100.0	mg/Kg	113%		75-125	1
Selenium	102.8	ND	100.0	mg/Kg	103%		75-125	1
Silver	52.15	ND	50.00	mg/Kg	104%		75-125	1
Thallium	109.8	ND	100.0	mg/Kg	110%		75-125	1
Vanadium	107.5	0.6196	100.0	mg/Kg	107%		75-125	1
Zinc	1,705	1353	100.0	mg/Kg	352%	NM	75-125	1

ENTHALPY ANALYTICAL

Batch QC

Type:	Matrix Spike Duplicate	Lab ID:	QC1262641	Batch:	372896
Matrix (Source ID):	Miscell. (534457-001)	Method:	EPA 6010B	Prep Method:	EPA 3050B

QC1262641 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
Antimony	155.3	57.16	95.24	mg/Kg	103%		75-125	1	41	0.95
Arsenic	105.0	5.891	95.24	mg/Kg	104%		75-125	0	35	0.95
Barium	257.1	68.72	95.24	mg/Kg	198%	*	75-125	34*	20	0.95
Beryllium	104.3	ND	95.24	mg/Kg	110%		75-125	0	20	0.95
Cadmium	107.2	ND	95.24	mg/Kg	113%		75-125	0	20	0.95
Chromium	106.8	4.591	95.24	mg/Kg	107%		75-125	1	20	0.95
Cobalt	111.4	6.181	95.24	mg/Kg	110%		75-125	0	20	0.95
Copper	168.4	61.59	95.24	mg/Kg	112%		75-125	1	20	0.95
Lead	109.0	1.065	95.24	mg/Kg	113%		75-125	0	20	0.95
Molybdenum	107.3	4.641	95.24	mg/Kg	108%		75-125	3	20	0.95
Nickel	113.5	2.799	95.24	mg/Kg	116%		75-125	3	20	0.95
Selenium	97.87	ND	95.24	mg/Kg	103%		75-125	0	20	0.95
Silver	49.81	ND	47.62	mg/Kg	105%		75-125	0	20	0.95
Thallium	104.0	ND	95.24	mg/Kg	109%		75-125	1	20	0.95
Vanadium	102.1	0.6196	95.24	mg/Kg	107%		75-125	0	20	0.95
Zinc	1,528	1353	95.24	mg/Kg	184%	NM	75-125	11	20	0.95

Type:	Post Digest Spike	Lab ID:	QC1262642	Batch:	372896
Matrix (Source ID):	Miscell. (534457-001)	Method:	EPA 6010B	Prep Method:	EPA 3050B

QC1262642 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Antimony	149.2	57.16	100.0	mg/Kg	92%		75-125	1
Arsenic	94.41	5.891	100.0	mg/Kg	89%		75-125	1
Barium	160.0	68.72	100.0	mg/Kg	91%		75-125	1
Beryllium	92.43	ND	100.0	mg/Kg	92%		75-125	1
Cadmium	95.55	ND	100.0	mg/Kg	96%		75-125	1
Chromium	93.89	4.591	100.0	mg/Kg	89%		75-125	1
Cobalt	100.8	6.181	100.0	mg/Kg	95%		75-125	1
Copper	151.4	61.59	100.0	mg/Kg	90%		75-125	1
Lead	97.02	1.065	100.0	mg/Kg	96%		75-125	1
Molybdenum	94.20	4.641	100.0	mg/Kg	90%		75-125	1
Nickel	97.46	2.799	100.0	mg/Kg	95%		75-125	1
Selenium	88.93	ND	100.0	mg/Kg	89%		75-125	1
Silver	43.93	ND	50.00	mg/Kg	88%		75-125	1
Thallium	93.55	ND	100.0	mg/Kg	94%		75-125	1
Vanadium	90.70	0.6196	100.0	mg/Kg	90%		75-125	1
Zinc	1,436	1353	100.0	mg/Kg	84%	NM	75-125	1

ENTHALPY ANALYTICAL

Batch QC

Type:	Serial Dilution	Lab ID:	QC1262704	Batch:	372896
Matrix (Source ID):	Miscell. (534457-001)	Method:	EPA 6010B	Prep Method:	EPA 3050B

QC1262704 Analyte	Result	Source Sample Result	Units	Qual	RPD	RPD Lim	DF
Antimony	58.80	57.16	mg/Kg				5
Arsenic	6.586	5.891	mg/Kg				5
Barium	69.28	68.72	mg/Kg				5
Beryllium	ND	ND	mg/Kg				5
Cadmium	ND	ND	mg/Kg				5
Chromium	4.233	4.591	mg/Kg	J			5
Cobalt	6.138	6.181	mg/Kg				5
Copper	58.72	61.59	mg/Kg				5
Lead	ND	1.065	mg/Kg				5
Molybdenum	4.047	4.641	mg/Kg	J			5
Nickel	2.675	2.799	mg/Kg	J			5
Selenium	ND	ND	mg/Kg				5
Silver	ND	ND	mg/Kg				5
Thallium	ND	ND	mg/Kg				5
Vanadium	ND	0.6196	mg/Kg				5
Zinc	1,388	1353	mg/Kg				5

Type:	Blank	Lab ID:	QC1262672	Batch:	372906
Matrix:	Soil	Method:	EPA 7471A	Prep Method:	EPA 7471A

QC1262672 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Mercury	ND		mg/Kg	0.14	06/03/25	06/03/25

Type:	Lab Control Sample	Lab ID:	QC1262673	Batch:	372906
Matrix:	Soil	Method:	EPA 7471A	Prep Method:	EPA 7471A

QC1262673 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Mercury	0.8728	0.8333	mg/Kg	105%		80-120

Type:	Matrix Spike	Lab ID:	QC1262674	Batch:	372906
Matrix (Source ID):	Miscell. (534457-001)	Method:	EPA 7471A	Prep Method:	EPA 7471A

QC1262674 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Mercury	0.6682	ND	0.8475	mg/Kg	79%		75-125	1

Type:	Matrix Spike Duplicate	Lab ID:	QC1262675	Batch:	372906
Matrix (Source ID):	Miscell. (534457-001)	Method:	EPA 7471A	Prep Method:	EPA 7471A

QC1262675 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
Mercury	0.7766	ND	1.000	mg/Kg	78%		75-125	2	20	1.2

ENTHALPY ANALYTICAL

Batch QC

Type: Blank	Lab ID: QC1262758	Batch: 372931
Matrix: Soil	Method: EPA 8015M	Prep Method: EPA 3580M

QC1262758 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
GRO C8-C10	ND		mg/Kg	10	06/03/25	06/04/25
DRO C10-C28	ND		mg/Kg	10	06/03/25	06/04/25
ORO C28-C44	ND		mg/Kg	20	06/03/25	06/04/25
Jet Fuel A C10-C16	ND		mg/Kg	10	06/03/25	06/04/25
Surrogates				**Limits**		
n-Triacontane	114%		%REC	70-130	06/03/25	06/04/25

Type: Lab Control Sample	Lab ID: QC1262759	Batch: 372931
Matrix: Soil	Method: EPA 8015M	Prep Method: EPA 3580M

QC1262759 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Diesel C10-C28	209.1	250.0	mg/Kg	84%		76-122
Surrogates						
n-Triacontane	11.12	10.00	mg/Kg	111%		70-130

Type: Matrix Spike	Lab ID: QC1262760	Batch: 372931
Matrix (Source ID): Soil (534518-001)	Method: EPA 8015M	Prep Method: EPA 3580M

QC1262760 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Diesel C10-C28	230.7	ND	248.6	mg/Kg	93%		62-126	0.99
Surrogates								
n-Triacontane	11.75		9.945	mg/Kg	118%		70-130	0.99

Type: Matrix Spike Duplicate	Lab ID: QC1262761	Batch: 372931
Matrix (Source ID): Soil (534518-001)	Method: EPA 8015M	Prep Method: EPA 3580M

QC1262761 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
Diesel C10-C28	230.9	ND	249.4	mg/Kg	93%		62-126	0	35	1
Surrogates										
n-Triacontane	11.74		9.975	mg/Kg	118%		70-130			1

ENTHALPY ANALYTICAL

Batch QC

Type:	**Lab Control Sample**	**Lab ID:**	**QC1262549**	**Batch:**	**372860**
Matrix:	**Soil**	**Method:**	**EPA 8260B**	**Prep Method:**	**EPA 5030B**

QC1262549 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
1,1-Dichloroethene	54.18	50.00	ug/Kg	108%		70-131
MTBE	52.63	50.00	ug/Kg	105%		69-130
Benzene	55.49	50.00	ug/Kg	111%		70-130
Trichloroethene	52.37	50.00	ug/Kg	105%		70-130
Toluene	55.64	50.00	ug/Kg	111%		70-130
Chlorobenzene	54.95	50.00	ug/Kg	110%		70-130
Surrogates						
Dibromofluoromethane	48.39	50.00	ug/Kg	97%		70-130
1,2-Dichloroethane-d4	44.54	50.00	ug/Kg	89%		70-145
Toluene-d8	50.46	50.00	ug/Kg	101%		70-145
Bromofluorobenzene	50.10	50.00	ug/Kg	100%		70-145

Type:	**Lab Control Sample Duplicate**	**Lab ID:**	**QC1262550**	**Batch:**	**372860**
Matrix:	**Soil**	**Method:**	**EPA 8260B**	**Prep Method:**	**EPA 5030B**

QC1262550 Analyte	Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim
1,1-Dichloroethene	51.44	50.00	ug/Kg	103%		70-131	5	33
MTBE	52.12	50.00	ug/Kg	104%		69-130	1	30
Benzene	53.95	50.00	ug/Kg	108%		70-130	3	30
Trichloroethene	51.55	50.00	ug/Kg	103%		70-130	2	30
Toluene	53.55	50.00	ug/Kg	107%		70-130	4	30
Chlorobenzene	53.43	50.00	ug/Kg	107%		70-130	3	30
Surrogates								
Dibromofluoromethane	47.54	50.00	ug/Kg	95%		70-130		
1,2-Dichloroethane-d4	46.21	50.00	ug/Kg	92%		70-145		
Toluene-d8	50.47	50.00	ug/Kg	101%		70-145		
Bromofluorobenzene	49.81	50.00	ug/Kg	100%		70-145		

ENTHALPY ANALYTICAL

Batch QC

Type: Blank	Lab ID: QC1262553	Batch: 372860
Matrix: Soil	Method: EPA 8260B	Prep Method: EPA 5030B

QC1262553 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
3-Chloropropene	ND		ug/Kg	5.0	06/03/25	06/03/25
Freon 12	ND		ug/Kg	5.0	06/03/25	06/03/25
Chloromethane	ND		ug/Kg	5.0	06/03/25	06/03/25
Vinyl Chloride	ND		ug/Kg	5.0	06/03/25	06/03/25
Bromomethane	ND		ug/Kg	5.0	06/03/25	06/03/25
Chloroethane	ND		ug/Kg	5.0	06/03/25	06/03/25
Trichlorofluoromethane	ND		ug/Kg	5.0	06/03/25	06/03/25
Acetone	ND		ug/Kg	100	06/03/25	06/03/25
Freon 113	ND		ug/Kg	5.0	06/03/25	06/03/25
1,1-Dichloroethene	ND		ug/Kg	5.0	06/03/25	06/03/25
Methylene Chloride	ND		ug/Kg	5.0	06/03/25	06/03/25
MTBE	ND		ug/Kg	5.0	06/03/25	06/03/25
trans-1,2-Dichloroethene	ND		ug/Kg	5.0	06/03/25	06/03/25
1,1-Dichloroethane	ND		ug/Kg	5.0	06/03/25	06/03/25
2-Butanone	ND		ug/Kg	100	06/03/25	06/03/25
cis-1,2-Dichloroethene	ND		ug/Kg	5.0	06/03/25	06/03/25
2,2-Dichloropropane	ND		ug/Kg	5.0	06/03/25	06/03/25
Chloroform	ND		ug/Kg	5.0	06/03/25	06/03/25
Bromochloromethane	ND		ug/Kg	5.0	06/03/25	06/03/25
1,1,1-Trichloroethane	ND		ug/Kg	5.0	06/03/25	06/03/25
1,1-Dichloropropene	ND		ug/Kg	5.0	06/03/25	06/03/25
Carbon Tetrachloride	ND		ug/Kg	5.0	06/03/25	06/03/25
1,2-Dichloroethane	ND		ug/Kg	5.0	06/03/25	06/03/25
Benzene	ND		ug/Kg	5.0	06/03/25	06/03/25
Trichloroethene	ND		ug/Kg	5.0	06/03/25	06/03/25
1,2-Dichloropropane	ND		ug/Kg	5.0	06/03/25	06/03/25
Bromodichloromethane	ND		ug/Kg	5.0	06/03/25	06/03/25
Dibromomethane	ND		ug/Kg	5.0	06/03/25	06/03/25
4-Methyl-2-Pentanone	ND		ug/Kg	5.0	06/03/25	06/03/25
cis-1,3-Dichloropropene	ND		ug/Kg	5.0	06/03/25	06/03/25
Toluene	ND		ug/Kg	5.0	06/03/25	06/03/25
trans-1,3-Dichloropropene	ND		ug/Kg	5.0	06/03/25	06/03/25
1,1,2-Trichloroethane	ND		ug/Kg	5.0	06/03/25	06/03/25
1,3-Dichloropropane	ND		ug/Kg	5.0	06/03/25	06/03/25
Tetrachloroethene	ND		ug/Kg	5.0	06/03/25	06/03/25
Dibromochloromethane	ND		ug/Kg	5.0	06/03/25	06/03/25
1,2-Dibromoethane	ND		ug/Kg	5.0	06/03/25	06/03/25
Chlorobenzene	ND		ug/Kg	5.0	06/03/25	06/03/25
1,1,1,2-Tetrachloroethane	ND		ug/Kg	5.0	06/03/25	06/03/25
Ethylbenzene	ND		ug/Kg	5.0	06/03/25	06/03/25
m,p-Xylenes	ND		ug/Kg	10	06/03/25	06/03/25
o-Xylene	ND		ug/Kg	5.0	06/03/25	06/03/25
Styrene	ND		ug/Kg	5.0	06/03/25	06/03/25
Bromoform	ND		ug/Kg	5.0	06/03/25	06/03/25
Isopropylbenzene	ND		ug/Kg	5.0	06/03/25	06/03/25
1,1,2,2-Tetrachloroethane	ND		ug/Kg	5.0	06/03/25	06/03/25
1,2,3-Trichloropropane	ND		ug/Kg	5.0	06/03/25	06/03/25

ENTHALPY ANALYTICAL

Batch QC

QC1262553 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Propylbenzene	ND		ug/Kg	5.0	06/03/25	06/03/25
Bromobenzene	ND		ug/Kg	5.0	06/03/25	06/03/25
1,3,5-Trimethylbenzene	ND		ug/Kg	5.0	06/03/25	06/03/25
2-Chlorotoluene	ND		ug/Kg	5.0	06/03/25	06/03/25
4-Chlorotoluene	ND		ug/Kg	5.0	06/03/25	06/03/25
tert-Butylbenzene	ND		ug/Kg	5.0	06/03/25	06/03/25
1,2,4-Trimethylbenzene	ND		ug/Kg	5.0	06/03/25	06/03/25
sec-Butylbenzene	ND		ug/Kg	5.0	06/03/25	06/03/25
para-Isopropyl Toluene	ND		ug/Kg	5.0	06/03/25	06/03/25
1,3-Dichlorobenzene	ND		ug/Kg	5.0	06/03/25	06/03/25
1,4-Dichlorobenzene	ND		ug/Kg	5.0	06/03/25	06/03/25
n-Butylbenzene	ND		ug/Kg	5.0	06/03/25	06/03/25
1,2-Dichlorobenzene	ND		ug/Kg	5.0	06/03/25	06/03/25
1,2-Dibromo-3-Chloropropane	ND		ug/Kg	5.0	06/03/25	06/03/25
1,2,4-Trichlorobenzene	ND		ug/Kg	5.0	06/03/25	06/03/25
Hexachlorobutadiene	ND		ug/Kg	5.0	06/03/25	06/03/25
Naphthalene	ND		ug/Kg	5.0	06/03/25	06/03/25
1,2,3-Trichlorobenzene	ND		ug/Kg	5.0	06/03/25	06/03/25
cis-1,4-Dichloro-2-butene	ND		ug/Kg	5.0	06/03/25	06/03/25
trans-1,4-Dichloro-2-butene	ND		ug/Kg	5.0	06/03/25	06/03/25
Xylene (total)	ND		ug/Kg	5.0	06/03/25	06/03/25
Surrogates				**Limits**		
Dibromofluoromethane	92%		%REC	70-130	06/03/25	06/03/25
1,2-Dichloroethane-d4	89%		%REC	70-145	06/03/25	06/03/25
Toluene-d8	102%		%REC	70-145	06/03/25	06/03/25
Bromofluorobenzene	100%		%REC	70-145	06/03/25	06/03/25

Type:	**Matrix Spike**	**Lab ID:**	**QC1262753**	**Batch:**	**372860**
Matrix (Source ID):	**Soil (534374-001)**	**Method:**	**EPA 8260B**	**Prep Method:**	**EPA 5030B**

QC1262753 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
1,1-Dichloroethene	8.870	ND	19.96	ug/Kg	44%	*	70-141	1
MTBE	11.12	ND	19.96	ug/Kg	56%	*	59-130	1
Benzene	10.01	ND	19.96	ug/Kg	50%	*	70-130	1
Trichloroethene	8.135	ND	19.96	ug/Kg	41%	*	69-130	1
Toluene	8.854	ND	19.96	ug/Kg	44%	*	70-130	1
Chlorobenzene	7.973	ND	19.96	ug/Kg	40%	*	70-130	1
Surrogates								
Dibromofluoromethane	48.87		49.90	ug/Kg	98%		70-145	1
1,2-Dichloroethane-d4	47.94		49.90	ug/Kg	96%		70-145	1
Toluene-d8	50.07		49.90	ug/Kg	100%		70-145	1
Bromofluorobenzene	50.28		49.90	ug/Kg	101%		70-145	1

ENTHALPY ANALYTICAL

Batch QC

Type:	Matrix Spike Duplicate	Lab ID:	QC1262754	Batch:	372860
Matrix (Source ID):	Soil (534374-001)	Method:	EPA 8260B	Prep Method:	EPA 5030B

QC1262754 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
1,1-Dichloroethene	12.94	ND	20.00	ug/Kg	65%	*	70-141	37	43	1
MTBE	14.79	ND	20.00	ug/Kg	74%		59-130	28	30	1
Benzene	13.24	ND	20.00	ug/Kg	66%	*	70-130	28	30	1
Trichloroethene	11.59	ND	20.00	ug/Kg	58%	*	69-130	35*	30	1
Toluene	11.92	ND	20.00	ug/Kg	60%	*	70-130	29	30	1
Chlorobenzene	10.42	ND	20.00	ug/Kg	52%	*	70-130	26	30	1
Surrogates										
Dibromofluoromethane	48.76		50.00	ug/Kg	98%		70-145			1
1,2-Dichloroethane-d4	47.22		50.00	ug/Kg	94%		70-145			1
Toluene-d8	50.75		50.00	ug/Kg	102%		70-145			1
Bromofluorobenzene	51.52		50.00	ug/Kg	103%		70-145			1

Type:	Lab Control Sample	Lab ID:	QC1263327	Batch:	373124
Matrix:	Soil	Method:	EPA 8260B	Prep Method:	EPA 5030B

QC1263327 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
1,1-Dichloroethene	51.22	50.00	ug/Kg	102%		70-131
MTBE	51.64	50.00	ug/Kg	103%		69-130
Benzene	51.56	50.00	ug/Kg	103%		70-130
Trichloroethene	49.94	50.00	ug/Kg	100%		70-130
Toluene	50.94	50.00	ug/Kg	102%		70-130
Chlorobenzene	50.97	50.00	ug/Kg	102%		70-130
Surrogates						
Dibromofluoromethane	50.23	50.00	ug/Kg	100%		70-130
1,2-Dichloroethane-d4	45.09	50.00	ug/Kg	90%		70-145
Toluene-d8	49.06	50.00	ug/Kg	98%		70-145
Bromofluorobenzene	49.94	50.00	ug/Kg	100%		70-145

Type:	Lab Control Sample Duplicate	Lab ID:	QC1263328	Batch:	373124
Matrix:	Soil	Method:	EPA 8260B	Prep Method:	EPA 5030B

QC1263328 Analyte	Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim
1,1-Dichloroethene	41.22	50.00	ug/Kg	82%		70-131	22	33
MTBE	43.28	50.00	ug/Kg	87%		69-130	18	30
Benzene	40.46	50.00	ug/Kg	81%		70-130	24	30
Trichloroethene	39.52	50.00	ug/Kg	79%		70-130	23	30
Toluene	41.31	50.00	ug/Kg	83%		70-130	21	30
Chlorobenzene	41.85	50.00	ug/Kg	84%		70-130	20	30
Surrogates								
Dibromofluoromethane	50.43	50.00	ug/Kg	101%		70-130		
1,2-Dichloroethane-d4	44.22	50.00	ug/Kg	88%		70-145		
Toluene-d8	50.35	50.00	ug/Kg	101%		70-145		
Bromofluorobenzene	49.79	50.00	ug/Kg	100%		70-145		

ENTHALPY ANALYTICAL

Batch QC

Type: Blank	Lab ID: QC1263332	Batch: 373124
Matrix: Soil	Method: EPA 8260B	Prep Method: EPA 5030B

QC1263332 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
3-Chloropropene	ND		ug/Kg	5.0	06/05/25	06/05/25
Freon 12	ND		ug/Kg	5.0	06/05/25	06/05/25
Chloromethane	ND		ug/Kg	5.0	06/05/25	06/05/25
Vinyl Chloride	ND		ug/Kg	5.0	06/05/25	06/05/25
Bromomethane	ND		ug/Kg	5.0	06/05/25	06/05/25
Chloroethane	ND		ug/Kg	5.0	06/05/25	06/05/25
Trichlorofluoromethane	ND		ug/Kg	5.0	06/05/25	06/05/25
Acetone	ND		ug/Kg	100	06/05/25	06/05/25
Freon 113	ND		ug/Kg	5.0	06/05/25	06/05/25
1,1-Dichloroethene	ND		ug/Kg	5.0	06/05/25	06/05/25
Methylene Chloride	ND		ug/Kg	7.3	06/05/25	06/05/25
MTBE	ND		ug/Kg	5.0	06/05/25	06/05/25
trans-1,2-Dichloroethene	ND		ug/Kg	5.0	06/05/25	06/05/25
1,1-Dichloroethane	ND		ug/Kg	5.0	06/05/25	06/05/25
2-Butanone	ND		ug/Kg	100	06/05/25	06/05/25
cis-1,2-Dichloroethene	ND		ug/Kg	5.0	06/05/25	06/05/25
2,2-Dichloropropane	ND		ug/Kg	5.0	06/05/25	06/05/25
Chloroform	ND		ug/Kg	5.0	06/05/25	06/05/25
Bromochloromethane	ND		ug/Kg	5.0	06/05/25	06/05/25
1,1,1-Trichloroethane	ND		ug/Kg	5.0	06/05/25	06/05/25
1,1-Dichloropropene	ND		ug/Kg	5.0	06/05/25	06/05/25
Carbon Tetrachloride	ND		ug/Kg	5.0	06/05/25	06/05/25
1,2-Dichloroethane	ND		ug/Kg	5.0	06/05/25	06/05/25
Benzene	ND		ug/Kg	5.0	06/05/25	06/05/25
Trichloroethene	ND		ug/Kg	5.0	06/05/25	06/05/25
1,2-Dichloropropane	ND		ug/Kg	5.0	06/05/25	06/05/25
Bromodichloromethane	ND		ug/Kg	5.0	06/05/25	06/05/25
Dibromomethane	ND		ug/Kg	5.0	06/05/25	06/05/25
4-Methyl-2-Pentanone	ND		ug/Kg	5.0	06/05/25	06/05/25
cis-1,3-Dichloropropene	ND		ug/Kg	5.0	06/05/25	06/05/25
Toluene	ND		ug/Kg	5.0	06/05/25	06/05/25
trans-1,3-Dichloropropene	ND		ug/Kg	5.0	06/05/25	06/05/25
1,1,2-Trichloroethane	ND		ug/Kg	5.0	06/05/25	06/05/25
1,3-Dichloropropane	ND		ug/Kg	5.0	06/05/25	06/05/25
Tetrachloroethene	ND		ug/Kg	5.0	06/05/25	06/05/25
Dibromochloromethane	ND		ug/Kg	5.0	06/05/25	06/05/25
1,2-Dibromoethane	ND		ug/Kg	5.0	06/05/25	06/05/25
Chlorobenzene	ND		ug/Kg	5.0	06/05/25	06/05/25
1,1,1,2-Tetrachloroethane	ND		ug/Kg	5.0	06/05/25	06/05/25
Ethylbenzene	ND		ug/Kg	5.0	06/05/25	06/05/25
m,p-Xylenes	ND		ug/Kg	10	06/05/25	06/05/25
o-Xylene	ND		ug/Kg	5.0	06/05/25	06/05/25
Styrene	ND		ug/Kg	5.0	06/05/25	06/05/25
Bromoform	ND		ug/Kg	5.0	06/05/25	06/05/25
Isopropylbenzene	ND		ug/Kg	5.0	06/05/25	06/05/25
1,1,2,2-Tetrachloroethane	ND		ug/Kg	5.0	06/05/25	06/05/25
1,2,3-Trichloropropane	ND		ug/Kg	5.0	06/05/25	06/05/25

ENTHALPY ANALYTICAL

Batch QC

QC1263332 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Propylbenzene	ND		ug/Kg	5.0	06/05/25	06/05/25
Bromobenzene	ND		ug/Kg	5.0	06/05/25	06/05/25
1,3,5-Trimethylbenzene	ND		ug/Kg	5.0	06/05/25	06/05/25
2-Chlorotoluene	ND		ug/Kg	5.0	06/05/25	06/05/25
4-Chlorotoluene	ND		ug/Kg	5.0	06/05/25	06/05/25
tert-Butylbenzene	ND		ug/Kg	5.0	06/05/25	06/05/25
1,2,4-Trimethylbenzene	ND		ug/Kg	5.0	06/05/25	06/05/25
sec-Butylbenzene	ND		ug/Kg	5.0	06/05/25	06/05/25
para-Isopropyl Toluene	ND		ug/Kg	5.0	06/05/25	06/05/25
1,3-Dichlorobenzene	ND		ug/Kg	5.0	06/05/25	06/05/25
1,4-Dichlorobenzene	ND		ug/Kg	5.0	06/05/25	06/05/25
n-Butylbenzene	ND		ug/Kg	5.0	06/05/25	06/05/25
1,2-Dichlorobenzene	ND		ug/Kg	5.0	06/05/25	06/05/25
1,2-Dibromo-3-Chloropropane	ND		ug/Kg	5.0	06/05/25	06/05/25
1,2,4-Trichlorobenzene	ND		ug/Kg	5.0	06/05/25	06/05/25
Hexachlorobutadiene	ND		ug/Kg	5.0	06/05/25	06/05/25
Naphthalene	ND		ug/Kg	5.0	06/05/25	06/05/25
1,2,3-Trichlorobenzene	ND		ug/Kg	5.0	06/05/25	06/05/25
cis-1,4-Dichloro-2-butene	ND		ug/Kg	5.0	06/05/25	06/05/25
trans-1,4-Dichloro-2-butene	ND		ug/Kg	5.0	06/05/25	06/05/25
Xylene (total)	ND		ug/Kg	5.0	06/05/25	06/05/25
Surrogates				**Limits**		
Dibromofluoromethane	100%		%REC	70-130	06/05/25	06/05/25
1,2-Dichloroethane-d4	88%		%REC	70-145	06/05/25	06/05/25
Toluene-d8	97%		%REC	70-145	06/05/25	06/05/25
Bromofluorobenzene	98%		%REC	70-145	06/05/25	06/05/25

ENTHALPY ANALYTICAL

Batch QC

Type: Blank	Lab ID: QC1263333	Batch: 373124
Matrix: Soil	Method: EPA 8260B	Prep Method: EPA 5030B

QC1263333 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
3-Chloropropene	ND		ug/Kg	250	06/05/25	06/05/25
Freon 12	ND		ug/Kg	250	06/05/25	06/05/25
Chloromethane	ND		ug/Kg	250	06/05/25	06/05/25
Vinyl Chloride	ND		ug/Kg	250	06/05/25	06/05/25
Bromomethane	ND		ug/Kg	250	06/05/25	06/05/25
Chloroethane	ND		ug/Kg	250	06/05/25	06/05/25
Trichlorofluoromethane	ND		ug/Kg	250	06/05/25	06/05/25
Acetone	ND		ug/Kg	5,000	06/05/25	06/05/25
Freon 113	ND		ug/Kg	250	06/05/25	06/05/25
1,1-Dichloroethene	ND		ug/Kg	250	06/05/25	06/05/25
Methylene Chloride	ND		ug/Kg	710	06/05/25	06/05/25
MTBE	ND		ug/Kg	250	06/05/25	06/05/25
trans-1,2-Dichloroethene	ND		ug/Kg	250	06/05/25	06/05/25
1,1-Dichloroethane	ND		ug/Kg	250	06/05/25	06/05/25
2-Butanone	ND		ug/Kg	5,000	06/05/25	06/05/25
cis-1,2-Dichloroethene	ND		ug/Kg	250	06/05/25	06/05/25
2,2-Dichloropropane	ND		ug/Kg	250	06/05/25	06/05/25
Chloroform	ND		ug/Kg	250	06/05/25	06/05/25
Bromochloromethane	ND		ug/Kg	250	06/05/25	06/05/25
1,1,1-Trichloroethane	ND		ug/Kg	250	06/05/25	06/05/25
1,1-Dichloropropene	ND		ug/Kg	250	06/05/25	06/05/25
Carbon Tetrachloride	ND		ug/Kg	250	06/05/25	06/05/25
1,2-Dichloroethane	ND		ug/Kg	250	06/05/25	06/05/25
Benzene	ND		ug/Kg	250	06/05/25	06/05/25
Trichloroethene	ND		ug/Kg	250	06/05/25	06/05/25
1,2-Dichloropropane	ND		ug/Kg	250	06/05/25	06/05/25
Bromodichloromethane	ND		ug/Kg	250	06/05/25	06/05/25
Dibromomethane	ND		ug/Kg	250	06/05/25	06/05/25
4-Methyl-2-Pentanone	ND		ug/Kg	250	06/05/25	06/05/25
cis-1,3-Dichloropropene	ND		ug/Kg	250	06/05/25	06/05/25
Toluene	ND		ug/Kg	250	06/05/25	06/05/25
trans-1,3-Dichloropropene	ND		ug/Kg	250	06/05/25	06/05/25
1,1,2-Trichloroethane	ND		ug/Kg	250	06/05/25	06/05/25
1,3-Dichloropropane	ND		ug/Kg	250	06/05/25	06/05/25
Tetrachloroethene	ND		ug/Kg	250	06/05/25	06/05/25
Dibromochloromethane	ND		ug/Kg	250	06/05/25	06/05/25
1,2-Dibromoethane	ND		ug/Kg	250	06/05/25	06/05/25
Chlorobenzene	ND		ug/Kg	250	06/05/25	06/05/25
1,1,1,2-Tetrachloroethane	ND		ug/Kg	250	06/05/25	06/05/25
Ethylbenzene	ND		ug/Kg	250	06/05/25	06/05/25
m,p-Xylenes	ND		ug/Kg	500	06/05/25	06/05/25
o-Xylene	ND		ug/Kg	250	06/05/25	06/05/25
Styrene	ND		ug/Kg	250	06/05/25	06/05/25
Bromoform	ND		ug/Kg	250	06/05/25	06/05/25
Isopropylbenzene	ND		ug/Kg	250	06/05/25	06/05/25
1,1,2,2-Tetrachloroethane	ND		ug/Kg	250	06/05/25	06/05/25
1,2,3-Trichloropropane	ND		ug/Kg	250	06/05/25	06/05/25

ENTHALPY ANALYTICAL

Batch QC

QC1263333 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Propylbenzene	ND		ug/Kg	250	06/05/25	06/05/25
Bromobenzene	ND		ug/Kg	250	06/05/25	06/05/25
1,3,5-Trimethylbenzene	ND		ug/Kg	250	06/05/25	06/05/25
2-Chlorotoluene	ND		ug/Kg	250	06/05/25	06/05/25
4-Chlorotoluene	ND		ug/Kg	250	06/05/25	06/05/25
tert-Butylbenzene	ND		ug/Kg	250	06/05/25	06/05/25
1,2,4-Trimethylbenzene	ND		ug/Kg	250	06/05/25	06/05/25
sec-Butylbenzene	ND		ug/Kg	250	06/05/25	06/05/25
para-Isopropyl Toluene	ND		ug/Kg	250	06/05/25	06/05/25
1,3-Dichlorobenzene	ND		ug/Kg	250	06/05/25	06/05/25
1,4-Dichlorobenzene	ND		ug/Kg	250	06/05/25	06/05/25
n-Butylbenzene	ND		ug/Kg	250	06/05/25	06/05/25
1,2-Dichlorobenzene	ND		ug/Kg	250	06/05/25	06/05/25
1,2-Dibromo-3-Chloropropane	ND		ug/Kg	250	06/05/25	06/05/25
1,2,4-Trichlorobenzene	ND		ug/Kg	250	06/05/25	06/05/25
Hexachlorobutadiene	ND		ug/Kg	250	06/05/25	06/05/25
Naphthalene	ND		ug/Kg	250	06/05/25	06/05/25
1,2,3-Trichlorobenzene	ND		ug/Kg	250	06/05/25	06/05/25
cis-1,4-Dichloro-2-butene	ND		ug/Kg	250	06/05/25	06/05/25
trans-1,4-Dichloro-2-butene	ND		ug/Kg	250	06/05/25	06/05/25
Xylene (total)	ND		ug/Kg	250	06/05/25	06/05/25
Surrogates				**Limits**		
Dibromofluoromethane	100%		%REC	70-130	06/05/25	06/05/25
1,2-Dichloroethane-d4	86%		%REC	70-145	06/05/25	06/05/25
Toluene-d8	101%		%REC	70-145	06/05/25	06/05/25
Bromofluorobenzene	103%		%REC	70-145	06/05/25	06/05/25

Type:	**Matrix Spike**	**Lab ID:**	**QC1263355**	**Batch:**	**373124**
Matrix (Source ID):	**Soil (534371-006)**	**Method:**	**EPA 8260B**	**Prep Method:**	**EPA 5030B**

QC1263355 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
1,1-Dichloroethene	17.95	ND	20.58	ug/Kg	87%		70-141	1
MTBE	17.39	ND	20.58	ug/Kg	84%		59-130	1
Benzene	18.40	ND	20.58	ug/Kg	89%		70-130	1
Trichloroethene	18.21	ND	20.58	ug/Kg	88%		69-130	1
Toluene	17.81	ND	20.58	ug/Kg	87%		70-130	1
Chlorobenzene	18.30	ND	20.58	ug/Kg	89%		70-130	1
Surrogates								
Dibromofluoromethane	51.39		51.44	ug/Kg	100%		70-145	1
1,2-Dichloroethane-d4	49.93		51.44	ug/Kg	97%		70-145	1
Toluene-d8	50.80		51.44	ug/Kg	99%		70-145	1
Bromofluorobenzene	50.51		51.44	ug/Kg	98%		70-145	1

ENTHALPY ANALYTICAL

Batch QC

Type:	Matrix Spike Duplicate	Lab ID:	QC1263356	Batch:	373124
Matrix (Source ID):	Soil (534371-006)	Method:	EPA 8260B	Prep Method:	EPA 5030B

QC1263356 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
1,1-Dichloroethene	11.39	ND	20.00	ug/Kg	57%	*	70-141	42	43	1
MTBE	11.67	ND	20.00	ug/Kg	58%	*	59-130	37*	30	1
Benzene	11.73	ND	20.00	ug/Kg	59%	*	70-130	42*	30	1
Trichloroethene	11.02	ND	20.00	ug/Kg	55%	*	69-130	46*	30	1
Toluene	11.25	ND	20.00	ug/Kg	56%	*	70-130	42*	30	1
Chlorobenzene	11.20	ND	20.00	ug/Kg	56%	*	70-130	45*	30	1
Surrogates										
Dibromofluoromethane	50.17		50.00	ug/Kg	100%		70-145			1
1,2-Dichloroethane-d4	49.47		50.00	ug/Kg	99%		70-145			1
Toluene-d8	49.24		50.00	ug/Kg	98%		70-145			1
Bromofluorobenzene	50.57		50.00	ug/Kg	101%		70-145			1

Type:	Lab Control Sample	Lab ID:	QC1263593	Batch:	373211
Matrix:	Soil	Method:	EPA 8260B	Prep Method:	EPA 5030B

QC1263593 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
1,1-Dichloroethene	48.67	50.00	ug/Kg	97%		70-131
MTBE	49.61	50.00	ug/Kg	99%		69-130
Benzene	51.98	50.00	ug/Kg	104%		70-130
Trichloroethene	49.12	50.00	ug/Kg	98%		70-130
Toluene	51.88	50.00	ug/Kg	104%		70-130
Chlorobenzene	51.52	50.00	ug/Kg	103%		70-130
Surrogates						
Dibromofluoromethane	47.18	50.00	ug/Kg	94%		70-130
1,2-Dichloroethane-d4	43.72	50.00	ug/Kg	87%		70-145
Toluene-d8	50.98	50.00	ug/Kg	102%		70-145
Bromofluorobenzene	50.89	50.00	ug/Kg	102%		70-145

Type:	Lab Control Sample Duplicate	Lab ID:	QC1263594	Batch:	373211
Matrix:	Soil	Method:	EPA 8260B	Prep Method:	EPA 5030B

QC1263594 Analyte	Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim
1,1-Dichloroethene	48.17	50.00	ug/Kg	96%		70-131	1	33
MTBE	49.37	50.00	ug/Kg	99%		69-130	0	30
Benzene	51.11	50.00	ug/Kg	102%		70-130	2	30
Trichloroethene	47.65	50.00	ug/Kg	95%		70-130	3	30
Toluene	50.43	50.00	ug/Kg	101%		70-130	3	30
Chlorobenzene	49.95	50.00	ug/Kg	100%		70-130	3	30
Surrogates								
Dibromofluoromethane	48.38	50.00	ug/Kg	97%		70-130		
1,2-Dichloroethane-d4	44.48	50.00	ug/Kg	89%		70-145		
Toluene-d8	50.05	50.00	ug/Kg	100%		70-145		
Bromofluorobenzene	49.57	50.00	ug/Kg	99%		70-145		

ENTHALPY ANALYTICAL

Batch QC

Type:	Matrix Spike	Lab ID:	QC1263597	Batch:	373211
Matrix (Source ID):	Soil (533394-007)	Method:	EPA 8260B	Prep Method:	EPA 5030B

QC1263597 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
1,1-Dichloroethene	18.49	ND	20.62	ug/Kg	90%		70-141	1
MTBE	19.56	ND	20.62	ug/Kg	95%		59-130	1
Benzene	20.72	ND	20.62	ug/Kg	101%		70-130	1
Trichloroethene	18.69	ND	20.62	ug/Kg	91%		69-130	1
Toluene	21.58	1.538	20.62	ug/Kg	97%		70-130	1
Chlorobenzene	20.09	ND	20.62	ug/Kg	97%		70-130	1
Surrogates								
Dibromofluoromethane	49.05		51.55	ug/Kg	95%		70-145	1
1,2-Dichloroethane-d4	45.38		51.55	ug/Kg	88%		70-145	1
Toluene-d8	52.14		51.55	ug/Kg	101%		70-145	1
Bromofluorobenzene	51.11		51.55	ug/Kg	99%		70-145	1

Type:	Matrix Spike Duplicate	Lab ID:	QC1263598	Batch:	373211
Matrix (Source ID):	Soil (533394-007)	Method:	EPA 8260B	Prep Method:	EPA 5030B

QC1263598 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
1,1-Dichloroethene	19.55	ND	20.37	ug/Kg	96%		70-141	7	43	1
MTBE	20.45	ND	20.37	ug/Kg	100%		59-130	6	30	1
Benzene	21.51	ND	20.37	ug/Kg	106%		70-130	5	30	1
Trichloroethene	18.82	ND	20.37	ug/Kg	92%		69-130	2	30	1
Toluene	22.50	1.538	20.37	ug/Kg	103%		70-130	5	30	1
Chlorobenzene	20.95	ND	20.37	ug/Kg	103%		70-130	5	30	1
Surrogates										
Dibromofluoromethane	48.81		50.92	ug/Kg	96%		70-145			1
1,2-Dichloroethane-d4	45.93		50.92	ug/Kg	90%		70-145			1
Toluene-d8	50.50		50.92	ug/Kg	99%		70-145			1
Bromofluorobenzene	50.79		50.92	ug/Kg	100%		70-145			1

ENTHALPY ANALYTICAL

Batch QC

Type:	**Blank**	**Lab ID:**	**QC1263599**	**Batch:**	**373211**
Matrix:	**Soil**	**Method:**	**EPA 8260B**	**Prep Method:**	**EPA 5030B**

QC1263599 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
3-Chloropropene	ND		ug/Kg	250	06/05/25	06/05/25
Freon 12	ND		ug/Kg	250	06/05/25	06/05/25
Chloromethane	ND		ug/Kg	250	06/05/25	06/05/25
Vinyl Chloride	ND		ug/Kg	250	06/05/25	06/05/25
Bromomethane	ND		ug/Kg	250	06/05/25	06/05/25
Chloroethane	ND		ug/Kg	270	06/05/25	06/05/25
Trichlorofluoromethane	ND		ug/Kg	250	06/05/25	06/05/25
Acetone	ND		ug/Kg	5,000	06/05/25	06/05/25
Freon 113	ND		ug/Kg	250	06/05/25	06/05/25
1,1-Dichloroethene	ND		ug/Kg	250	06/05/25	06/05/25
Methylene Chloride	ND		ug/Kg	860	06/05/25	06/05/25
MTBE	ND		ug/Kg	250	06/05/25	06/05/25
trans-1,2-Dichloroethene	ND		ug/Kg	250	06/05/25	06/05/25
1,1-Dichloroethane	ND		ug/Kg	250	06/05/25	06/05/25
2-Butanone	ND		ug/Kg	5,000	06/05/25	06/05/25
cis-1,2-Dichloroethene	ND		ug/Kg	250	06/05/25	06/05/25
2,2-Dichloropropane	ND		ug/Kg	250	06/05/25	06/05/25
Chloroform	ND		ug/Kg	250	06/05/25	06/05/25
Bromochloromethane	ND		ug/Kg	250	06/05/25	06/05/25
1,1,1-Trichloroethane	ND		ug/Kg	250	06/05/25	06/05/25
1,1-Dichloropropene	ND		ug/Kg	250	06/05/25	06/05/25
Carbon Tetrachloride	ND		ug/Kg	250	06/05/25	06/05/25
1,2-Dichloroethane	ND		ug/Kg	250	06/05/25	06/05/25
Benzene	ND		ug/Kg	250	06/05/25	06/05/25
Trichloroethene	ND		ug/Kg	250	06/05/25	06/05/25
1,2-Dichloropropane	ND		ug/Kg	250	06/05/25	06/05/25
Bromodichloromethane	ND		ug/Kg	250	06/05/25	06/05/25
Dibromomethane	ND		ug/Kg	250	06/05/25	06/05/25
4-Methyl-2-Pentanone	ND		ug/Kg	250	06/05/25	06/05/25
cis-1,3-Dichloropropene	ND		ug/Kg	250	06/05/25	06/05/25
Toluene	ND		ug/Kg	250	06/05/25	06/05/25
trans-1,3-Dichloropropene	ND		ug/Kg	250	06/05/25	06/05/25
1,1,2-Trichloroethane	ND		ug/Kg	250	06/05/25	06/05/25
1,3-Dichloropropane	ND		ug/Kg	250	06/05/25	06/05/25
Tetrachloroethene	ND		ug/Kg	250	06/05/25	06/05/25
Dibromochloromethane	ND		ug/Kg	250	06/05/25	06/05/25
1,2-Dibromoethane	ND		ug/Kg	250	06/05/25	06/05/25
Chlorobenzene	ND		ug/Kg	250	06/05/25	06/05/25
1,1,1,2-Tetrachloroethane	ND		ug/Kg	250	06/05/25	06/05/25
Ethylbenzene	ND		ug/Kg	250	06/05/25	06/05/25
m,p-Xylenes	ND		ug/Kg	500	06/05/25	06/05/25
o-Xylene	ND		ug/Kg	250	06/05/25	06/05/25
Styrene	ND		ug/Kg	250	06/05/25	06/05/25
Bromoform	ND		ug/Kg	250	06/05/25	06/05/25
Isopropylbenzene	ND		ug/Kg	250	06/05/25	06/05/25
1,1,2,2-Tetrachloroethane	ND		ug/Kg	250	06/05/25	06/05/25
1,2,3-Trichloropropane	ND		ug/Kg	250	06/05/25	06/05/25

ENTHALPY ANALYTICAL

Batch QC

QC1263599 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Propylbenzene	ND		ug/Kg	250	06/05/25	06/05/25
Bromobenzene	ND		ug/Kg	250	06/05/25	06/05/25
1,3,5-Trimethylbenzene	ND		ug/Kg	250	06/05/25	06/05/25
2-Chlorotoluene	ND		ug/Kg	250	06/05/25	06/05/25
4-Chlorotoluene	ND		ug/Kg	250	06/05/25	06/05/25
tert-Butylbenzene	ND		ug/Kg	250	06/05/25	06/05/25
1,2,4-Trimethylbenzene	ND		ug/Kg	250	06/05/25	06/05/25
sec-Butylbenzene	ND		ug/Kg	250	06/05/25	06/05/25
para-Isopropyl Toluene	ND		ug/Kg	250	06/05/25	06/05/25
1,3-Dichlorobenzene	ND		ug/Kg	250	06/05/25	06/05/25
1,4-Dichlorobenzene	ND		ug/Kg	250	06/05/25	06/05/25
n-Butylbenzene	ND		ug/Kg	250	06/05/25	06/05/25
1,2-Dichlorobenzene	ND		ug/Kg	250	06/05/25	06/05/25
1,2-Dibromo-3-Chloropropane	ND		ug/Kg	250	06/05/25	06/05/25
1,2,4-Trichlorobenzene	ND		ug/Kg	250	06/05/25	06/05/25
Hexachlorobutadiene	ND		ug/Kg	250	06/05/25	06/05/25
Naphthalene	ND		ug/Kg	250	06/05/25	06/05/25
1,2,3-Trichlorobenzene	ND		ug/Kg	250	06/05/25	06/05/25
cis-1,4-Dichloro-2-butene	ND		ug/Kg	250	06/05/25	06/05/25
trans-1,4-Dichloro-2-butene	ND		ug/Kg	250	06/05/25	06/05/25
Xylene (total)	ND		ug/Kg	250	06/05/25	06/05/25
Surrogates				**Limits**		
Dibromofluoromethane	90%		%REC	70-130	06/05/25	06/05/25
1,2-Dichloroethane-d4	88%		%REC	70-145	06/05/25	06/05/25
Toluene-d8	101%		%REC	70-145	06/05/25	06/05/25
Bromofluorobenzene	98%		%REC	70-145	06/05/25	06/05/25

ENTHALPY ANALYTICAL

Batch QC

Type: Blank	Lab ID: QC1263600	Batch: 373211
Matrix: Soil	Method: EPA 8260B	Prep Method: EPA 5030B

QC1263600 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
3-Chloropropene	ND		ug/Kg	5.0	06/06/25	06/06/25
Freon 12	ND		ug/Kg	5.0	06/06/25	06/06/25
Chloromethane	ND		ug/Kg	5.0	06/06/25	06/06/25
Vinyl Chloride	ND		ug/Kg	5.0	06/06/25	06/06/25
Bromomethane	ND		ug/Kg	5.0	06/06/25	06/06/25
Chloroethane	ND		ug/Kg	5.0	06/06/25	06/06/25
Trichlorofluoromethane	ND		ug/Kg	5.0	06/06/25	06/06/25
Acetone	ND		ug/Kg	100	06/06/25	06/06/25
Freon 113	ND		ug/Kg	5.0	06/06/25	06/06/25
1,1-Dichloroethene	ND		ug/Kg	5.0	06/06/25	06/06/25
Methylene Chloride	ND		ug/Kg	5.0	06/06/25	06/06/25
MTBE	ND		ug/Kg	5.0	06/06/25	06/06/25
trans-1,2-Dichloroethene	ND		ug/Kg	5.0	06/06/25	06/06/25
1,1-Dichloroethane	ND		ug/Kg	5.0	06/06/25	06/06/25
2-Butanone	ND		ug/Kg	100	06/06/25	06/06/25
cis-1,2-Dichloroethene	ND		ug/Kg	5.0	06/06/25	06/06/25
2,2-Dichloropropane	ND		ug/Kg	5.0	06/06/25	06/06/25
Chloroform	ND		ug/Kg	5.0	06/06/25	06/06/25
Bromochloromethane	ND		ug/Kg	5.0	06/06/25	06/06/25
1,1,1-Trichloroethane	ND		ug/Kg	5.0	06/06/25	06/06/25
1,1-Dichloropropene	ND		ug/Kg	5.0	06/06/25	06/06/25
Carbon Tetrachloride	ND		ug/Kg	5.0	06/06/25	06/06/25
1,2-Dichloroethane	ND		ug/Kg	5.0	06/06/25	06/06/25
Benzene	ND		ug/Kg	5.0	06/06/25	06/06/25
Trichloroethene	ND		ug/Kg	5.0	06/06/25	06/06/25
1,2-Dichloropropane	ND		ug/Kg	5.0	06/06/25	06/06/25
Bromodichloromethane	ND		ug/Kg	5.0	06/06/25	06/06/25
Dibromomethane	ND		ug/Kg	5.0	06/06/25	06/06/25
4-Methyl-2-Pentanone	ND		ug/Kg	5.0	06/06/25	06/06/25
cis-1,3-Dichloropropene	ND		ug/Kg	5.0	06/06/25	06/06/25
Toluene	ND		ug/Kg	5.0	06/06/25	06/06/25
trans-1,3-Dichloropropene	ND		ug/Kg	5.0	06/06/25	06/06/25
1,1,2-Trichloroethane	ND		ug/Kg	5.0	06/06/25	06/06/25
1,3-Dichloropropane	ND		ug/Kg	5.0	06/06/25	06/06/25
Tetrachloroethene	ND		ug/Kg	5.0	06/06/25	06/06/25
Dibromochloromethane	ND		ug/Kg	5.0	06/06/25	06/06/25
1,2-Dibromoethane	ND		ug/Kg	5.0	06/06/25	06/06/25
Chlorobenzene	ND		ug/Kg	5.0	06/06/25	06/06/25
1,1,1,2-Tetrachloroethane	ND		ug/Kg	5.0	06/06/25	06/06/25
Ethylbenzene	ND		ug/Kg	5.0	06/06/25	06/06/25
m,p-Xylenes	ND		ug/Kg	10	06/06/25	06/06/25
o-Xylene	ND		ug/Kg	5.0	06/06/25	06/06/25
Styrene	ND		ug/Kg	5.0	06/06/25	06/06/25
Bromoform	ND		ug/Kg	5.0	06/06/25	06/06/25
Isopropylbenzene	ND		ug/Kg	5.0	06/06/25	06/06/25
1,1,2,2-Tetrachloroethane	ND		ug/Kg	5.0	06/06/25	06/06/25
1,2,3-Trichloropropane	ND		ug/Kg	5.0	06/06/25	06/06/25

ENTHALPY ANALYTICAL

Batch QC

QC1263600 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Propylbenzene	ND		ug/Kg	5.0	06/06/25	06/06/25
Bromobenzene	ND		ug/Kg	5.0	06/06/25	06/06/25
1,3,5-Trimethylbenzene	ND		ug/Kg	5.0	06/06/25	06/06/25
2-Chlorotoluene	ND		ug/Kg	5.0	06/06/25	06/06/25
4-Chlorotoluene	ND		ug/Kg	5.0	06/06/25	06/06/25
tert-Butylbenzene	ND		ug/Kg	5.0	06/06/25	06/06/25
1,2,4-Trimethylbenzene	ND		ug/Kg	5.0	06/06/25	06/06/25
sec-Butylbenzene	ND		ug/Kg	5.0	06/06/25	06/06/25
para-Isopropyl Toluene	ND		ug/Kg	5.0	06/06/25	06/06/25
1,3-Dichlorobenzene	ND		ug/Kg	5.0	06/06/25	06/06/25
1,4-Dichlorobenzene	ND		ug/Kg	5.0	06/06/25	06/06/25
n-Butylbenzene	ND		ug/Kg	5.0	06/06/25	06/06/25
1,2-Dichlorobenzene	ND		ug/Kg	5.0	06/06/25	06/06/25
1,2-Dibromo-3-Chloropropane	ND		ug/Kg	5.0	06/06/25	06/06/25
1,2,4-Trichlorobenzene	ND		ug/Kg	5.0	06/06/25	06/06/25
Hexachlorobutadiene	ND		ug/Kg	5.0	06/06/25	06/06/25
Naphthalene	ND		ug/Kg	5.0	06/06/25	06/06/25
1,2,3-Trichlorobenzene	ND		ug/Kg	5.0	06/06/25	06/06/25
cis-1,4-Dichloro-2-butene	ND		ug/Kg	5.0	06/06/25	06/06/25
trans-1,4-Dichloro-2-butene	ND		ug/Kg	5.0	06/06/25	06/06/25
Xylene (total)	ND		ug/Kg	5.0	06/06/25	06/06/25
Surrogates				**Limits**		
Dibromofluoromethane	92%		%REC	70-130	06/06/25	06/06/25
1,2-Dichloroethane-d4	86%		%REC	70-145	06/06/25	06/06/25
Toluene-d8	100%		%REC	70-145	06/06/25	06/06/25
Bromofluorobenzene	99%		%REC	70-145	06/06/25	06/06/25

ENTHALPY ANALYTICAL

Batch QC

Type:	**Blank**	**Lab ID:**	**QC1262708**	**Batch:**	**372914**
Matrix:	**Soil**	**Method:**	**EPA 8270C-SIM**	**Prep Method:**	**EPA 3546**

QC1262708 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
1-Methylnaphthalene	ND		ug/Kg	10	06/03/25	06/03/25
2-Methylnaphthalene	ND		ug/Kg	10	06/03/25	06/03/25
Naphthalene	ND		ug/Kg	10	06/03/25	06/03/25
Acenaphthylene	ND		ug/Kg	10	06/03/25	06/03/25
Acenaphthene	ND		ug/Kg	10	06/03/25	06/03/25
Fluorene	ND		ug/Kg	10	06/03/25	06/03/25
Phenanthrene	ND		ug/Kg	10	06/03/25	06/03/25
Anthracene	ND		ug/Kg	10	06/03/25	06/03/25
Fluoranthene	ND		ug/Kg	10	06/03/25	06/03/25
Pyrene	ND		ug/Kg	10	06/03/25	06/03/25
Benzo(a)anthracene	ND		ug/Kg	10	06/03/25	06/03/25
Chrysene	ND		ug/Kg	10	06/03/25	06/03/25
Benzo(b)fluoranthene	ND		ug/Kg	10	06/03/25	06/03/25
Benzo(k)fluoranthene	ND		ug/Kg	10	06/03/25	06/03/25
Benzo(a)pyrene	ND		ug/Kg	10	06/03/25	06/03/25
Indeno(1,2,3-cd)pyrene	ND		ug/Kg	10	06/03/25	06/03/25
Dibenz(a,h)anthracene	ND		ug/Kg	10	06/03/25	06/03/25
Benzo(g,h,i)perylene	ND		ug/Kg	10	06/03/25	06/03/25
Surrogates				**Limits**		
Nitrobenzene-d5	54%		%REC	27-125	06/03/25	06/03/25
2-Fluorobiphenyl	58%		%REC	30-120	06/03/25	06/03/25
Terphenyl-d14	76%		%REC	33-155	06/03/25	06/03/25

ENTHALPY ANALYTICAL

Batch QC

Type:	**Lab Control Sample**	**Lab ID:**	**QC1262709**	**Batch:**	**372914**
Matrix:	**Soil**	**Method:**	**EPA 8270C-SIM**	**Prep Method:**	**EPA 3546**

QC1262709 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
1-Methylnaphthalene	163.4	202.0	ug/Kg	81%		28-130
2-Methylnaphthalene	165.2	202.0	ug/Kg	82%		33-130
Naphthalene	164.4	202.0	ug/Kg	81%		25-130
Acenaphthylene	162.7	202.0	ug/Kg	81%		28-130
Acenaphthene	162.7	202.0	ug/Kg	81%		32-130
Fluorene	165.2	202.0	ug/Kg	82%		35-130
Phenanthrene	167.7	202.0	ug/Kg	83%		35-132
Anthracene	168.6	202.0	ug/Kg	83%		34-136
Fluoranthene	169.4	202.0	ug/Kg	84%		34-139
Pyrene	170.7	202.0	ug/Kg	85%		35-134
Benzo(a)anthracene	166.5	202.0	ug/Kg	82%		30-132
Chrysene	165.2	202.0	ug/Kg	82%		29-130
Benzo(b)fluoranthene	164.5	202.0	ug/Kg	81%		32-137
Benzo(k)fluoranthene	168.1	202.0	ug/Kg	83%		32-130
Benzo(a)pyrene	164.6	202.0	ug/Kg	82%		10-138
Indeno(1,2,3-cd)pyrene	166.9	202.0	ug/Kg	83%		34-132
Dibenz(a,h)anthracene	167.4	202.0	ug/Kg	83%		32-130
Benzo(g,h,i)perylene	170.5	202.0	ug/Kg	84%		27-130
Surrogates						
Nitrobenzene-d5	137.8	202.0	ug/Kg	68%		27-125
2-Fluorobiphenyl	151.9	202.0	ug/Kg	75%		30-120
Terphenyl-d14	174.7	202.0	ug/Kg	86%		33-155

ENTHALPY ANALYTICAL

Batch QC

Type:	**Matrix Spike**	**Lab ID:**	**QC1262710**	**Batch:**	**372914**
Matrix (Source ID):	**Soil (534374-001)**	**Method:**	**EPA 8270C-SIM**	**Prep Method:**	**EPA 3546**

QC1262710 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
1-Methylnaphthalene	153.3	ND	202.0	ug/Kg	76%		25-130	1
2-Methylnaphthalene	157.6	ND	202.0	ug/Kg	78%		32-133	1
Naphthalene	154.0	ND	202.0	ug/Kg	76%		33-130	1
Acenaphthylene	155.6	ND	202.0	ug/Kg	77%		14-157	1
Acenaphthene	154.2	ND	202.0	ug/Kg	76%		28-134	1
Fluorene	154.6	ND	202.0	ug/Kg	77%		27-140	1
Phenanthrene	174.3	14.21	202.0	ug/Kg	79%		29-147	1
Anthracene	161.2	ND	202.0	ug/Kg	80%		24-156	1
Fluoranthene	237.0	57.16	202.0	ug/Kg	89%		28-160	1
Pyrene	240.3	62.44	202.0	ug/Kg	88%		26-153	1
Benzo(a)anthracene	183.9	21.29	202.0	ug/Kg	81%		26-174	1
Chrysene	210.1	45.32	202.0	ug/Kg	82%		40-139	1
Benzo(b)fluoranthene	232.3	73.27	202.0	ug/Kg	79%		36-164	1
Benzo(k)fluoranthene	183.5	27.19	202.0	ug/Kg	77%		36-161	1
Benzo(a)pyrene	190.7	41.03	202.0	ug/Kg	74%		18-173	1
Indeno(1,2,3-cd)pyrene	191.1	44.28	202.0	ug/Kg	73%		26-154	1
Dibenz(a,h)anthracene	142.4	8.088	202.0	ug/Kg	66%		38-132	1
Benzo(g,h,i)perylene	194.5	51.71	202.0	ug/Kg	71%		36-130	1
Surrogates								
Nitrobenzene-d5	135.5		202.0	ug/Kg	67%		27-125	1
2-Fluorobiphenyl	139.0		202.0	ug/Kg	69%		30-120	1
Terphenyl-d14	161.6		202.0	ug/Kg	80%		33-155	1

ENTHALPY ANALYTICAL

Batch QC

Type:	Matrix Spike Duplicate	Lab ID:	QC1262711	Batch:	372914
Matrix (Source ID):	Soil (534374-001)	Method:	EPA 8270C-SIM	Prep Method:	EPA 3546

QC1262711 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
1-Methylnaphthalene	135.6	ND	199.0	ug/Kg	68%		25-130	11	35	1
2-Methylnaphthalene	139.2	ND	199.0	ug/Kg	70%		32-133	11	35	1
Naphthalene	132.0	ND	199.0	ug/Kg	66%		33-130	14	35	1
Acenaphthylene	141.0	ND	199.0	ug/Kg	71%		14-157	8	35	1
Acenaphthene	139.4	ND	199.0	ug/Kg	70%		28-134	9	35	1
Fluorene	139.3	ND	199.0	ug/Kg	70%		27-140	9	35	1
Phenanthrene	162.4	14.21	199.0	ug/Kg	74%		29-147	6	35	1
Anthracene	152.2	ND	199.0	ug/Kg	77%		24-156	4	35	1
Fluoranthene	225.1	57.16	199.0	ug/Kg	84%		28-160	4	35	1
Pyrene	228.3	62.44	199.0	ug/Kg	83%		26-153	4	35	1
Benzo(a)anthracene	178.4	21.29	199.0	ug/Kg	79%		26-174	2	35	1
Chrysene	204.1	45.32	199.0	ug/Kg	80%		40-139	2	35	1
Benzo(b)fluoranthene	233.4	73.27	199.0	ug/Kg	80%		36-164	2	35	1
Benzo(k)fluoranthene	172.0	27.19	199.0	ug/Kg	73%		36-161	5	35	1
Benzo(a)pyrene	185.0	41.03	199.0	ug/Kg	72%		18-173	2	35	1
Indeno(1,2,3-cd)pyrene	182.0	44.28	199.0	ug/Kg	69%		26-154	4	35	1
Dibenz(a,h)anthracene	135.0	8.088	199.0	ug/Kg	64%		38-132	4	35	1
Benzo(g,h,i)perylene	184.9	51.71	199.0	ug/Kg	67%		36-130	4	35	1
Surrogates										
Nitrobenzene-d5	115.5		199.0	ug/Kg	58%		27-125			1
2-Fluorobiphenyl	123.8		199.0	ug/Kg	62%		30-120			1
Terphenyl-d14	153.4		199.0	ug/Kg	77%		33-155			1

* Value is outside QC limits
J Estimated value
ND Not Detected
NM Not Meaningful

Ninyo & Moore

A SOCOTEC COMPANY

5710 Ruffin Road | San Diego, California 92123 | p. 858.576.1000

ninyoandmoore.com

Appendix H

Noise Technical Report

HELIX Environmental Planning

San Diego Miramar College Aviation Instructional Center at Montgomery-Gibbs Executive Airport

Noise Technical Report

October 2026 | 01737.00004.005

Prepared for:

San Diego Community College District
3375 Camino del Rio South, Suite 310
San Diego, CA 92108

Prepared by:

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

This page intentionally left blank

TABLE OF CONTENTS

Section **Page**

EXECUTIVE SUMMARY ES-1

1.0 INTRODUCTION 1

1.1 Project Location and Setting 1
1.2 Project Description 1
1.3 Noise Descriptors and Terminology 2
1.3.1 Noise Descriptors 2
1.3.2 Noise Terminology 3
1.4 Ground-Borne Vibration Descriptors and Terminology 4
1.5 Noise and Vibration-Sensitive Land Uses 4

2.0 ENVIRONMENTAL SETTING 5

2.1 Surrounding Land Uses 5
2.1.1 Montgomery-Gibbs Executive Airport 5
2.1.2 Noise Survey 5

3.0 REGULATORY FRAMEWORK 6

3.1 Federal 6
3.1.1 Federal Transit Administration 6
3.2 State 6
3.2.1 California Noise Control Act 6
3.3 Regional 7
3.3.1 Airport Land Use Compatibility Plans 7
3.4 City of San Diego 7
3.4.1 City of San Diego General Plan, Noise Element 7
3.4.2 City of San Diego Municipal Code 9
3.4.3 Montgomery-Gibbs Airport Master Plan 10
3.5 San Diego Community College District 10
3.5.1 District Design Guidelines and Standards Manual 10

4.0 METHODOLOGY, ASSUMPTIONS, AND THRESHOLDS OF SIGNIFICANCE 11

4.1 Methodology 11
4.1.1 Noise Modeling Software 11
4.2 Assumptions 12
4.2.1 Construction Equipment 12
4.2.2 Vehicular Traffic Noise 12
4.2.3 Stationary Source Noises 13
4.3 Guidelines for the Determination of Significance and Conditions of Approval 14
4.3.1 Increase in Ambient Noise Levels 14
4.3.2 Ground-Borne Vibration 14
4.3.3 Airport Noise Exposure 14
4.3.4 Land Use Compatibility 15

TABLE OF CONTENTS (cont.)

Section		Page
5.0	IMPACT ANALYSIS	15
5.1	Issue 1: Increase in Ambient Noise Levels	15
5.1.1	Temporary Noise Increase	15
5.1.2	Operational Noise	16
5.2	Issue 2: Excessive Vibration	18
5.2.1	Construction Vibration	18
5.2.2	Operational Vibration	19
5.3	Issue 3: Airport Noise Exposure	19
5.3.1	Airport Noise	19
5.4	Issue 4: Land Use Compatibility	20
5.4.1	Noise Levels at Exterior Use Areas	20
5.4.2	Interior Noise Levels	21
6.0	LIST OF PREPARERS	22
7.0	REFERENCES	23

LIST OF APPENDICES

A	Noise Survey

LIST OF FIGURES

No.	Title	Follows Page
1	Regional Location	2
2	Aerial Photograph	2
3	Site Plan	2
4	Noise Measurement Locations	6

LIST OF TABLES

No.	Title	Page
1	Noise Measurement Results	5
2	City of San Diego Land Use Noise Compatibility Guidelines	7
3	City of San Diego Exterior Noise Limits	9
4	Roadway Segment Volumes	12
5	Off-Site Traffic Noise Levels	18

ACRONYMS AND ABBREVIATIONS

µPa	micro-Pascals
ADA	Americans with Disabilities Act
ADT	average daily trips
AIA	Airport Influence Area
AIC	Aviation Instructional Center
Airport	Montgomery-Gibbs Executive Airport
ALUCP	Airport Land Use Compatibility Plan
ANSI	American National Standards Institute
Caltrans	California Department of Transportation
CEQA	California Environmental Quality Act
City	City of San Diego
CNEL	Community Noise Equivalent Level
County	County of San Diego
dB	decibel
dBA	A-weighted decibel
District	San Diego Community College District
EV	electric vehicle
FAA	Federal Aviation Administration
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
HOV	high occupancy vehicle
HVAC	heating, ventilation, and air conditioning
Hz	hertz
I-	Interstate
in	inch
in/sec	inches per second
KPI	Key Performance Indicator
L_{DN}	Day Night sound level
L_{EQ}	time-averaged noise level
LLG	Linscott, Law, and Greenspan Engineers
L_{MAX}	maximum sound level
L_V	vibration velocity level

ACRONYMS AND ABBREVIATIONS (cont.)

mph	miles per hour
MYF	Montgomery-Gibbs Executive Airport
NSLU	noise-sensitive land use
OSHA	Occupational Safety and Health Administration
PPV	peak particle velocity
project	San Diego Miramar College Aviation Instructional Center at Montgomery-Gibbs Executive Airport Project; Miramar College AIC Project
RCNM	Roadway Construction Noise Model
SANDAG	San Diego Association of Governments
SDCRAA	San Diego County Regional Airport Authority
SDG&E	San Diego Gas and Electric
sec	second
SF	square foot/feet
SPL	sound pressure level
SR	State Route
STC	Sound Transmission Class
TNM	Traffic Noise Model
USDOT	U.S. Department of Transportation
VdB	vibration decibels

EXECUTIVE SUMMARY

This report presents an assessment of potential construction and operational noise and vibration impacts resulting from the construction and operation of the proposed San Diego Community College District (District) San Diego Miramar College Aviation Instructional Center at Montgomery-Gibbs Executive Airport Project (Miramar College AIC Project; project). The project site is located at 3873 Kearny Villa Road within the southwest quadrant of the Montgomery-Gibbs Executive Airport, which is owned and operated by the City of San Diego (City) Airports Division as a general aviation airport. The District currently leases the project site from the City to operate an existing educational aviation facility. The project would demolish an existing historic hangar building and replace it with an expanded and modernized instructional facility.

The project's construction equipment would not result in noise levels exceeding the City's threshold of 75 A-weighted decibels (dBA).

Project operational noise from building heating, ventilation, and air conditioning (HVAC) systems is not anticipated to exceed the City standard for nearby land uses. The project proposes the continued use of a test engine which would be located on an outdoor pad east of the hangar building. The use of this test engine would generate noise levels that exceed City thresholds. Mitigation Measure NOI-1 requires specific time limits and barriers to be implemented to ensure noise levels are reduced to acceptable levels. The addition of project-related traffic to City streets would not result in a substantial permanent increase in ambient traffic noise.

Temporary vibrations from project construction and demolition may exceed building damage criteria at the closest historic hangar buildings. Mitigation Measure NOI-2 would be required to reduce potential vibrations from construction equipment. Long-term operation of the project would not be a source of substantial ground-borne vibrations.

The project would be located in an area that exceeds the City's land use compatibility standards for classroom spaces. Mitigation Measure NOI-3 would be required to ensure interior noise levels are reduced to meet City standards through the implementation of an exterior-to-interior noise analysis.

This page intentionally left blank

1.0 INTRODUCTION

This report assesses the potential noise and vibration impacts that would be associated with the proposed San Diego Community College District (District) San Diego Miramar College Aviation Instructional Center at Montgomery-Gibbs Executive Airport Project (Miramar College AIC Project; project). The analysis includes a description of existing conditions in the project vicinity, an overview of relevant regulations, and an assessment of potential impacts associated with project construction 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 AND SETTING

The project site is located at 3873 Kearny Villa Road within the central portion of the City of San Diego (City), San Diego County (County), California. Refer to Figure 1, *Regional Location*. The proposed project site is generally located north of Aero Drive, south and east of State Route (SR) 163 and Kearny Villa Road, and west of Interstate (I-) 15 and Ruffin Road. The project is proposed on a 1.06-acre site that is currently comprised of the 6,300-square-foot (SF) Miramar Hangar, surface parking, and gravel and paved areas used for aircraft and engine testing. Refer to Figure 2, *Aerial Photograph*.

The project site is located in the southwest quadrant of the Montgomery-Gibbs Executive Airport (also referred to as the Airport or by its Federal Aviation Administration [FAA] identifier "MYF"), which is owned and operated by the City Airports Division as a general aviation airport. MYF is located north of Aero Drive, east of SR 163, south of Balboa Avenue, and west of Ruffin Road. The project site is additionally located within the community of Kearny Mesa, which is approximately 4,400 acres and is bound by SR 52 to the north, I-805 to the west, I-15 to the east, and properties lying to the south of Aero Drive and along the western edge of I-15 to the south. MYF occupies over 500 acres of the Kearny Mesa community.

1.2 PROJECT DESCRIPTION

The project would involve the demolition of the existing 6,300-SF Miramar Hangar and construction of an expanded and modernized instructional facility, referred to as the Miramar College AIC, and supporting facilities. The upgraded instructional facility would support the programs offered within the Aviation Operations Program at Miramar College, including the specific programs of Aircraft Maintenance, Pilot Training, and Air Traffic Control. The proposed Miramar College AIC would be approximately 18,000 SF and would be located in the same general location as the existing hangar in the northwestern portion of the project site. To accommodate this upgraded instructional facility and the needs of the Aviation Operations Program, the project would additionally involve the expansion of the existing 0.42-acre lease area to 1.06 acres.

The expanded instructional facility would allow for an additional 15 class sessions per week to occur (three class sessions per day), for a total of 28 class sessions per week. Each class session would contain an average of 23 students. The engine testing activity, which currently occurs on the eastern portion of the project site once a week under existing conditions (Figure 3, *Site Plan*), would occur twice a week in the same location to account for these additional class sessions. Class sessions would occur between 8:00 a.m. and 10:00 p.m. Monday through Friday, with the potential for special Saturday class sessions to occur.

The new Miramar College AIC would be two stories with a maximum height of 32 feet. Level 1 would include a lobby, a maintenance/hangar bay, two classrooms, offices, a custodial room, restrooms, and utility and storage rooms. In addition, trash enclosures, an air compressor, and a hazardous waste collection area would be located along the northern perimeter of level 1. Level 2 would include one classroom, four pilot debrief rooms, air traffic control tower and *en route* training facilities, a conference room, break room, and restrooms. Refer to Figure 3.

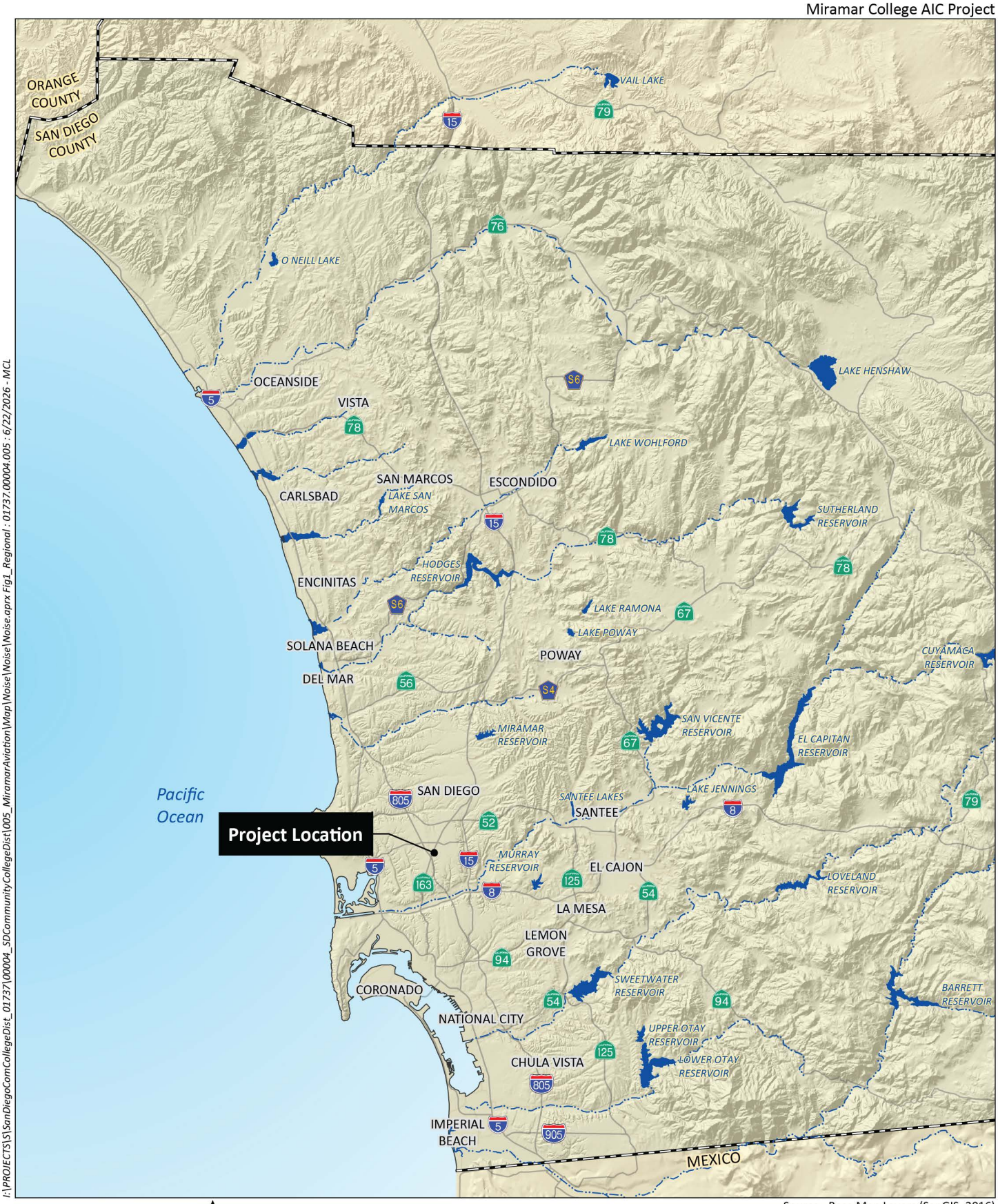
The project would additionally include repaving of the existing open-air storage area and engine testing pad on the eastern portion of the project site. Access would continue to be provided by the existing MYF Gate 4 east of Kearny Villa Road, which would connect to a paved parking area located southeast of the new hangar. This parking area would provide approximately 70 parking spaces for students and faculty and would include nine electric vehicle (EV)-ready spaces and seven EV charging spaces. An additional nine parking spaces would be provided along the southern perimeter of the proposed Miramar College AIC which would include four Americans with Disabilities Act (ADA) accessible spaces and one EV charging station. Bicycle racks and secure bicycle storage lockers would be provided near the southeastern area of the Miramar College AIC. Additional site improvements would include the addition of accessible paths of travel within the lease area. The fence located along the western boundary of the project site would remain in its existing location and a new gate would be installed where the existing gate is located.

The project would include the construction of connections to existing City-owned utility lines located in Kearny Villa Road to the west of the project site, including water and fire water. The project would involve the installation of a new sewer lateral to connect to an existing on-site sewer main located west of the proposed Miramar College AIC. In addition, the project would involve coordination with San Diego Gas and Electric (SDG&E) for new underground electric power lines that would connect to a new SDG&E transformer, which would be installed on the western side of the proposed building. The project would not involve natural gas connections. The project would include the installation of a storm drain along the perimeter of the proposed building which would connect to a modular wetland system and underground vault located near the southwestern corner of the building. In addition, a storm drain would be constructed along the central portion of the parking lot which would connect to a modular wetland system and underground vault located in the western portion of the parking lot. Consistent with the District Sustainability Levels framework, the proposed project would be designed to achieve the level of Certified/Coast Live Oak (Sustainable Performance) and would include high-efficiency low-flow plumbing fixtures and water-conserving appliances.

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, or L_{MAX} to indicate the maximum sound level. 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



I:\PROJECTS\S\SanDiegoComCollegeDist_01737\00004_SDCommunityCollegeDist\005_MiramarAviation\Map\Noise\Noise\Noise.aprx Fig1_Regional : 01737.00004.005 : 6/22/2026 - MCL

0 8 Miles

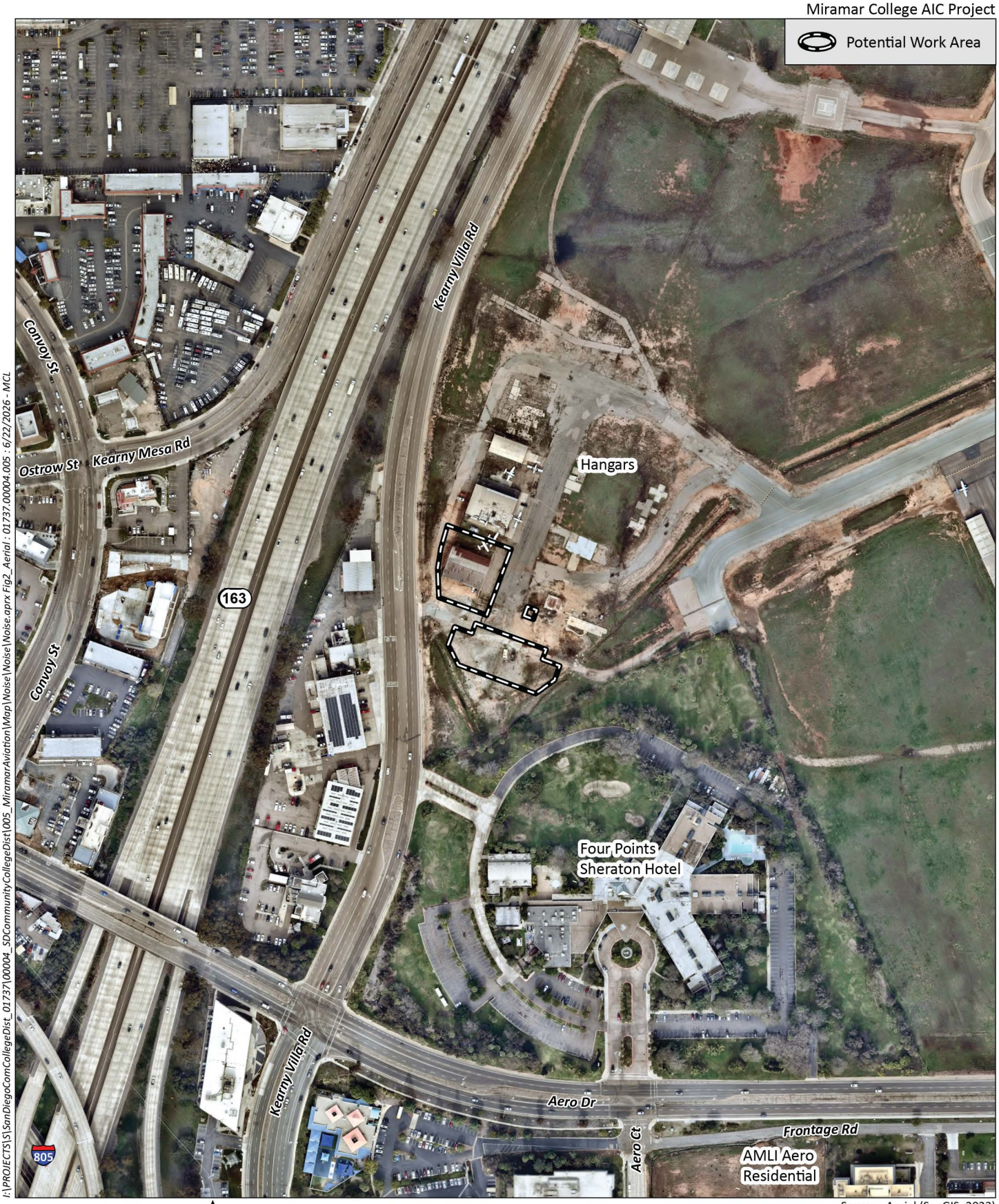
Source: Base Map Layers (SanGIS, 2016)

HELIX Environmental Planning

Regional Location

Figure 1

Miramar College AIC Project



I:\PROJECTS\S\SanDiegoComCollegeDist_01737\00004_SDCommunityCollegeDist\005_MiramarAviation\Map\Noise\Noise\Noise.aprx Fig2_Aerial : 01737.00004.005 : 6/22/2026 - MCL

0 300 Feet

Source: Aerial (SanGIS, 2023)

HELIX Environmental Planning

Aerial Photograph

Figure 2

Miramar College AIC Project



I:\PROJECTS\S\SanDiegoComCollegeDist_01737\00004_SDCommunityCollegeDist\005_MiramarAviation\Map\Noise\Noise\Noise.aprx Fig3_SitePlan : 01737.00004.005 : 6/22/2026 - MCL

0 100 Feet

Source: Aerial (SanGIS, 2023)

HELIX Environmental Planning

Proposed Site Plan

Figure 3

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 vibration decibels (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 nearest NSLU to the project site within the Airport property is the Four Points by Sheraton hotel to the south of the project, along the north side of Aero Drive. The hotel property is adjacent to the project site, with the hotel building approximately 675 feet southeast of the existing hangar building.

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 structural integrity of specific buildings, particularly old or historic structures, has the potential to be vibration-sensitive due to their age, method of construction, or other factors. 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 the project site that are subject to annoyance from vibration include the hotel described above. The two existing adjacent hangars to the north are considered historic resources (City 2025). As such, due to their age, these hangars are considered vibration-sensitive.

2.0 ENVIRONMENTAL SETTING

2.1 SURROUNDING LAND USES

The project site is surrounded by commercial and institutional uses. The nearest residential use is a multi-family residential development called AMLI Aero. The development is located at the southeast corner of Aero Drive and Aero Court, approximately 1,300 feet south of the project. As described in Section 1.5, a hotel use is located southeast of the project, on the north side of Aero Drive, within the Airport property. A San Diego Fire Rescue Station is located southwest of the project across Kearny Villa Road and commercial uses are located across SR 163 to the west. Uses surrounding MYF include commercial, industrial, and residential uses.

The existing noise environment is dominated by traffic noise from the nearby SR 163 freeway and noise from aircraft operations associated with MYF, such as takeoffs, landings, and taxiing and idling aircraft. MYF has three runways, the closest of which, Runway 05/23, is approximately 1,300 feet northeast of the project. There is also noise generated from vehicles along the adjacent Kearny Villa Road.

2.1.1 Montgomery-Gibbs Executive Airport

The project site is located within the MYF property and is therefore within its Airport Influence Area (AIA). The project is located outside of the MYF noise contours, as shown in the Airport Land Use Compatibility Plan (ALUCP; San Diego County Regional Airport Authority [SDCRAA] 2010). MYF has voluntarily enacted noise abatement procedures that are designed to reduce the amount of noise pollution in the surrounding community. These procedures include a combination of restricting departure times, positioning the use of louder aircraft on runways further from noise-sensitive land uses, and modification of flight operations during departures, ascents, landings, and descents.

2.1.2 Noise Survey

Noise measurements were taken at the site to assess the existing conditions at the site including the testing of the engine described in Section 1.2 of this report. The engine is used for instructional purposes and would continue to be used as part of the project. Two measurements were taken at 130 and 135 feet from the existing test engine location while the engine was operating, and one additional measurement was taken at 135 feet from the test engine location while the engine was turned off. The measured noise levels 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	
Noise Meter:	Larson Davis 831
Date:	April 17, 2026
Time:	9:52 a.m. – 10:30 a.m.
Location:	130 feet from the portable engine
Measured Noise Level:	85.6 dBA L_{EQ}

Measurement 1 (cont.)	
Primary Noise Sources:	Portable engine, with additional noise from idling and flying aircraft and vehicles.
Measurement 2	
Noise Meter:	Larson Davis LxT
Date:	April 17, 2026
Time:	10:54 a.m. – 11:32 a.m.
Location:	135 feet from the portable engine
Measured Noise Level:	85.5 dBA L_{EQ}
Primary Noise Sources:	Portable engine, with additional noise from idling and flying aircraft and vehicles.
Measurement 3	
Noise Meter:	Larson Davis 831
Date:	April 17, 2026
Time:	10:33 a.m. – 10:44 a.m.
Location:	135 feet from the portable engine (not running)
Measured Noise Level:	62.0 dBA L_{EQ}
Primary Noise Sources:	Traffic from I-15 and flying aircraft.

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 carried out by the applicable agency. While none of these federal noise laws, regulations, or policies for noise and vibration apply to the project site, 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.



I:\PROJECTS\S\SanDiegoComCollegeDist_01737\00004_SDCommunityCollegeDist\005_MiramarAviation\Map\Noise\Noise\Noise.aprx Fig4_Noise : 01737.00004.005 : 9/11/2026 - MCL

Source: Aerial (SanGIS, 2023)

HELIX Environmental Planning

Noise Measurement Locations

Figure 4

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 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 project is within the boundaries of MYF and is therefore within its Airport Influence Area (SDCRAA 2010). Table III-1 of the ALUCP defines noise compatibility standards for each land use category within the 65 dBA CNEL noise contour of the airport.

The project site is not within the noise contours shown in Exhibit III-1 of the ALUCP. Table III-1 of the ALUCP defines the noise compatibility standards for classrooms, offices, and related indoor uses of adult schools, colleges, and universities. These uses are conditionally compatible with noise exposure levels between 60 and 70 dBA CNEL if the building structure is capable of maintaining interior noise levels of 45 dBA CNEL. Outdoor uses are acceptable, though some noise interference may occur (SDCRAA 2010).

3.4 CITY OF SAN DIEGO

3.4.1 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 2, *City of San Diego Land Use Noise Compatibility Guidelines* (City 2024).

Table 2
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		
Institutional					
Hospitals; Nursing Facilities; Intermediate Care Facilities; Kindergarten through Grade 12 Educational Facilities; Libraries; Museums; Child Care Facilities		45			

Land Use Category	Exterior Noise Exposure (CNEL)				
	<60	60-65	65-70	70-75	75+
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

3.4.2 City of San Diego Municipal Code

3.4.2.1 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 3, *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 3), 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 3
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.

3.4.2.2 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.

3.4.3 Montgomery-Gibbs Executive Airport Draft Airport Master Plan

The MYF Draft Airport Master Plan (City 2025) serves as a planning document to determine the extent, type, and schedule of future development within the Airport's master plan area. The project site is located within the airport property but was not identified for future development. Based on the forecast noise contours for the Draft Airport Master Plan, the proposed building is anticipated to be exposed to aircraft noise levels below 65 dBA CNEL.

3.5 SAN DIEGO COMMUNITY COLLEGE DISTRICT

3.5.1 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.

3.5.1.1 Sustainability Goals

The District has developed environmental quality goals as part of these guidelines and standards. The following relates to noise:

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.

3.5.1.2 Design Guidelines and Standards

Section 2.1.3 of the District Design Guidelines and Standards Manual includes noise and vibration control criteria for all District projects, 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 (OSHA) requirements.

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 LxT Noise Meter
- Larson Davis 831 Noise Meter
- Larson Davis Model CA250 Calibrator
- Windscreen and tripod for the noise meters

The sound level meters were 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 American National Standards Institute (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 (FHWA), and noise level calculations using guidance from various agencies. Project construction noise was analyzed using the Roadway Construction Noise Model (RCNM; U.S. Department of Transportation [USDOT] 2008), which utilizes estimates of sound levels from standard construction equipment.

4.2 ASSUMPTIONS

4.2.1 Construction Equipment

Construction would last approximately one year and would require the use of equipment throughout the site for the full term of construction. General project construction activities would include site preparation, demolition, grading, installation of underground utilities, physical building construction, paving, and architectural coatings. The most prominent noise-generating standard construction equipment anticipated to be used on the site includes dozers, dump trucks, loaders, excavators, concrete saws, graders, backhoes, cement and mortar mixers, pavers, rollers, cranes, forklifts, generators, and air compressors.

4.2.2 Vehicular Traffic Noise

Existing and future exterior noise levels along the roadways anticipated to carry increases in project-related trips were modeled using the FHWA TNM Version 2.5. Traffic volumes were provided by Linscott, Law, and Greenspan Engineers (LLG) for opening year (2028) conditions with and without the project. Peak hours are provided, with project volumes conservatively assumed to occur during these times. The project would generate 222 daily trips upon completion, with approximately 60 trips occurring during the afternoon peak hours. Project trips were estimated to be distributed along Kearny Villa Road and Aero Drive. The project would generate 65 percent of its daily trips south of the project driveway and 35 percent to the north. Along Aero Drive, five percent would travel east toward existing residential developments, and five percent would travel west toward Linda Vista Road. The remaining 55 percent would continue south along Kearny Villa Road toward existing residential developments. Table 4, *Roadway Segment Volumes*, summarizes the peak hour traffic data for the roadway segments anticipated to be traveled by project-related trips upon the project completion.

Table 4
ROADWAY SEGMENT VOLUMES

Roadway Segment	Opening Year (2028) Peak Hour[1] No Project	Project Trips Peak Hour	Opening Year (2028) Peak Hour[1] With Project	Speed Limit (mph)
Kearny Villa Road				
North of Project Driveway	1,713	21	1,734	45
Project Driveway to Aero Drive	1,720	39	1,759	45
South of Aero Drive	1,412	32	1,444	45
Aero Drive				
East of Kearny Villa Road	3,119	4	3,123	40
West of Kearny Villa Road	2,152	3	2,155	40

Source: LLG 2026
[1] P.M. peak hour used for non-project trips
mph = miles per hour

To assess land use compatibility of the proposed project, traffic for SR 163 was estimated using the San Diego Association of Government's (SANDAG) Transportation Forecast Information Center tool (SANDAG 2021). Traffic estimates for 2025 were used in this analysis. For the segment of freeway nearest the project, northbound traffic volumes are estimated at 82,900 average daily trips (ADT), southbound at

86,600 ADT, northbound high-occupancy vehicle (HOV) lanes at 4,800 ADT, and southbound HOV lanes at 4,300 ADT. A traffic distribution of 96 percent automobiles, two percent medium trucks, and two percent heavy trucks were used on local roads in this analysis.

The one-hour L_{EQ} traffic noise level is calculated utilizing peak-hour traffic. Peak-hour traffic volumes for SR 163 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:

$$CNEL = L_{EQ}(h)pk + 10log10\ 4.17/P + 10log10(d + 4.77e + 10N)$$

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).

4.2.3 Stationary Source Noises

Stationary noise sources generally include equipment such as heating, ventilation, and air-conditioning (HVAC) systems. The project would also require the use of an outdoor engine that would be tested weekly for academic purposes.

4.2.3.1 HVAC Systems

The exact models and location of the HVAC systems are not known at this stage of the planning process. Therefore, a standard rooftop commercial HVAC unit manufactured by Carrier is used in this analysis to predict the potential for HVAC-related noise effects. 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 this unit would be mounted on the proposed new hangar rooftop; however, to be conservative, no parapets or other mechanical screening materials are considered in this analysis.

4.2.3.2 Engine Tests

As described in Section 1.2, the existing aviation classes conducted at the site utilize a portable large aircraft engine that would be used twice weekly outside the existing hangar for testing and teaching purposes. The engine is currently used for instructional purposes and was measured as having a noise level of 85.6 dBA L_{EQ} at a distance of 135 feet. The project would pave an outdoor area where the engine would be tested, in the same general area where testing is currently conducted. This report assumes that all engine tests would be located at this site. In addition, airplanes may be parked in the vicinity of the engine for additional teaching purposes, and their propellers would also be running. The measurements taken on April 17, 2026, include the use of these multiple sources as a conservative estimate and as a reference source of baseline conditions.

4.3 GUIDELINES FOR THE DETERMINATION OF SIGNIFICANCE AND CONDITIONS OF APPROVAL

Based on Appendix G of the State CEQA Guidelines and the City's CEQA Guidelines (City 2022), implementation of the project would result in a significant adverse impact if it would:

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.*

In accordance with the City's CEQA Guidelines and Municipal Code, an increase in noise levels during construction would be considered significant if construction noise levels would exceed 75 dBA L_{EQ} during the 12-hour period from 7:00 a.m. to 7:00 p.m. at a property zoned residential. This threshold provides a reasonable balance between the need to operate noise-generating equipment for most temporary construction activities and the desire to protect NSLUs from temporary disturbances.

A significant impact related to proposed stationary noise sources (not including temporary construction equipment) would occur if the sources would generate noise levels at the property line that exceed the limits contained in the City's Noise Ordinance (provided in Table 3 of this report).

According to the City CEQA Thresholds, a significant impact related to traffic-generated noise would occur if exterior noise levels exceed 65 dBA CNEL at residential, school, library, hospital, daycare, hotel/motel, park, or convalescent home land uses; 70 dBA CNEL at offices, churches, businesses, or other professional uses; or exceed 75 dBA CNEL at commercial, retail, industrial, or outdoor spectator sport land uses. Where these noise levels are already exceeded, a significant impact would occur if the project would result in a 3 dB increase.

4.3.2 Ground-Borne Vibration

Threshold 2: *Generate excessive ground-borne vibration or ground-borne noise levels.*

A significant vibration impact may occur if construction of the proposed project would subject vibration-sensitive land uses to construction-related ground-borne vibration that exceeds the threshold of 0.25 inch per second (in/sec) PPV for potential architectural damage to historic structures for continuous/frequent intermittent construction sources (such as impact pile drivers, vibratory pile drivers, and vibratory compaction equipment), as specified by Caltrans (2020).

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. For the project's academic land use, excessive noise is defined as greater than 45 dBA L_{EQ}[1] for interior classroom spaces per City standards.

4.3.4 Land Use Compatibility

Threshold 4: *Would the project cause a significant environmental impact due to a conflict with a land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental impact?*

Land use compatibility is defined as noise levels that exceed the City General Plan noise compatibility limit for the associated land use or the District's Design Guidelines and Standards Manual limits for interior classroom spaces. For the project's academic land use, excessive noise for interior classroom space is defined in the City General Plan as greater than 45 dBA $L_{EQ.}$[2]

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 Temporary Noise Increase

5.1.1.1 Construction Noise

In accordance with the City's CEQA Thresholds, an increase in noise levels during demolition and construction would typically be considered a significant impact if construction noise levels would exceed 75 dBA L_{EQ} (12-hour) at a property zoned residential. The Municipal Code specifies that construction noise shall not exceed 75 dBA L_{EQ} (12-hour) at a residentially zoned property between 7:00 a.m. and 7:00 p.m.

The properties immediately adjacent to the proposed project site are not residential land uses. The closest residential-zoned property is the AMLI Aero residential development approximately 1,300 feet to the south. Using the RCNM to calculate typical construction equipment, the combined use of a dozer and grader would generate 82.7 dBA L_{EQ} at 50 feet. At 1,300 feet, this would attenuate to 54.4 dBA L_{EQ}, well below the 75 dBA L_{EQ} (12-hour) threshold. Although it is not zoned residential, the nearby Four Points by Sheraton hotel would be approximately 700 feet from project construction activity. At these distances, the dozer and grader would generate noise levels of 59.8 dBA L_{EQ}. Impacts would be less than significant.

[1] For classroom uses where sleep is not a factor, the CNEL is not used. The daytime noise level (L_{EQ}) is used here.
[2] For classroom uses where sleep is not a factor, the CNEL is not used. The daytime noise level (L_{EQ}) is used here.

5.1.1.2 Mitigation Measures

Impacts from construction noise would be less than significant, and no mitigation is required.

5.1.2 Operational Noise

5.1.2.1 On-Site Noise Generation

The City Municipal Code establishes property line noise limits for stationary sources based on land use. The nearest noise sensitive land uses would be the hotel to the south. Based on the Zoning and Parcel Information Portal (City 2026), the hotel, along with the project site and MYF, is considered Unzoned. For the purposes of this analysis, a commercial zone noise limit is applied for the hotel: 65 dBA L_{EQ} from 7:00 a.m. to 7:00 p.m., 60 dBA L_{EQ} from 7:00 p.m. to 10:00 p.m., and 60 dBA L_{EQ} from 10:00 p.m. to 7:00 a.m. (see Table 3). The other nearby land uses across SR 163 are zoned commercial.

HVAC

The location of future HVAC systems and other mechanical equipment required for buildings is not known at this time. Based on the sample HVAC unit described in Section 4.2.3, noise levels would attenuate below the City's nighttime commercial property line limit of 60 dBA L_{EQ} at a distance of approximately 30 feet. Although the precise location of the HVAC unit within the project building is not known at this time, it is not anticipated to be installed within 30 feet of neighboring properties. Noise generated by the project's HVAC units would be less than significant.

Test Engine

Noise generated by the aviation classes' outdoor uses would include the operation of a portable test engine and airplane propellers twice a week. The test engine would be periodically moved to an engine testing pad and tested up to an hour each day. This pad would be located approximately 215 feet northwest of the nearest property line, the hotel property to the south. As noted in Section 4.2.3.2, noise levels measured from these existing operations were 85.6 dBA L_{EQ} at a distance of 135 feet. At 215 feet, noise would be approximately 79.4 dBA L_{EQ}. This would exceed the City's commercial limit of 65 dBA L_{EQ} during daytime hours when the engines are anticipated to be running. Impacts from operation of the test engine would therefore be significant without mitigation.

5.1.2.2 Mitigation Measures

As test engine operations associated with the proposed Project would generate noise levels exceeding the assumed commercial limits of 60 dBA L_{EQ} at the nearby hotel property lines, potentially significant impacts would occur. Implementation of Mitigation Measure **NOI-1** would be required to reduce impacts from engine noise to a less than significant level.

NOI-1 **Test Engine Noise Level Reduction Measures.** Noise levels generated by the project's test engines shall not exceed the City's limits stated in Table K-4 of San Diego Municipal Code Section 59.5.0401. Noise levels from engine testing shall not exceed 65 dBA L_{EQ} from 7:00 a.m. to 7:00 p.m., 60 dBA L_{EQ} from 7:00 p.m. to 10:00 p.m., and 60 dBA L_{EQ} from 10:00 p.m. to 7:00 a.m. when measured at the nearby hotel to the south. Testing for individual engines shall be restricted to 30 minutes within a given hour during the daytime hours between 7:00 a.m. and 7:00 p.m. Engine testing shall not occur outside of these hours.

Noise levels shall be reduced by installing a barrier or acoustical louver between the engine and nearby property lines to achieve the minimum insertion loss necessary to achieve the noise levels above.

The barriers shall fully obstruct line of sight to off-site receptors and be at least one foot taller than the engine. To effectively reduce noise levels, the barrier should be constructed with no gaps or perforations and of a material to sufficiently reduce noise levels, such as concrete masonry.

Noise attenuation features or a sufficient demonstration that noise levels would not exceed the limits set by the San Diego Municipal Code shall be included on construction plans to ensure compliance and submitted to the District for approval. The acceptability of the predicted insertion loss shall be verified in writing by the project's mechanical engineer, acoustical consultant, or an engineer employed by the manufacturer of the louver.

A mechanical schedule and louver details documenting noise-reduction measures shall be included in the project plans to ensure compliance with this noise limit and shall be prepared by the project applicant and submitted to the District for approval prior to DSA approval.

5.1.2.3 Significance of Impacts After Mitigation

With implementation of **NOI-1**, noise levels from testing and operation of the test engine would be reduced to less than significant levels.

5.1.2.4 Off-Site Transportation Noise

According to the City CEQA Thresholds, a significant impact related to traffic-generated noise would occur if the project-generated traffic noise would increase overall traffic noise levels by 3 dB CNEL or more, when existing exterior noise levels exceed 65 CNEL at residential, school, library, hospital, daycare, hotel/motel, park, or convalescent home land uses; 70 CNEL at offices, churches, businesses, or other professional uses; or exceed 75 CNEL at commercial, retail, industrial, or outdoor spectator sport land uses.

The project would generate vehicular traffic in the project vicinity and has the potential to increase traffic noise levels along nearby roadways. The project is expected to generate a net increase of 222 daily trips compared to existing conditions, the distribution of which is detailed in Table 4.

TNM software was used to calculate noise levels at various receptors for the opening year and opening year plus project conditions along the affected roadways. The following traffic noise modeling represents a conservative analysis that does not consider topography or attenuation provided by existing structures. The results of the traffic noise analysis are shown below in Table 5, *Off-Site Traffic Noise Levels*, which presents the CNEL at the distance between the roadway centerline and nearby structures under opening year and opening year plus project conditions.

Table 5
OFF-SITE TRAFFIC NOISE LEVELS

Roadway Segment	Distance to Nearest Building (feet)	Nearest Building Land Use	CNEL at Distance (Opening Year)	CNEL at Distance (Opening Year + Project)	Change with Project (CNEL)
Kearny Villa Road					
North of Project Driveway	100	Institutional	66.7	66.7	+0.0
Project Driveway to Aero Drive	150	Institutional	64.4	64.5	+0.2
South of Aero Drive	75	Residential	67.3	67.5	+0.1
Aero Drive					
East of Kearny Villa Road	130	Residential	66.5	66.5	+0.0
West of Kearny Villa Road	70	Institutional	68.2	68.2	+0.0

Sources: USDOT 2004; LLG 2026
CNEL = Community Noise Equivalent Level

As shown in Table 5, traffic noise levels along roadway segments with the addition of project-generated traffic would increase by up to 0.2 CNEL. This would be far below a perceptible change (3 CNEL) in traffic noise levels; the City's traffic noise threshold would not be exceeded. Impacts related to traffic noise would be less than significant.

5.1.2.5 Mitigation Measures

Impacts from project-generated vehicular traffic would be less than significant, and no mitigation is required.

5.2 ISSUE 2: EXCESSIVE VIBRATION

Would the project expose persons to or generate excessive ground-borne vibration or noise levels?

5.2.1 Construction Vibration

During construction and demolition, the greatest potential source of vibration during project construction is anticipated to be a vibratory roller, primarily used to achieve soil, aggregate, and asphalt compaction. Demolition work would include the use of a skid steer, excavator, front end loader, concrete saw, forklift, and scissor lift. These equipment types are not anticipated to generate substantial vibration. Vibratory rollers may be used in the construction of paved areas and tarmac. Existing hangars located north of the project are designated as historic (City 2025) and would be subjected to construction vibration. A large vibratory roller is assumed to generate a vibration level of approximately 0.210 in/sec PPV at a distance of 25 feet (Caltrans 2020). If vibratory rollers are required within 22 feet of the hangar to the north, an exceedance of the 0.25 in/sec PPV vibration criteria for potential architectural damage to historical structures may occur.[3] Vibratory rollers are anticipated to be used for building foundations and parking areas, both of which would be beyond 22 feet from the nearest hangar. However, because exact locations of construction equipment may vary depending on site

[3] Equipment PPV = Reference PPV * $(25/D)^n$ (in/sec), where Reference PPV is PPV at 25 feet, D is distance from equipment to the receiver in feet, and n = 1.1 (the value related to the attenuation rate through the ground); formula from Caltrans 2020.

conditions during demolition and construction, this analysis assumes that the potential for architectural damage to historic buildings may occur. Impacts would be potentially significant without mitigation.

5.2.2 Operational Vibration

Academic uses of the site would not introduce substantial vibration-generating equipment to the project site. The project would not expose people to excessive ground-borne vibration or noise and impacts would be less than significant.

5.2.2.1 Mitigation Measures

To reduce vibration at the vibration-sensitive hangar north of the project, Mitigation Measure **NOI-2** would be required.

NOI-2 **Construction Vibration Limits Near Historic Structures.** Vibration-generating construction equipment shall not generate vibration levels that exceed 0.25 in/sec PPV at historic structures. This shall be demonstrated by ensuring that construction plans associated with the project, prior to District and City approval, specify that large vibratory rollers are to be set back from historic structures by 22 feet or be used in static mode only (no vibrations) when operating within 22 feet of historic structures. If vibration-generating equipment other than large vibratory rollers is used during construction, project construction plans shall include specifications that demonstrate that vibration limits do not exceed 0.25 in/sec PPV at the historic structure.

5.2.2.2 Significance of Impacts After Mitigation

With implementation of **NOI-2**, noise levels from testing and operation of the test engine would be reduced to less than significant levels.

5.3 ISSUE 3: AIRPORT NOISE EXPOSURE

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

5.3.1 Airport Noise

As discussed in Section 3.3.1, the project site is not within the 60 dBA CNEL noise contours of the MYF airport as shown in the ALUCP (SDCRAA 2010). However, based on the forecast noise contours for the Draft Airport Master Plan (City 2025), the proposed building is anticipated to be exposed to aircraft noise levels below 65 dBA CNEL. Table III-1 of the ALUCP defines the noise compatibility standards for classrooms, offices, and related indoor uses of adult schools, colleges, and universities. These uses are conditionally compatible with noise exposure levels between 60 and 70 dBA CNEL if the building structure is capable of maintaining interior noise levels of 45 dBA L_{EQ}. Outdoor uses are acceptable, though some noise interference may occur (SDCRAA 2010).

The project proposes to continue and expand existing aviation classes occurring at the project site. The nature of these courses means that academic instruction would take place in both indoor and outdoor environments at the project site. Due to the nature of the outdoor classes, noise interference from airport noise is expected and would be compatible with this use. Indoor classrooms, however, would be

required to attenuate indoor noise to 45 dBA L_{EQ}. Because elevated noise levels in the outdoor noise environment could occur at the building façades, maintaining this interior noise level is not guaranteed with standard construction materials.

5.3.1.1 Mitigation Measures

As the project may be exposed to airport-related noise levels of 60 to 65 dBA CNEL, required interior noise levels may not be achieved. Implementation of Mitigation Measure **NOI-3** is required to reduce impacts from aircraft noise exposure to a less than significant level.

NOI-3 Classroom Building Exterior-to-Interior Noise Limits. Once specific building plan information is available, an exterior-to-interior analysis shall be performed for interior classrooms within the project building. The exterior-to-interior analysis shall demonstrate that interior noise levels do not exceed 45 dBA L_{EQ}. The information in the analysis shall include wall heights and lengths, room volumes, and window and door tables typical for a building plan, as well as information on any other openings in the building shell. With this specific building plan information, the analysis shall determine the predicted interior noise levels for the planned classroom spaces. If predicted noise levels are found to exceed 45 dBA L_{EQ}, the analysis shall identify architectural materials or techniques that could be included to reduce noise levels to 45 dBA L_{EQ}. Standard measures, such as glazing with appropriate Sound Transmission Class (STC) ratings, as well as walls with appropriate STC ratings, should be considered. Final plans shall demonstrate that interior noise levels do not exceed 45 dBA L_{EQ} for proposed classroom areas.

5.3.1.2 Significance of Impacts After Mitigation

With implementation of **NOI-3**, interior noise levels would be reduced to compatible levels.

5.4 ISSUE 4: LAND USE COMPATIBILITY

Would the project cause a significant environmental impact due to a conflict with a land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental impact?

5.4.1 Noise Levels at Exterior Use Areas

Noise in the project vicinity is primarily generated by vehicular and aircraft traffic. As shown in Table 2, institutional land uses as described in the City General Plan are compatible with exterior noise levels up to 60 CNEL, conditionally compatible with exterior noise levels between 60 and 70 CNEL, and generally incompatible with exterior noise levels exceeding 70 CNEL. As discussed in Section 5.3.1, the outdoor noise environment would not be located within the 60 to 65 dBA CNEL noise contour of the airport as shown on the ALUCP. However, based on the forecast noise contours for the Draft Airport Master Plan (City 2025), the proposed building is anticipated to be exposed to aircraft noise levels below 65 dBA CNEL. In addition, vehicular traffic noise from the nearby Kearny Villa Road and SR 163 would generate noise at the site. Exterior use areas would be required for instruction and are expected to be exposed to outdoor noise from aircraft. Outdoor areas for instruction would also be located within the hangar and maintenance bay, which would be shielded from vehicular noise by the project building. Noise levels within the exterior use areas would therefore be within the “conditionally compatible” range for this use.

5.4.2 Interior Noise Levels

As shown in Table 2, institutional land uses described in the City General Plan are compatible when interior noise levels are attenuated to 45 dBA L_{EQ}. As described in Section 5.3.1, exterior noise levels from aircraft would exceed 60 dBA L_{EQ}. Vehicular noise from the roadways to the west would generate additional elevated noise at the building façades. Standard construction materials would not guarantee that interior noise levels meet the 45 dBA L_{EQ} requirements.

5.4.2.1 Mitigation Measures

As the project would be exposed to airport-related noise levels of 60 to 65 dBA CNEL, required interior noise levels may not be achieved. Implementation of mitigation measure **NOI-3** is required to reduce impacts from engine noise to a less than significant level. Refer to Section 5.3.1.1.

5.4.2.2 Significance After Mitigation

With implementation of **NOI-3**, interior noise levels would be attenuated to 45 dBA L_{EQ} or below, and impacts would be less than significant.

6.0 LIST OF PREPARERS

Jason Runyan	Senior Noise Specialist
Rachael Ortiz-Cowell	Senior Noise Specialist
Sydney Wells	Noise Specialist
Joanne Dramko, AICP	Principal Noise Specialist, QA/QC
Yara Fisher, AICP	Principal Planner, Project Manager

7.0 REFERENCES

California Department of Transportation (Caltrans). 2020. Transportation and Construction Vibration Guidance Manual. April. Available at: https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tcvgm-apr2020-a11y.pdf.

2013. Technical Noise Supplement (TeNS) to the Traffic Noise Protocol. September. Available at: https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tens-sep2013-a11y.pdf.

Carrier. 2024. Product Data WeatherMaker Single Packaged Rooftop 17.5 to 27.5 Nominal Tons. Available at: https://d36aiwq7h8e0h3.cloudfront.net/userfiles/inriver/documents/dp/10/-0/48-50fe-20-30-01pd.pdf.

Federal Transit Administration (FTA). 2018. Transit Noise and Vibration Impact Assessment Manual. September. Available at: https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf.

Linscott, Law, & Greenspan, Engineers (LLG). 2026. Local Mobility Analysis. June 16.

San Diego Association of Governments (SANDAG). 2021. Transportation Forecast Information Center. Available at: https://geo.sandag.org/portal/apps/experiencebuilder/experience/?id=34e6287d192f48b59cb2607db5c3707a. Accessed June 29.

San Diego, City of (City). 2026. Zoning and Permit Portal. Available at: https://www.sandiego.gov/development-services/zoning. Accessed June 29.

2025. Montgomery Gibbs Executive Airport Master Plan Program Draft Environmental Impact Report. October 9. Available at: https://ceqanet.lci.ca.gov/2019029034/2.

2024. City of San Diego General Plan Noise Element. July. Available at: https://www.sandiego.gov/sites/default/files/2024-07/general-plan_09_noise_july-2024.pdf.

2022. California Environmental Quality Act Significance Determination Thresholds. September. Available at: https://www.sandiego.gov/sites/default/files/september_2022_ceqa_thresholds_final.pdf.

San Diego Community College District (District). 2025. Design Guidelines and Standards Manual. June. Available at: https://www.sdccd.edu/docs/FacilitiesServices/Planning-Design/Design-Guidelines-Standards-Manual.pdf.

San Diego County Regional Airport Authority (SDCRAA). 2010. Montgomery Field Airport Land Use Compatibility Plan. Adopted January 25. Available at: https://www.san.org/wp-content/uploads/2025/08/Montgomery-ALUCP-Dec-20-2010_Amended.pdf.

U.S. Department of Transportation (USDOT). 2008. Roadway Construction Noise Model Version 1.1. Available at: https://www.fhwa.dot.gov/environment/noise/construction_noise/rcnm/.

2004. Traffic Noise Model Version 2.5.

Appendix A

Noise Survey

Site Survey

Job # 01737.00004.005	Project Name: Miramar College AIC		
Date: 4/17/2026	Site #: M1	Engineer: *Ortiz-Cowell; Runyan; Wells*	
Address: 3873 Kearny Villa Road			
Meter: 831	Serial #: 1390	Calibrator: CA250	Serial #: 2754

Notes: Portable engine, with additional noise from idling and flying aircraft and vehicles.



%

Start of Measurement: 9:52am	End of Measurement: 10:30am	85.6 dBA L_{EQ}

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 # 01737.00004.005	Project Name: Miramar College AIC		
Date: 4/17/2026	Site #: M2	Engineer: *Ortiz-Cowell; Runyan; Wells*	
Address: 3873 Kearny Villa Road			
Meter: LxT	Serial #: 1741	Calibrator: CA250	Serial #: 2754

Notes: Portable engine, with additional noise from idling and flying aircraft and vehicles.



%

Start of Measurement: 10:54 a.m.	End of Measurement: 11:32 a.m.	85.5 dBA L_{EQ}

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 # 01737.00004.005	Project Name: Miramar College AIC		
Date: 4/17/2026	Site #: M3	Engineer: *Ortiz-Cowell; Runyan; Wells*	
Address: 3873 Kearny Villa Road			
Meter: 831	Serial #: 1390	Calibrator: CA250	Serial #:

Notes: Noise from flying aircraft and vehicles.



%

Start of Measurement: 10:33 AM	End of Measurement: 10:44 a.m.	62.0 dBA L_{EQ}

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

Measurement Location	Time	Description	Leq	Lmax	Lmax Time	Measurement Distance	Property Line Distance	Distance Attenuation	PL Leq	PL Lmax
M2a		Overall	85.6	102.2	11:12	135	275	6.2	79.4	96
M2b		Overall	85.5	103.5	11:14	130	275	6.5	79	97

Appendix I

Local Mobility Analysis

4542 Ruffner Street
Suite 100
San Diego, CA 92111
858.300.8800 T
www.llgengineers.com

Pasadena
Irvine
San Diego

LOCAL MOBILITY ANALYSIS

SAN DIEGO MIRAMAR COLLEGE AVIATION INSTRUCTIONAL CENTER AT MONTGOMERY-GIBBS EXECUTIVE AIRPORT PROJECT

City of San Diego, California
July 1, 2026

LLG Ref. 3-26-4190

Prepared by:
Renald Espiritu
Transportation Engineer III

Under the Supervision of:
John Boarman, P.E.
Principal

TABLE OF CONTENTS

SECTION		PAGE
1.0	**Introduction**	**1**
2.0	**Project Description**	**4**
2.1	Project Location	4
2.2	Project Description	5
3.0	**Analysis Approach and Methodology**	**7**
3.1	Project Study Area	7
3.2	Analysis Scenarios	7
3.3	Analysis Methodology	7
4.0	**Existing Conditions**	**9**
4.1	Existing Transportation Network	9
4.2	Existing Traffic Volumes	9
5.0	**Existing Analysis**	**12**
5.1	Peak Hour Intersection LOS Operations	12
5.2	Existing Pedestrian Mobility	13
5.3	Existing Bicycle Mobility	13
5.4	Existing Transit Mobility	13
6.0	**Trip Generation/Distribution/Assignment**	**15**
6.1	Project Trip Generation	15
6.2	Project Trip Distribution/Assignment	15
7.0	**Opening Year 2028 Analysis**	**19**
7.1	Opening Year 2028 without Project Peak Hour Intersection Operations	19
7.2	Opening Year 2028 + Project Conditions Peak Hour Intersection Operations	19
8.0	**Site Access Assessment**	**23**
9.0	**Conclusions**	**24**

APPENDICES

APPENDIX

A. Intersection Methodology

B. Intersection Manual Count Sheets and Signal Timing Plans

C. Existing Intersection Analysis Calculation Sheets

D. Bus Route Schedules

E. Opening Year 2028 without Project Intersection Analysis Worksheets

F. Opening Year 2028 + Project Intersection Analysis Worksheets

LIST OF FIGURES

SECTION—FIGURE #		FOLLOWING PAGE
Figure 1–1	Vicinity Map	2
Figure 1–2	Project Area Map	3
Figure 2–1	Proposed Site Plan	6
Figure 4–1	Existing Conditions Diagram	10
Figure 4–2	Existing Traffic Volumes	11
Figure 6–1	Project Traffic Distribution	17
Figure 6–2	Project Traffic Volumes	18
Figure 7–1	Opening Year 2028 without Project Traffic Volumes	21
Figure 7–2	Opening Year 2028 + Project Traffic Volumes	22

LIST OF TABLES

SECTION—TABLE #		PAGE
Table 5–1	Existing Intersection Operations	12
Table 6–1	Project Trip Generation	16
Table 7–1	Opening Year 2028 Intersection Operations	20

LOCAL MOBILITY ANALYSIS

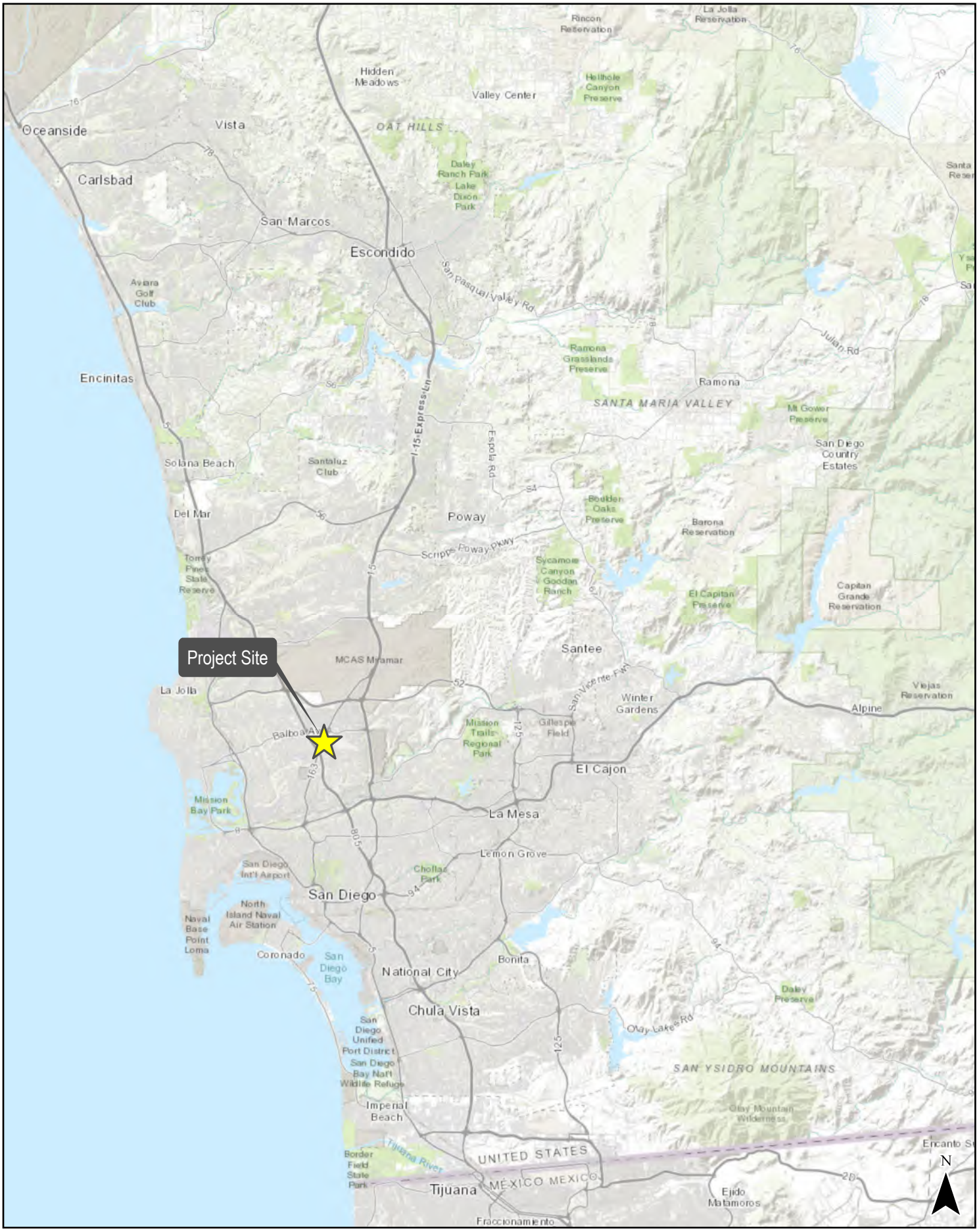
SAN DIEGO MIRAMAR COLLEGE AVIATION INSTRUCTIONAL CENTER AT MONTGOMERY-GIBBS EXECUTIVE AIRPORT PROJECT

City of San Diego, California
July 1, 2026

1.0 INTRODUCTION

Linscott, Law & Greenspan, Engineers (LLG) has prepared this Local Mobility Analysis (LMA) for the San Diego Miramar College Aviation Instructional Center at Montgomery-Gibbs Executive Airport Project (hereafter referred to as the "Project"). The Project is located on the west side of Montgomery-Gibbs Executive Airport (MYF) within the Kearny Mesa community of the City of San Diego. The site and its operations currently exist. This report is required because the Project proposes to redevelop and expand the existing instructional facility and increase enrollment and the number of class sessions per week. A detailed Project description is included in *Section 2.0*.

Figure 1–1 includes a Project vicinity map. ***Figure 1–2*** shows a more detailed Project area map.

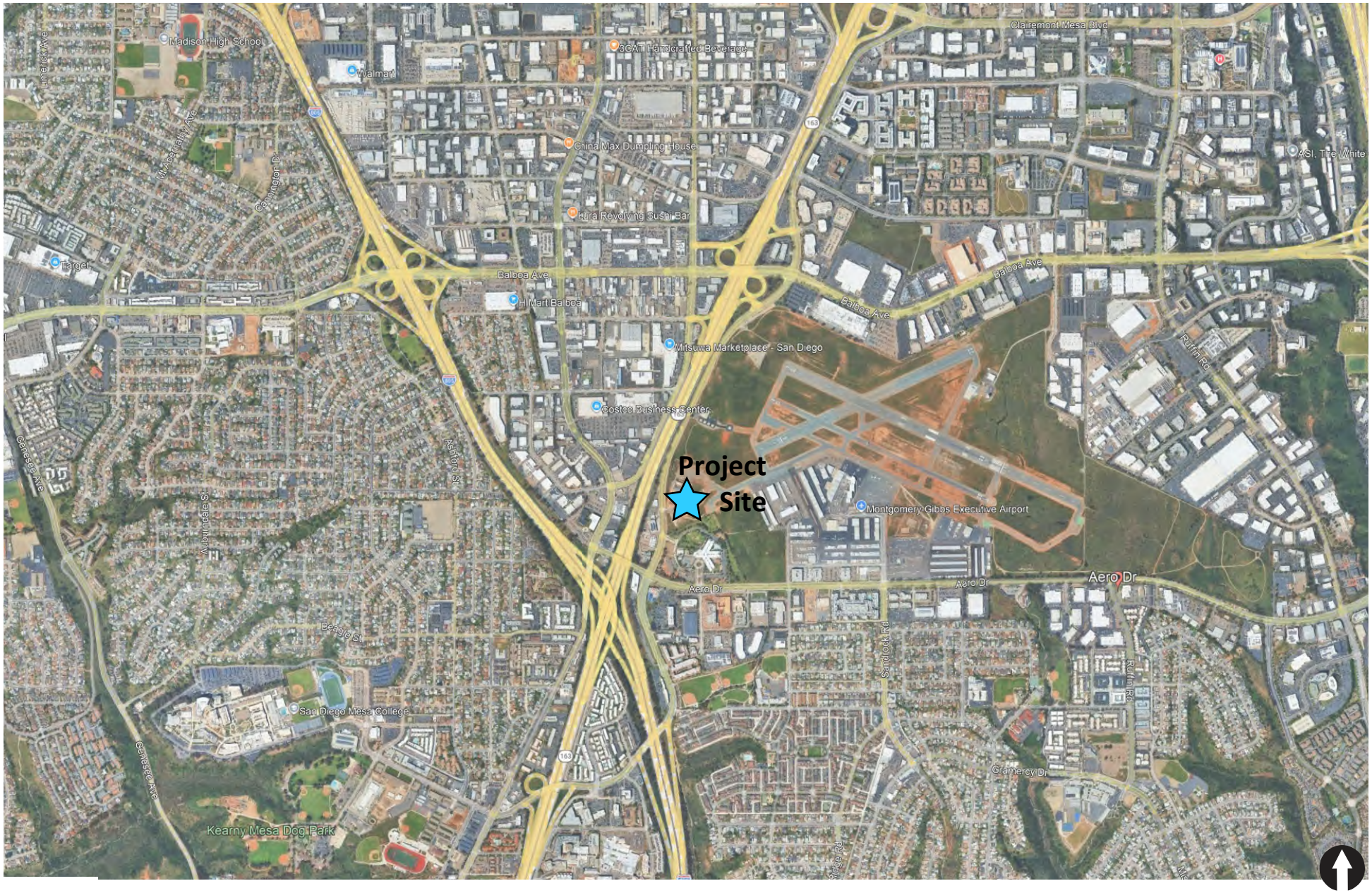


N:\4190\Figure
Date: 4/9/2026

SanGIS, Bureau of Land Management, Esri, HERE, Garmin, USGS, NGA, EPA, USDA, NPS

Figure 1-1
Vicinity Map

Miramar College AIC Project


Project Site
Madison High School
Walmart
Target
China Max Dumpling House
Kura Revolving Sushi Bar
H Mart Balboa
Balboa Ave
Mitsuwa Marketplace - San Diego
Costco Business Center
Montgomery-Gibbs Executive Airport
Aero Dr
San Diego Mesa College
Kearny Mesa Dog Park
Genesee Ave
Clairemont Mesa Blvd
Ruffin Rd
Sandrock Rd
Gramercy Dr
Beagle St
Ashford St
Arjons Dr
Camino Del Rio N
Overland Ave
Comstock St
Armstrong Pl
Kearny Villa Rd
Ridgeview Dr
Ridgeview Ct
Ridgeview Rd
Mesa College Dr
Mesa Rim Rd
Mesa Rim Pl
Mesa Rim Ct
Mesa Rim Dr
Mesa Rim Terrace

2.0 PROJECT DESCRIPTION

2.1 Project Location

The Project is proposed on a 1.06-acre site located at 3873 Kearny Villa Road, in the City of San Diego. The Project site is located on the western edge of the Montgomery-Gibbs Executive Airport (MYF) and is within the southwest quadrant of the airfield on the City's Airport Layout Plan Update for MYF.

Land uses surrounding the Project site include State Route (SR) 163, the San Diego Police Department Air Support Unit building, the Spiders Aircraft Services Inc. building, and undeveloped areas associated with MYF to the north, a hotel and recreational space to the south, San Diego Fire-Rescue Department Station 28 to the southwest, Kearny Villa Road and SR-163 to the west, and MYF runways, taxiways, and associated structures to the east.

The Project site is located on City owned property which has been leased to the District through a ground lease and is in current negotiation as part of a long-term ground lease. The Project site contains the approximately 6,300 square foot (SF) single-story Miramar Hangar and gravel parking lot with a maximum of 40 spaces within an existing 0.42-acre lease area. The site is currently used by the District for aviation-related instruction through their Miramar College campus and hosts approximately 13 class sessions per week, each containing approximately 15 to 35 students and one to two faculty members.

2.2 Project Description

The Project proposes the demolition of the existing 6,300 SF Miramar Hangar and the construction of a new approximately 18,000 SF Miramar College Aviation Instructional Center (AIC) hangar and supporting facilities, expanding the existing 0.42-acre lease area to 1.06 acres.

The Project would provide an upgraded instructional facility for aviation maintenance technology and related Federal Aviation Administration (FAA)-certified programs to serve Miramar College students and regional workforce needs. The new Miramar College AIC would be two stories. Level 1 would include a lobby, a maintenance/hangar bay, two classrooms, offices, a custodial room, hazardous materials storage, restrooms, and utility and storage rooms. Level 2 would include one classroom, four pilot debrief rooms, air traffic control tower and en route training facilities, a conference room, break room, study room, and restrooms. The expanded instructional facility would allow for an additional 15 class sessions per week to occur, each containing approximately 23 students. The Project would additionally include an open-air storage area, student parking, and engine testing pad.

Access to the site would be provided by the existing MYF Gate 4 east of Kearny Villa Road, as shown in ***Figure 2–1***. The proposed Aviation Instructional Center hangar would be designed to achieve District sustainability standards.

Construction is anticipated to begin in August 2027 and be completed in September 2028, with District courses resuming in the new facility in the Fall 2028 semester. During construction of the Project, the District would continue aviation instruction at a temporary location that is yet to be determined.



LLG

N:\4190\Figures
Date: 05/06/26

Figure 2-1

Site Plan

Miramar College AIC Project

3.0 ANALYSIS APPROACH AND METHODOLOGY

This section discusses the analysis approach and methodology used in the preparation of the study. This report evaluates potential operational deficiencies and considers transportation improvements that may be triggered by the traffic generated by the Project in the Project site vicinity.

3.1 Project Study Area

Based on the nearby intersections which will carry the majority of Project traffic, the following study area intersections were analyzed:

1. Kearny Villa Road / Project Driveway *(unsignalized)*
2. Kearny Villa Road / Aero Drive *(signalized)*

3.2 Analysis Scenarios

This LMA analyzes the facilities listed above under the following scenarios. Per discussion with the applicant, the Project is anticipated to open in Fall 2028.

- Existing Conditions – Establishes the existing baseline traffic conditions within the study area.
- Opening Year 2028 without Project Conditions – Represents traffic conditions in the study area for the anticipated Opening Year 2028, including cumulative traffic volumes based on ambient growth applied to existing traffic volumes.
- Opening Year 2028 + Project Conditions – The Project's generated traffic is added to the Opening Year 2028 Conditions to evaluate the Year 2028 operations with the addition of Project traffic.

3.3 Analysis Methodology

Level of service (LOS) is the term used to denote the different vehicular operating conditions which occur on a given roadway segment under various traffic volume loads. It is a qualitative measure used to describe a quantitative analysis considering factors such as roadway geometries, signal phasing, speed, travel delay, freedom to maneuver, and safety. Level of service provides an index to the operational qualities of a roadway segment or an intersection. Level of service designations range from A to F, with LOS A representing the best operating conditions and LOS F representing the worst operating conditions. Level of service designation is reported differently for signalized and unsignalized intersections, as well as for roadway segments.

Signalized intersections were analyzed under weekday 7:00-9:00 AM and 4:00-6:00 PM peak hour conditions. Average vehicle delay was determined utilizing the methodology found in Chapter 19 of the *Highway Capacity Manual (HCM) 7th Edition*, with the assistance of the *Synchro (version 12)* computer software. The delay values (represented in seconds) were qualified with a corresponding intersection LOS. A more detailed explanation of the methodology is attached in ***Appendix A***.

Unsignalized intersections were analyzed under weekday 7:00-9:00 AM and 4:00-6:00 PM peak hour conditions. Average vehicle delay and LOS was determined based upon the procedures found in Chapters 20 and 21 of the *HCM 7th Edition*, with the assistance of the *Synchro (version 12)* computer software. A more detailed explanation of the methodology is attached in *Appendix A*.

Additionally, vehicular queuing was also evaluated using SimTraffic 12 based on 60-minute recording time, 10-minute seeding, and an average of 5 simulations for study intersection turning movements where queue storage is only provided for within a turn pocket or a dedicated turn lane. The 95th percentile queues are reported. Lengthening a turn pocket should be considered if a project adds traffic to a turning movement and causes the 95th percentile queue to exceed the available turn pocket length.

4.0 EXISTING CONDITIONS

This section describes existing roadway conditions within the study area. ***Figure 4–1*** shows the existing conditions diagram.

4.1 Existing Transportation Network

The following is a description of the existing street network in the study area.

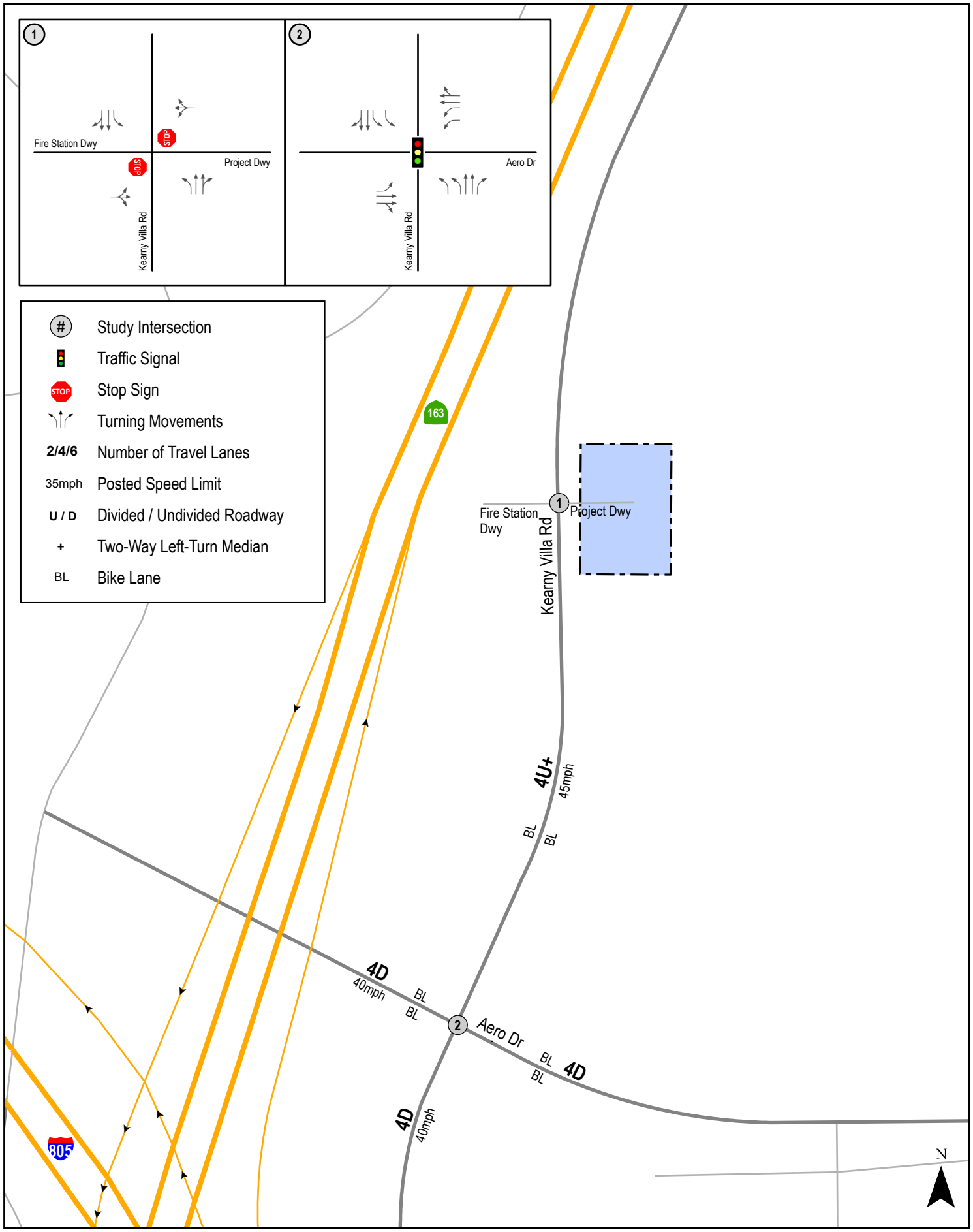
Kearny Villa Road is classified as a four-lane Major Arterial in the *Kearny Mesa Community Plan*. Kearny Villa Road is currently constructed as a four-lane undivided roadway with a two-way left-turn lane. Within the study area, sidewalks are provided on both sides of the roadway south of Aero Drive. North of Aero Drive, sidewalks extend 1,000 feet on the west side and 350 feet on the east side, beyond which decomposed granite path is present, including along the Project frontage. Class II bike lanes are provided on both sides of the roadway. On-street parking is not permitted. The posted speed limit is 45 mph.

Aero Drive is classified as a four-lane Major Arterial in the *Kearny Mesa Community Plan*. Kearny Aero Drive is currently constructed as a four-lane divided roadway. Within the study area, sidewalks are provided on both sides of the roadway. Class II bike lanes are provided on both sides of the roadway. On-street parking is not permitted. The posted speed limit is 40 mph.

4.2 Existing Traffic Volumes

Existing AM and PM peak hour (7:00-9:00 AM and 4:00-6:00 PM) intersection counts were conducted on Thursday, March 5, 2026, and Tuesday, February 24, 2026. Average daily traffic (ADT) volume counts were conducted on Tuesday, March 17, 2026, at the Project driveway while the existing instructional facility was in session. As shown in the count sheets of the Project driveway, the majority of traffic generated by the Project occurs outside the typical commuter peak periods of 7:00 – 9:00 AM and 4:00 – 6:00 PM. However, for the purposes of the analysis in this traffic study, these volumes were conservatively assumed to occur during the AM and PM peak hours and were analyzed under Existing conditions.

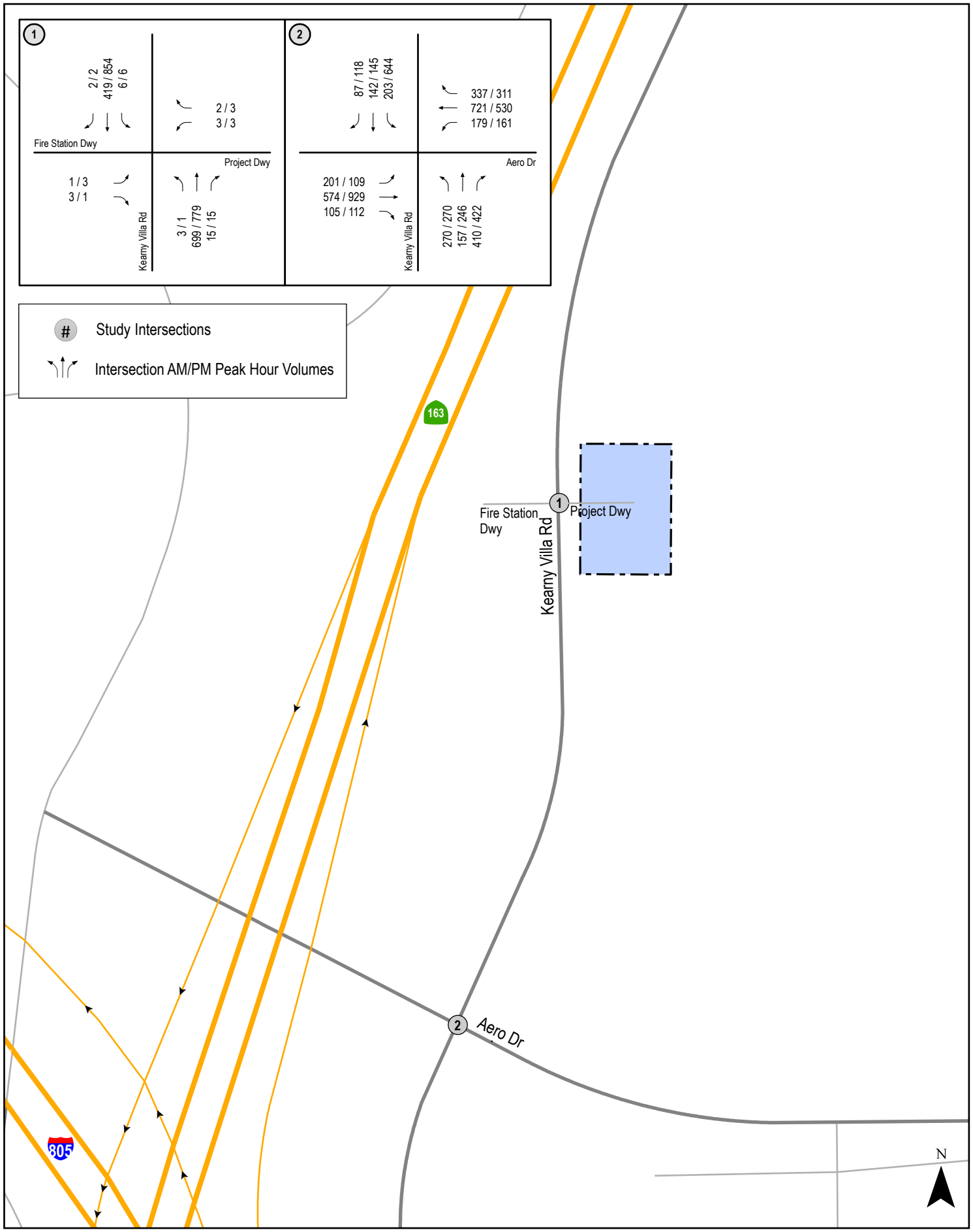
Figure 4–2 shows the existing traffic volumes. ***Appendix B*** contains the traffic count sheets.



N:\4190\Figure
Date: 4/9/2026

Figure 4-1
Existing Conditions Diagram

Miramar College AIC Project



N:\4190\Figure
Date: 4/10/2026

Figure 4-2
Existing Traffic Volumes

Miramar College AIC Project

5.0 EXISTING ANALYSIS

The analysis of existing conditions includes the assessment of the study area intersections using the methodologies described in *Section 3.0*. The analysis of existing conditions utilized the existing AM and PM peak hour intersection counts which were conducted on Thursday, March 5, 2026, and Tuesday, February 24, 2026

5.1 Peak Hour Intersection LOS Operations

Table 5–1 summarizes the existing peak hour intersection operations. As shown in *Table 5–1*, the Kearny Villa Road / Project driveway intersection is calculated to operate at LOS C during both the AM and PM peak hours, while the Kearny Villa Road / Aero Drive intersection is calculated to operate at LOS E during both the AM and PM peak hours.

Appendix C contains the intersection analysis worksheets for the Existing scenario.

TABLE 5–1
EXISTING INTERSECTION OPERATIONS

Intersection	Control Type	Peak Hour	Existing	
			Delay[a]	LOS[b]
1. Kearny Villa Rd / Project Dwy	TWSC[c]	AM PM	22.0 16.2	C C
2. Kearny Villa Rd / Aero Dr	Signal	AM PM	55.4 72.5	E E

Footnotes:
a. Average delay expressed in seconds per vehicle.
b. Level of Service
c. TWSC – Two-Way Stop Control. Westbound approach delay is reported, as the eastbound approach serves a fire station.

SIGNALIZED		UNSIGNALIZED	
DELAY/LOS THRESHOLDS		DELAY/LOS THRESHOLDS	
Delay	LOS	Delay	LOS
0.0 ≤ 10.0	A	0.0 ≤ 10.0	A
10.1 to 20.0	B	10.1 to 15.0	B
20.1 to 35.0	C	15.1 to 25.0	C
35.1 to 55.0	D	25.1 to 35.0	D
55.1 to 80.0	E	35.1 to 50.0	E
≥ 80.1	F	≥ 50.1	F

5.2 Existing Pedestrian Mobility

Within the Project study area, sidewalks are provided on both sides of the roadway south of Aero Drive. North of Aero Drive, sidewalks extend 1,000 feet on the west side and 350 feet on the east side, beyond which decomposed granite path is present, including along the Project frontage, and on both sides of Aero Drive. The nearest signalized intersection is located at the Kearny Villa Road / Aero Drive intersection, providing a controlled crossing location with pedestrian push buttons and crosswalks.

5.3 Existing Bicycle Mobility

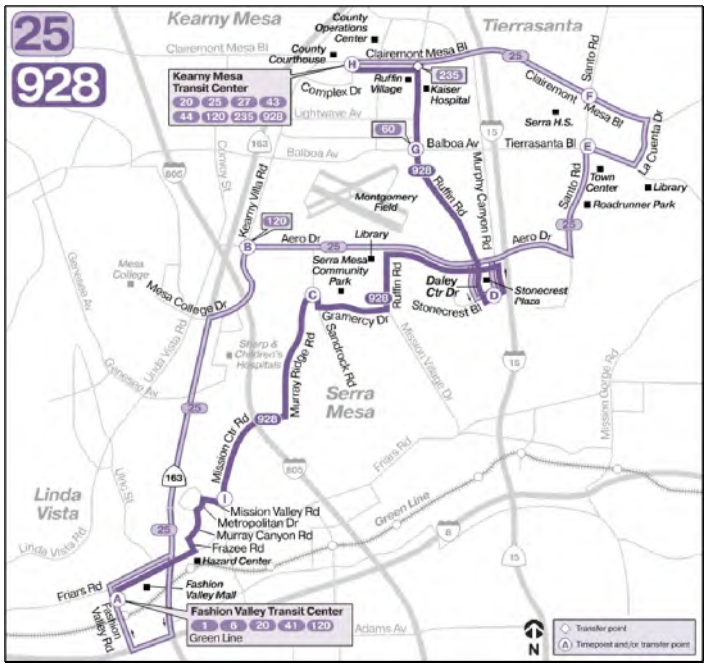
Class II bike lanes are currently provided on both sides of Kearny Villa Road and Aero Drive. Per the *City of San Diego Bicycle Master Plan dated December 2013*, no upgrades to bicycle facilities are planned along Kearny Villa Road or Aero within the Project study area.

Appendix D includes the timetable of these bus routes.

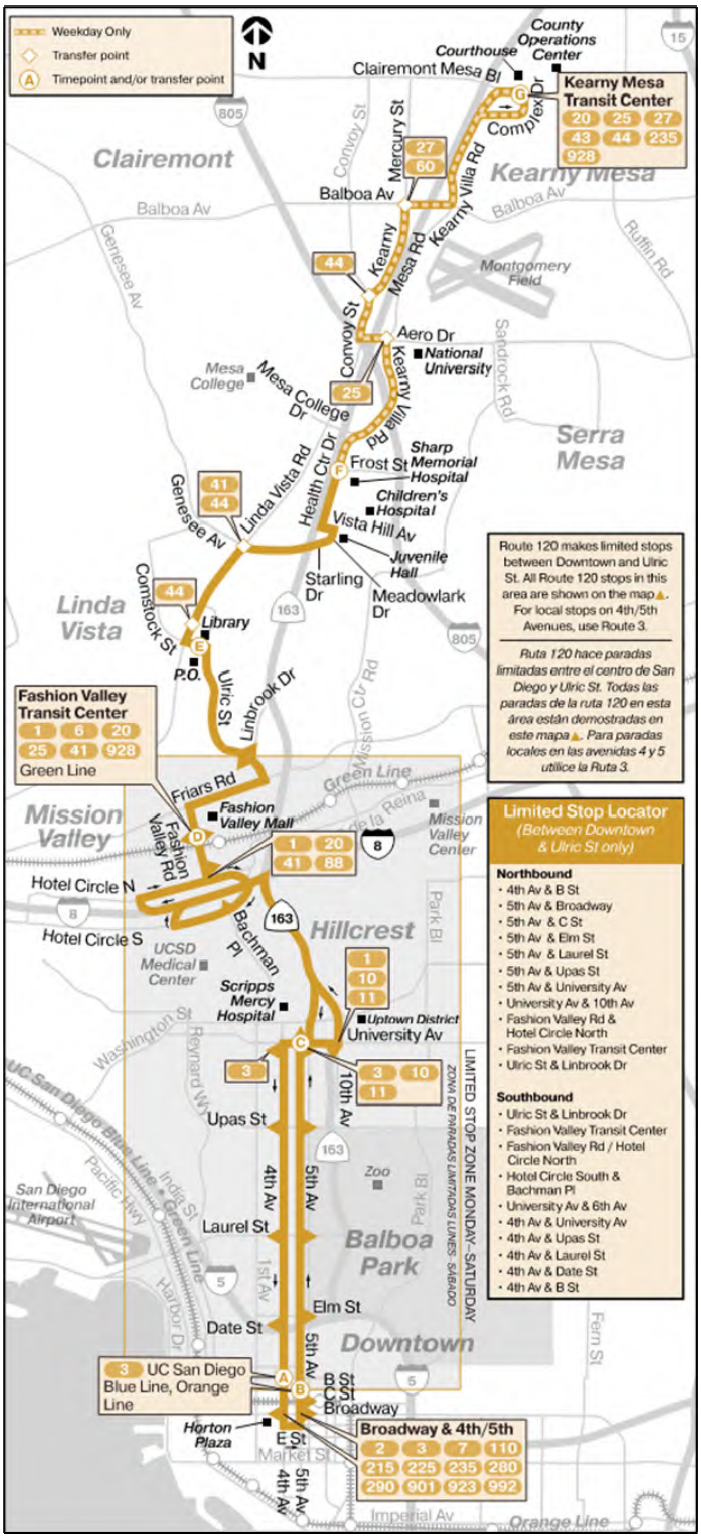
5.4 Existing Transit Mobility

The nearest bus stop is located approximately 0.2 miles from the Project site on the southwest corner at the Kearny Villa Road / Aero Drive intersection. Bus service is provided by the Metropolitan Transit System (MTS). The bus routes serving the immediate Project area include MTS Routes 25 and 120. A description of each route is provided below.

Route 25 runs between Fashion Valley Transit Center and Kearny Mesa Transit Center. The route runs along SR-163, Aero Drive and Clairemont Mesa Boulevard. Weekday service begins at 4:47 AM with 30-minute headway until 10:01 PM. This route does operate on the weekend. Saturday service begins at 6:30 AM with 1-hour headway until 9:29 PM. Sunday service begins at 8:30 AM with 1-hour headway until 6:28 PM.



Route 120 runs between Kearny Mesa Transit Center and 4th Avenue & B Street. The route runs along Kearny Villa Road, Linda Vista Road, Friars Road, and SR-163, 4th Avenue and 5th Avenue. Weekday service begins at 4:59 AM with 30-minute headway until 11:53 PM. This route does operate on the weekend. Saturday service begins at 5:45 AM with 30-minute headway until 10:29 PM. Sunday service begins at 6:13 AM with 1-hour headway until 9:59 PM.



6.0 TRIP GENERATION/DISTRIBUTION/ASSIGNMENT

The section below provides a detailed description of the Project's trip generation.

6.1 Project Trip Generation

As mentioned in *Section 2.0*, the site and its operations currently exist. The facility currently conducts daily daytime and nighttime instruction, with approximately 13 classes per week (1 to 2 per day). While multiple classes may occur concurrently, typically one class is in session at a time, with approximately 15 to 35 students and 1 to 2 instructors. The Project proposes to increase enrollment and the number of class sessions per week, with approximately 15 additional weekly (3 per day) sessions compared to existing conditions and an average of 23 students per class.

In order to determine the trip generation associated with the existing instructional facility, a 24-hour tube count was conducted on Tuesday, March 17, 2026, at the Project driveway while classes were in session. These data were used to evaluate typical weekday distribution (i.e., when traffic is generated throughout the day) and to estimate increases associated with expanded enrollment and additional sessions.

With the increase in enrollment and class frequency, a typical weekday scenario conservatively assumes three additional classes in a day, with a maximum of 35 students and two instructors per class. Under this scenario, total additional person trips are calculated as follows:

- Students = 3 classes x 35 students = 105 students
- Instructors = 3 classes x 2 instructors = 6 instructors
- Total = 111 additional persons on site equating to 222 ADT (assuming no carpooling)

As discussed in *Section 4.2*, majority of traffic generated by the Project occurs outside of the typical commuter peak periods of 7:00 – 9:00 AM and 4:00 – 6:00 PM. To remain conservative, trip generation assumes approximately 25% of the daily trips occur during the AM peak hour and 25% of the daily trips occur during the PM peak hour, even though existing traffic counts indicate that students and instructors typically arrive and depart outside of peak commuter periods. ***Table 6–1*** shows the Project trip generation. *Appendix B* includes the driveway counts.

Table 6–1 summarizes the Project's estimated trip generation. As shown in *Table 6–1*, the Project is expected to generate approximately 222 additional average daily trips with 60 additional trips during the AM peak hour (54 inbound/ 6 outbound trips) and 60 additional trips during the PM peak hour (54 inbound/ 6 outbound trips).

6.2 Project Trip Distribution/Assignment

The Project trip distribution was developed based on existing traffic patterns in the area, the site's accessibility on local roadways, and its proximity to state highways.

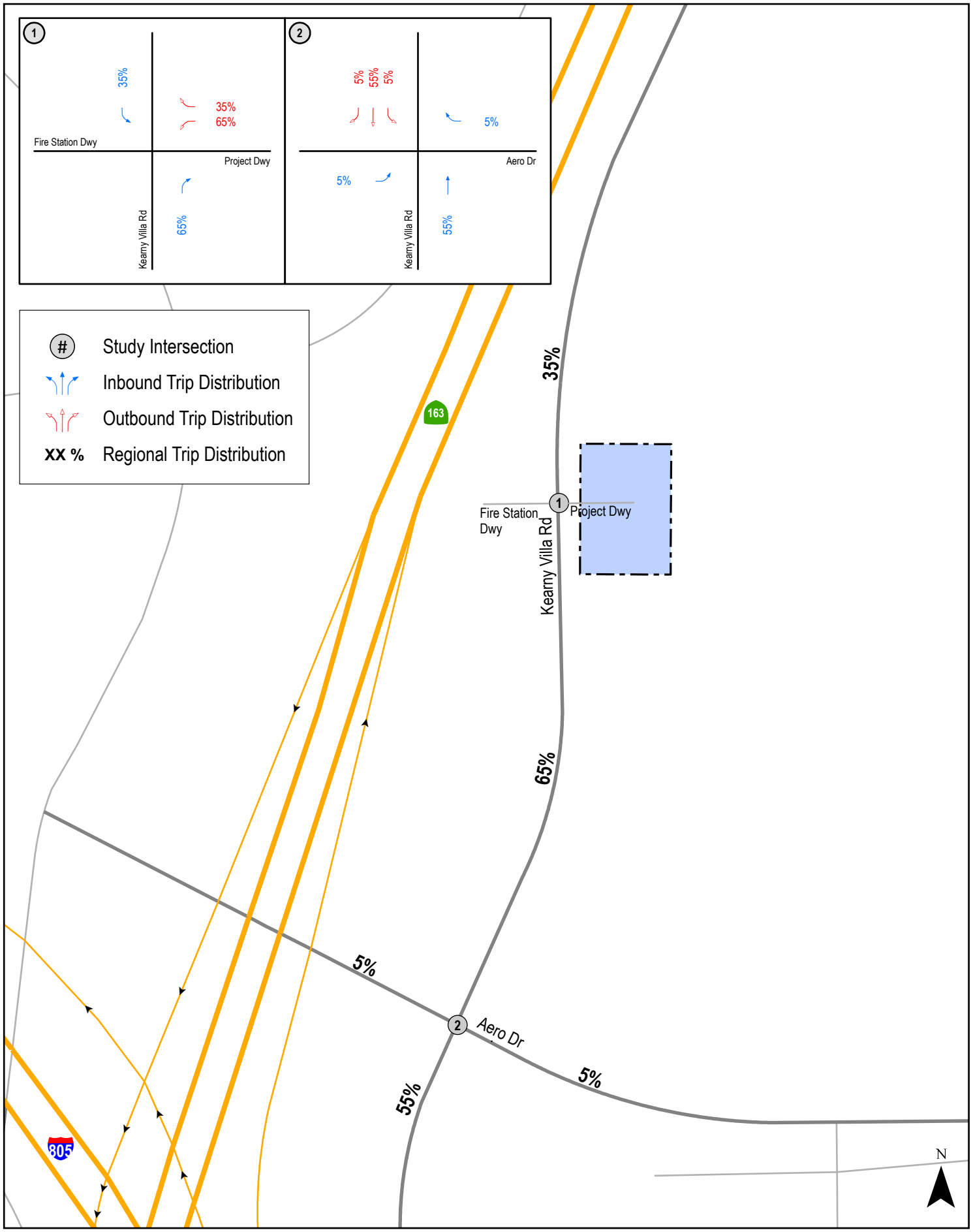
Figure 6–1 shows the Project traffic distribution percentages. ***Figure 6–2*** shows the Project traffic volumes.

TABLE 6–1
PROJECT TRIP GENERATION

Land Use	Volume	AM Peak Hour Volume			PM Peak Hour Volume		
		In	Out	Total	In	Out	Total
Aviation Instructional Center[a]	222	54	6	60	54	6	60

Footnotes:

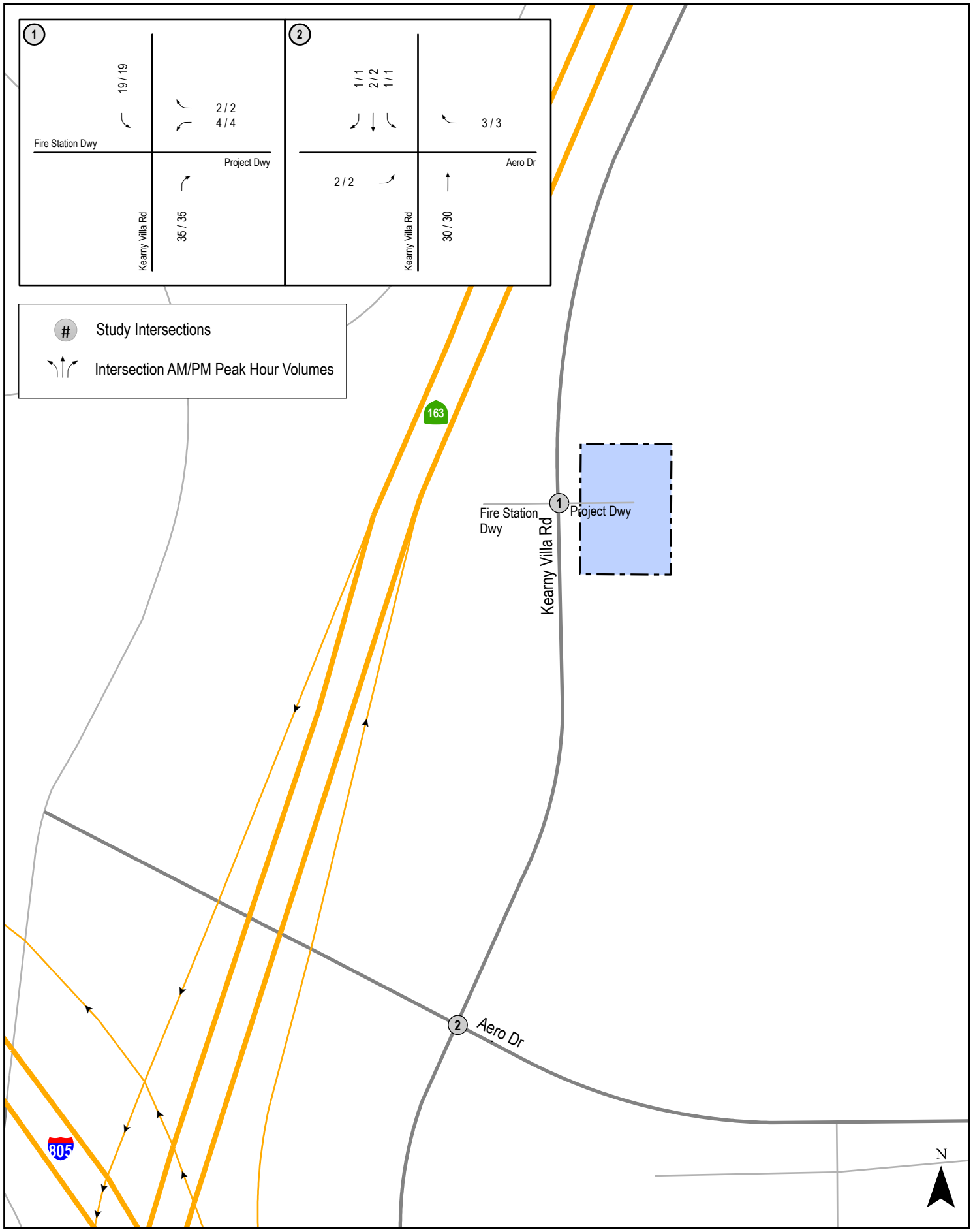
a. Per coordination with the applicant, the Project proposes to increase enrollment and the number of class sessions per week, with approximately 15 additional weekly (3 per day) sessions compared to existing conditions and an average of 23 students per class. To be conservation, the trip generation calculations for the ADT assumes three additional classes occurring concurrently. While the average class size was estimated at 25 students (midpoint of 15-35), a maximum of 35 students per class was assumed, plus 2 faculty members per class. To remain conservative, approximately 25% of the daily trips occur during the AM peak hour and 25% of the daily trips occur during the PM peak hour, even though existing traffic counts indicate that students and instructors typically arrive and depart outside of peak commuter periods.



N:\4190\Figure
Date: 4/10/2026

Figure 6-1
Project Traffic Distribution

Miramar College AIC Project



N:\4190\Figure
Date: 4/10/2026

Figure 6-2
Project Traffic Volumes

Miramar College AIC Project

7.0 OPENING YEAR 2028 ANALYSIS

The following section presents the analysis of study area locations under Opening Year conditions. Per discussion with the applicant, the Project is anticipated to open in Fall 2028.

In order to forecast near-term Cumulative traffic, LLG utilized a regional growth forecasting methodology. To determine an appropriate growth rate that accounts for ambient traffic increases, LLG compared existing traffic counts and future volumes from the San Diego Association of Governments (SANDAG) Transportation Forecast Information Center regional transportation model forecasts.

To calculate anticipated near-term growth rates on a location-specific basis, LLG reviewed SANDAG's 2025 ABM2+ and 2035 AMB2+ traffic model volumes. This review enabled LLG to calculate a growth factor percentage that represents traffic in the study area vicinity by the expected opening year of 2028. A factor of 2.0% per year was calculated and applied over a two-year period to replicate opening year volumes.

These growth rates were applied to existing traffic volumes to estimate cumulative volumes. These cumulative volumes were added to Existing volumes to determine Opening Year 2028 without Project volumes. The Project traffic volumes were then added to arrive at the Opening Year 2028 + Project scenario.

Figure 7–1 shows the Opening Year 2028 without Project traffic volumes. ***Figure 7–2*** shows the Opening Year 2028 + Project traffic volumes.

7.1 Opening Year 2028 without Project Peak Hour Intersection Operations

Table 7–1 summarizes the peak hour intersection operations for the Opening Year 2028 without Project conditions. As shown in *Table 7–1*, the Kearny Villa Road / Project driveway intersection is calculated to operate at LOS C during both the AM and PM peak hours, while the Kearny Villa Road / Aero Drive intersection is calculated to operate at LOS E during both the AM and PM peak hours.

Appendix E contains the intersection analysis worksheets for the Opening Year 2028 without Project scenario.

7.2 Opening Year 2028 + Project Conditions Peak Hour Intersection Operations

Table 7–1 summarizes the peak hour intersection operations for the Opening Year 2028 + Project condition. As shown in *Table 7–1*, with the addition of Project traffic, the Kearny Villa Road / Project driveway intersection is calculated to operate at LOS D during the AM and LOS D during the PM peak hour, while the Kearny Villa Road / Aero Drive intersection is calculated to operate at LOS E during both the AM and PM peak hours.

Appendix F contains the intersection analysis worksheets for the Opening Year 2028 + Project scenario.

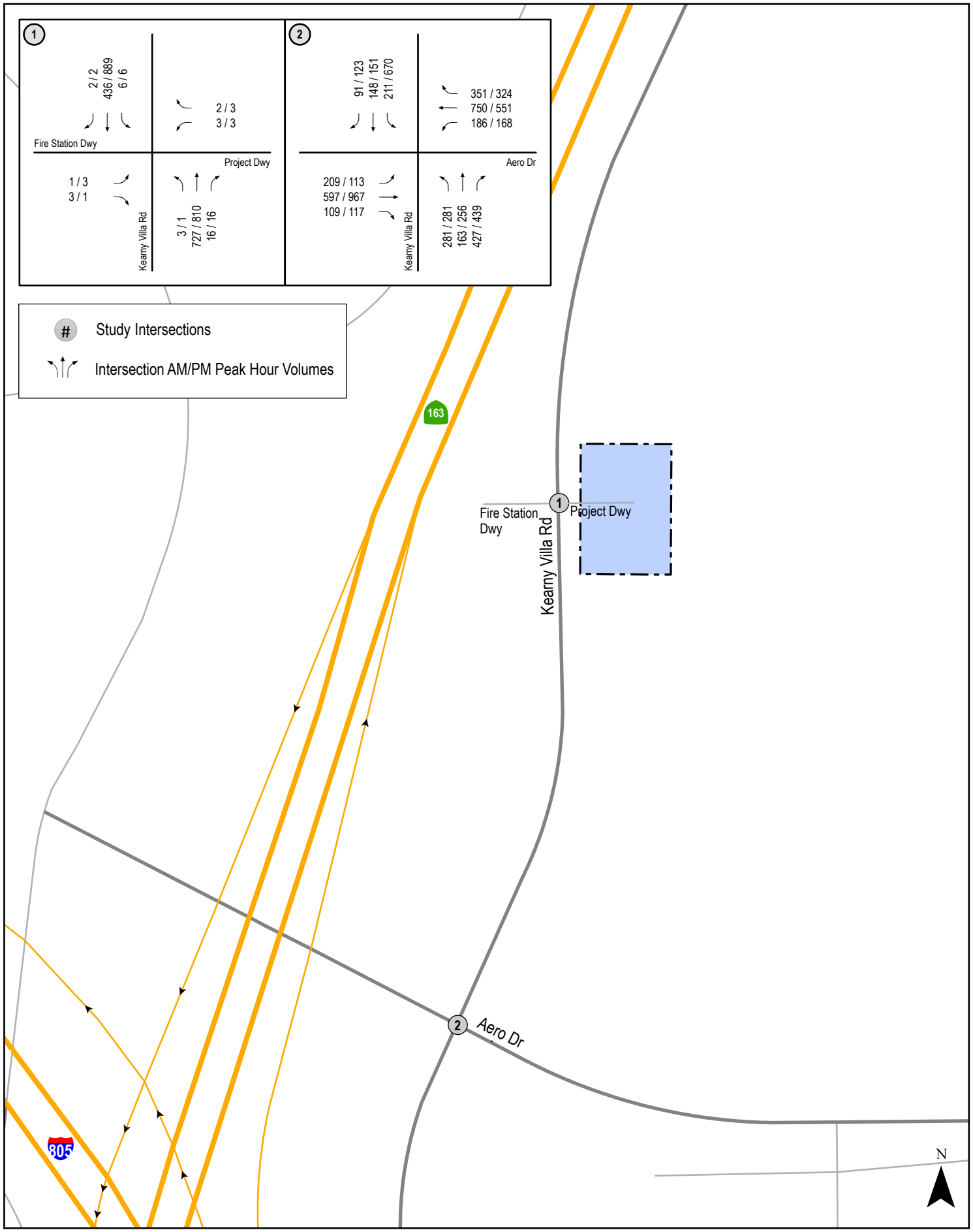
TABLE 7–1
OPENING YEAR 2028 INTERSECTION OPERATIONS

Intersection	Control Type	Peak Hour	Opening Year 2028		Opening Year 2028 + Project		Δ[c]
			Delay[a]	LOS[b]	Delay[a]	LOS[b]	
1. Kearny Villa Rd / Project Dwy	TWSC[d]	AM	23.2	C	27.4	D	4.2
		PM	16.7	C	19.3	C	2.6
2. Kearny Villa Rd / Aero Dr	Signal	AM	59.6	E	60.0	E	0.4
		PM	79.7	E	79.8	E	0.1

Footnotes:

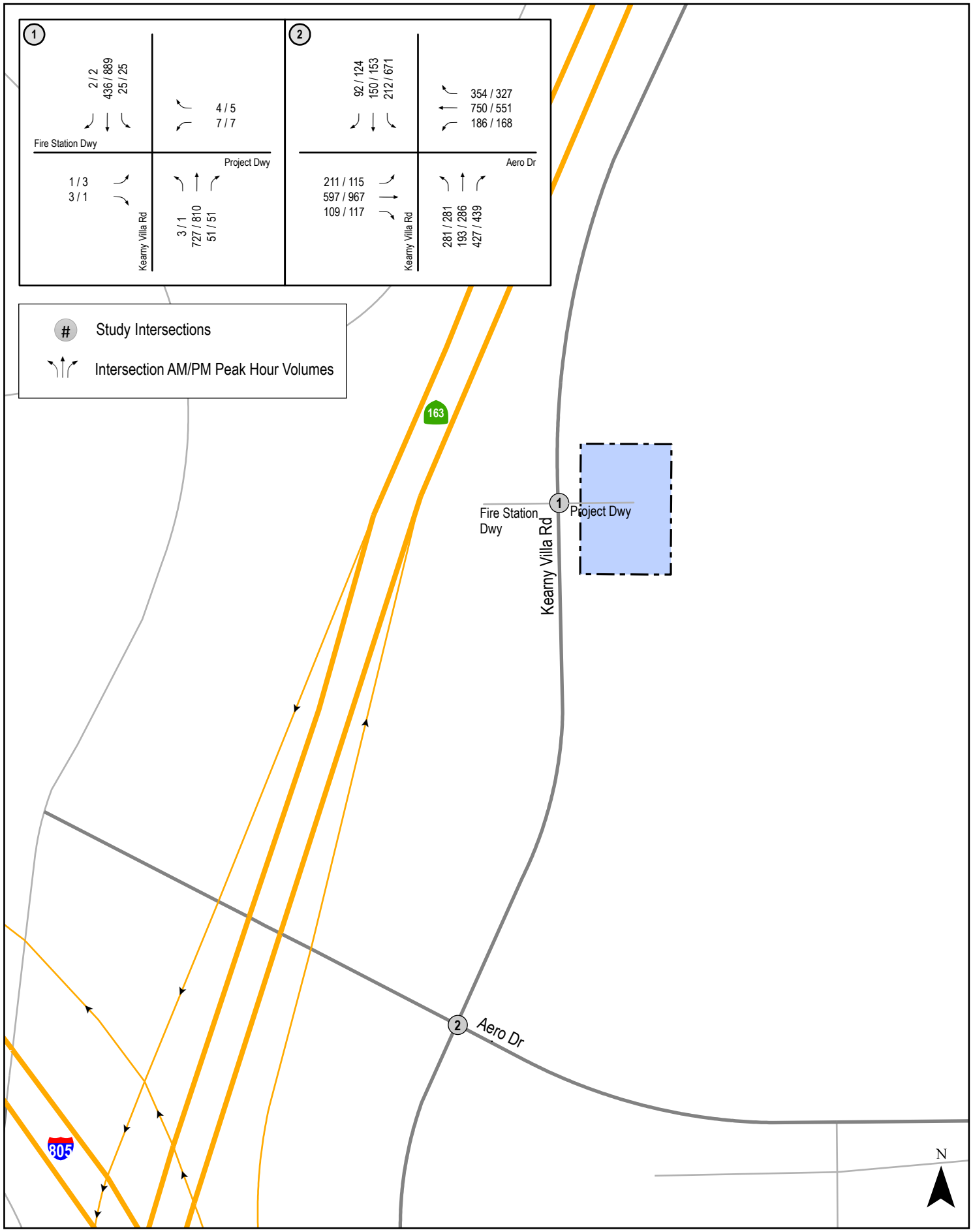
a. Average delay expressed in seconds per vehicle.
b. Level of Service
c. Δ denotes the project-induced increase in delay.
d. TWSC – Two-Way Stop Control. Westbound approach delay is reported, as the eastbound approach serves a fire station.

SIGNALIZED		UNSIGNALIZED	
DELAY/LOS THRESHOLDS		DELAY/LOS THRESHOLDS	
Delay	LOS	Delay	LOS
0.0 ≤ 10.0	A	0.0 ≤ 10.0	A
10.1 to 20.0	B	10.1 to 15.0	B
20.1 to 35.0	C	15.1 to 25.0	C
35.1 to 55.0	D	25.1 to 35.0	D
55.1 to 80.0	E	35.1 to 50.0	E
≥ 80.1	F	≥ 50.1	F



N:\4190\Figure
Date: 4/10/2026

Figure 7-1
Opening Year 2028 without Project Traffic Volumes



N:\4190\Figure
Date: 4/10/2026

Figure 7-2
Opening Year 2028 + Project Traffic Volumes

8.0 SITE ACCESS ASSESSMENT

As mentioned in *Section 2.1*, access to the site will continue to be provided from Kearny Villa Road via the existing airport gate that currently serves the instructional facility. This full-access driveway fronts Kearny Villa Road, which is a four-lane undivided roadway with a two-way left-turn lane. This access is calculated to operate at LOS D or better during both the AM and PM peak hours under all study scenarios, and therefore, no improvements are required.

9.0 CONCLUSIONS

The Project proposes to increase enrollment and the number of class sessions per week, with approximately 15 additional weekly sessions compared to existing conditions and an average of 23 students per class. Access to the site will continue to be provided from Kearny Villa Road via the existing airport gate that currently serves the instructional facility.

The Project is expected to generate approximately 222 additional average daily trips with 60 additional trips during the AM peak hour (54 inbound/ 6 outbound trips) and 60 additional trips during the PM peak hour (54 inbound/ 6 outbound trips).

The Kearny Villa Road / Project driveway intersection is calculated to operate acceptably during both the AM and PM peak hours, while the Kearny Villa Road / Aero Drive intersection is calculated to operate at LOS E during both the AM and PM peak hours, however, with less than half a second increase in delay. Therefore, no improvements are required

4542 Ruffner Street
Suite 100
San Diego, CA 92111
858.300.8800 T
www.llgengineers.com

Pasadena
Irvine
San Diego

TECHNICAL APPENDICES
SAN DIEGO MIRAMAR COLLEGE AVIATION INSTRUCTIONAL CENTER AT MONTGOMERY-GIBBS EXECUTIVE AIRPORT PROJECT

City of San Diego, California
July 1, 2026

LLG Ref. 3-26-4190

APPENDICES

APPENDIX

A. Intersection Methodology

B. Intersection Manual Count Sheets and Signal Timing Plans

C. Existing Intersection Analysis Calculation Sheets

D. Bus Route Schedules

E. Opening Year 2028 without Project Intersection Analysis Worksheets

F. Opening Year 2028 + Project Intersection Analysis Worksheets

APPENDIX A

INTERSECTION METHODOLOGY

SIGNALIZED INTERSECTIONS

For signalized intersections, level of service criteria are stated in terms of the average control delay per vehicle for a 15-minute analysis period. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. **Table 1** summarizes the delay thresholds for signalized intersections.

Level of service A describes operations with very low delay, (i.e. less than 10.0 seconds per vehicle). This occurs when progression is extremely favorable, and most vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay.

Level of service B describes operations with delay in the range 10.1 seconds and 20.0 seconds per vehicle. This generally occurs with good progression and/or short cycle lengths. More vehicles stop than for LOS A, causing higher levels of average delay.

TABLE 1

LEVEL OF SERVICE THRESHOLDS FOR SIGNALIZED INTERSECTIONS

AVERAGE CONTROL DELAY PER VEHICLE (SECONDS/VEHICLE)			LEVEL OF SERVICE
0.0	≤	10.0	A
10.1	to	20.0	B
21.1	to	35.0	C
35.1	to	55.0	D
55.1	to	80.0	E
	≥	80.0	F

Source: Highway Capacity Manual, 2000.

Level of service C describes operations with delay in the range 20.1 seconds and 35.0 seconds per vehicle. These higher delays may result from fair progression and/or longer cycle lengths. Individual cycle failures may begin to appear. The number of vehicles stopping is significant at this level, although many still pass through the intersection without stopping.

Level of service D describes operations with delay in the range 35.1 seconds and 55.0 seconds per vehicle. At level D, the influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or higher v/c ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are more frequent.

Level of service E describes operations with delay in the range of 55.1 seconds to 80.0 seconds per vehicle. This is considered to be the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths, and high v/c ratios. Individual cycle failures are frequent occurrences.

Level of service F describes operations with delay in excess of over 80.0 seconds per vehicle. This is considered to be unacceptable to most drivers. This condition often occurs with over-saturation (i.e., when arrival flow rates exceed the capacity of the intersection). It may also occur at high v/c ratios below 1.00 with many individual cycle failures. Poor progression and long cycle lengths may also be major contributing causes to such delay levels.

UNSIGNALIZED INTERSECTIONS

For unsignalized intersections, level of service is determined by the computed or measured control delay and is defined for each minor movement. Level of service is not defined for the intersection as a whole. **Table 2** depicts the criteria, which are based on the average control delay for any particular minor movement.

TABLE 2

LEVEL OF SERVICE THRESHOLDS FOR UNSIGNALIZED INTERSECTIONS

AVERAGE CONTROL DELAY PER VEHICLE (SECONDS/VEHICLE)	LEVEL OF SERVICE	EXPECTED DELAY TO MINOR STREET TRAFFIC
0.0 ≤ 10.0	A	Little or no delay
10.1 to 15.0	B	Short traffic delays
15.1 to 25.0	C	Average traffic delays
25.1 to 35.0	D	Long traffic delays
35.1 to 50.0	E	Very long traffic delays
≥ 50.0	F	Severe congestion

Source: Highway Capacity Manual, 2000.

Level of Service F exists when there are insufficient gaps of suitable size to allow a side street demand to safely cross through a major street traffic stream. This level of service is generally evident from extremely long control delays experienced by side-street traffic and by queuing on the minor-street approaches. The method, however, is based on a constant critical gap size; that is, the critical gap remains constant no matter how long the side-street motorist waits. LOS F may also appear in the form of side-street vehicles selecting smaller-than-usual gaps. In such cases, safety may be a problem, and some disruption to the major traffic stream may result. It is important to note that LOS F may not always result in long queues but may result in adjustments to normal gap acceptance behavior, which are more difficult to observe in the field than queuing.

APPENDIX B

INTERSECTION MANUAL COUNT SHEETS AND SIGNAL TIMING PLANS

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of San Diego
N/S: Kearny Villa Road
E/W: Driveways
Weather: Clear

File Name : SDG_KV_DW_AM
Site Code : 05726200
Start Date : 3/5/2026
Page No : 1

Groups Printed- Total Volume

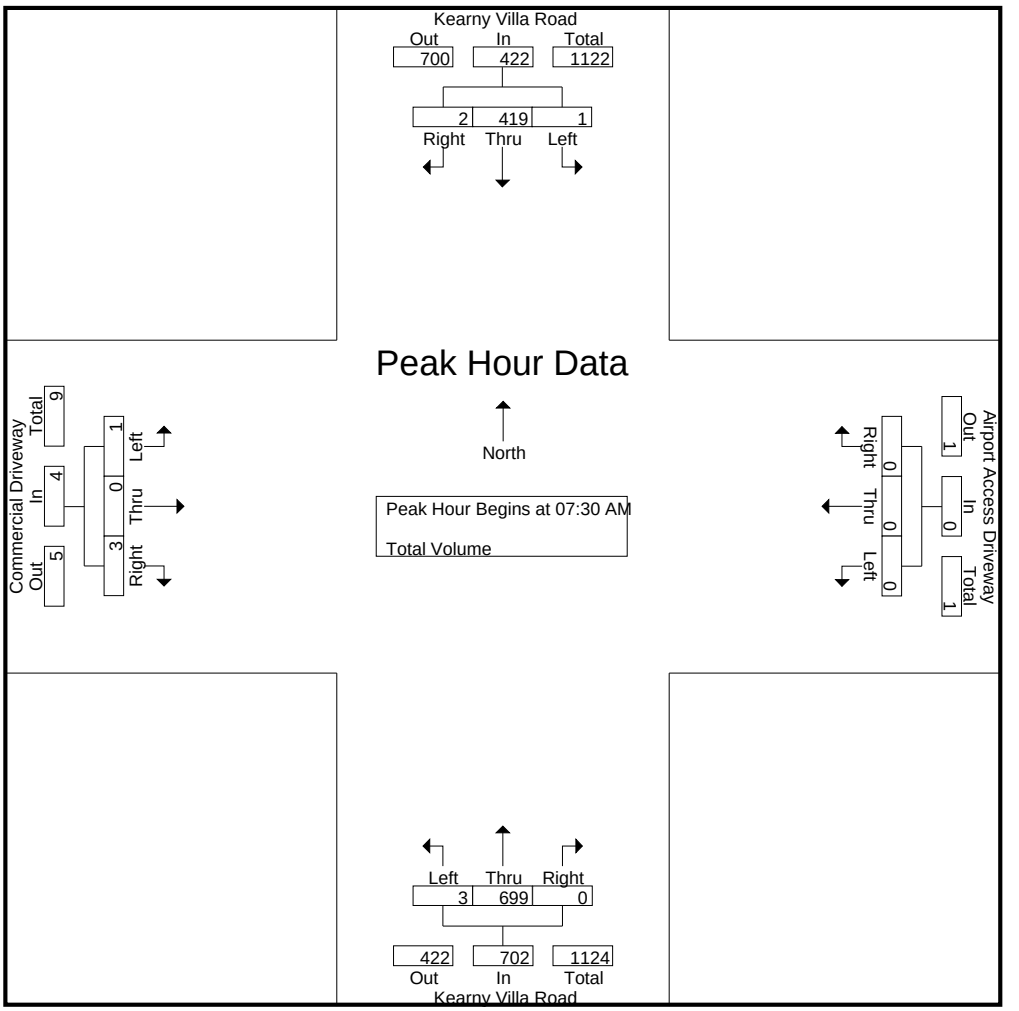
	Kearny Villa Road Southbound				Airport Access Driveway Westbound				Kearny Villa Road Northbound				Commercial Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	50	2	52	0	0	0	0	2	109	0	111	0	0	0	0	163
07:15 AM	0	52	5	57	0	0	0	0	0	131	0	131	3	0	0	3	191
07:30 AM	0	97	0	97	0	0	0	0	0	188	0	188	0	0	2	2	287
07:45 AM	1	94	0	95	0	0	0	0	1	209	0	210	0	0	0	0	305
Total	1	293	7	301	0	0	0	0	3	637	0	640	3	0	2	5	946
08:00 AM	0	119	1	120	0	0	0	0	1	154	0	155	1	0	1	2	277
08:15 AM	0	109	1	110	0	0	0	0	1	148	0	149	0	0	0	0	259
08:30 AM	0	97	1	98	0	0	0	0	1	180	0	181	0	0	0	0	279
08:45 AM	2	97	0	99	0	0	0	0	1	188	0	189	0	0	0	0	288
Total	2	422	3	427	0	0	0	0	4	670	0	674	1	0	1	2	1103
Grand Total	3	715	10	728	0	0	0	0	7	1307	0	1314	4	0	3	7	2049
Apprch %	0.4	98.2	1.4		0	0	0		0.5	99.5	0		57.1	0	42.9		
Total %	0.1	34.9	0.5	35.5	0	0	0	0	0.3	63.8	0	64.1	0.2	0	0.1	0.3	

	Kearny Villa Road Southbound				Airport Access Driveway Westbound				Kearny Villa Road Northbound				Commercial Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	97	0	97	0	0	0	0	0	188	0	188	0	0	**2**	**2**	287
07:45 AM	**1**	94	0	95	0	0	0	0	**1**	**209**	0	**210**	0	0	0	0	**305**
08:00 AM	0	**119**	**1**	**120**	0	0	0	0	1	154	0	155	**1**	0	1	2	277
08:15 AM	0	109	1	110	0	0	0	0	1	148	0	149	0	0	0	0	259
Total Volume	1	419	2	422	0	0	0	0	3	699	0	702	1	0	3	4	1128
% App. Total	0.2	99.3	0.5		0	0	0		0.4	99.6	0		25	0	75		
PHF	.250	.880	.500	.879	.000	.000	.000	.000	.750	.836	.000	.836	.250	.000	.375	.500	.925

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of San Diego
N/S: Kearny Villa Road
E/W: Driveways
Weather: Clear

File Name : SDG_KV_DW_AM
Site Code : 05726200
Start Date : 3/5/2026
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				07:00 AM				07:30 AM				07:15 AM			
+0 mins.	0	**119**	**1**	**120**	0	0	0	0	0	188	0	188	**3**	0	0	**3**
+15 mins.	0	109	1	110	0	0	0	0	**1**	**209**	0	**210**	0	0	**2**	2
+30 mins.	0	97	1	98	0	0	0	0	1	154	0	155	0	0	0	0
+45 mins.	**2**	97	0	99	0	0	0	0	1	148	0	149	1	0	1	2
Total Volume	2	422	3	427	0	0	0	0	3	699	0	702	4	0	3	7
% App. Total	0.5	98.8	0.7		0	0	0		0.4	99.6	0		57.1	0	42.9	
PHF	.250	.887	.750	.890	.000	.000	.000	.000	.750	.836	.000	.836	.333	.000	.375	.583

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of San Diego
N/S: Kearny Villa Road
E/W: Driveways
Weather: Clear

File Name : SDG_KV_DW_PM
Site Code : 05726200
Start Date : 3/5/2026
Page No : 1

Groups Printed- Total Volume

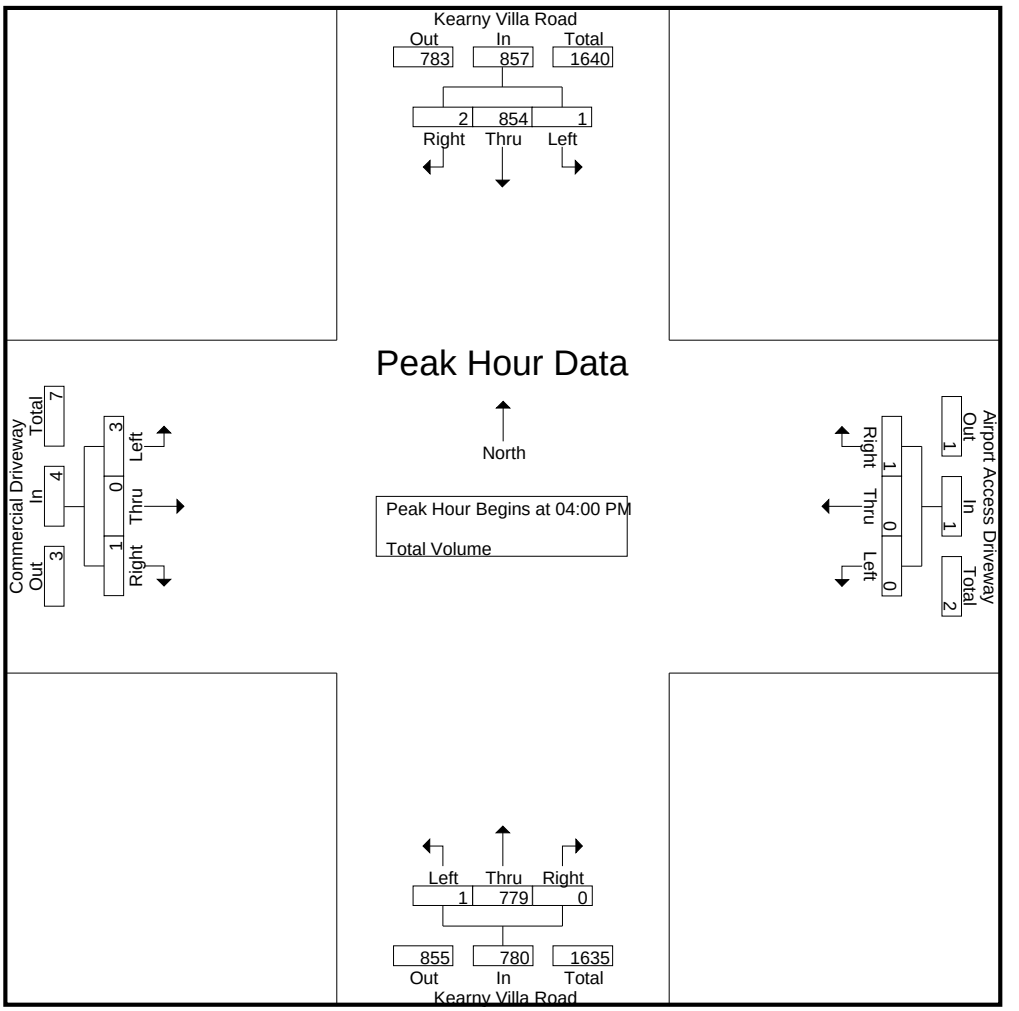
	Kearny Villa Road Southbound				Airport Access Driveway Westbound				Kearny Villa Road Northbound				Commercial Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	1	212	1	214	0	0	1	1	0	218	0	218	3	0	0	3	436
04:15 PM	0	210	1	211	0	0	0	0	1	173	0	174	0	0	0	0	385
04:30 PM	0	242	0	242	0	0	0	0	0	204	0	204	0	0	0	0	446
04:45 PM	0	190	0	190	0	0	0	0	0	184	0	184	0	0	1	1	375
Total	1	854	2	857	0	0	1	1	1	779	0	780	3	0	1	4	1642
05:00 PM	0	219	1	220	0	0	0	0	0	174	0	174	0	0	0	0	394
05:15 PM	0	241	1	242	0	0	1	1	0	137	0	137	0	0	0	0	380
05:30 PM	0	166	0	166	0	0	0	0	0	137	0	137	0	0	0	0	303
05:45 PM	0	169	0	169	1	0	1	2	0	127	0	127	0	0	1	1	299
Total	0	795	2	797	1	0	2	3	0	575	0	575	0	0	1	1	1376
Grand Total	1	1649	4	1654	1	0	3	4	1	1354	0	1355	3	0	2	5	3018
Apprch %	0.1	99.7	0.2		25	0	75		0.1	99.9	0		60	0	40		
Total %	0	54.6	0.1	54.8	0	0	0.1	0.1	0	44.9	0	44.9	0.1	0	0.1	0.2	

	Kearny Villa Road Southbound				Airport Access Driveway Westbound				Kearny Villa Road Northbound				Commercial Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	**1**	212	**1**	214	0	0	**1**	**1**	0	**218**	0	**218**	**3**	0	0	**3**	436
04:15 PM	0	210	1	211	0	0	0	0	**1**	173	0	174	0	0	0	0	385
04:30 PM	0	**242**	0	**242**	0	0	0	0	0	204	0	204	0	0	0	0	**446**
04:45 PM	0	190	0	190	0	0	0	0	0	184	0	184	0	0	**1**	1	375
Total Volume	1	854	2	857	0	0	1	1	1	779	0	780	3	0	1	4	1642
% App. Total	0.1	99.6	0.2		0	0	100		0.1	99.9	0		75	0	25		
PHF	.250	.882	.500	.885	.000	.000	.250	.250	.250	.893	.000	.894	.250	.000	.250	.333	.920

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of San Diego
N/S: Kearny Villa Road
E/W: Driveways
Weather: Clear

File Name : SDG_KV_DW_PM
Site Code : 05726200
Start Date : 3/5/2026
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM				05:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	**242**	0	**242**	0	0	0	0	0	**218**	0	**218**	**3**	0	0	**3**
+15 mins.	0	190	0	190	0	0	**1**	1	**1**	173	0	174	0	0	0	0
+30 mins.	0	219	**1**	220	0	0	0	0	0	204	0	204	0	0	0	0
+45 mins.	0	241	1	242	**1**	0	1	**2**	0	184	0	184	0	0	**1**	1
Total Volume	0	892	2	894	1	0	2	3	1	779	0	780	3	0	1	4
% App. Total	0	99.8	0.2		33.3	0	66.7		0.1	99.9	0		75	0	25	
PHF	.000	.921	.500	.924	.250	.000	.500	.375	.250	.893	.000	.894	.250	.000	.250	.333

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of San Diego
N/S: Kearny Villa Road
E/W: Aero Drive
Weather: Clear

File Name : SDG_KV_Aero AM
Site Code : 05726178
Start Date : 2/24/2026
Page No : 1

Groups Printed- Total Volume

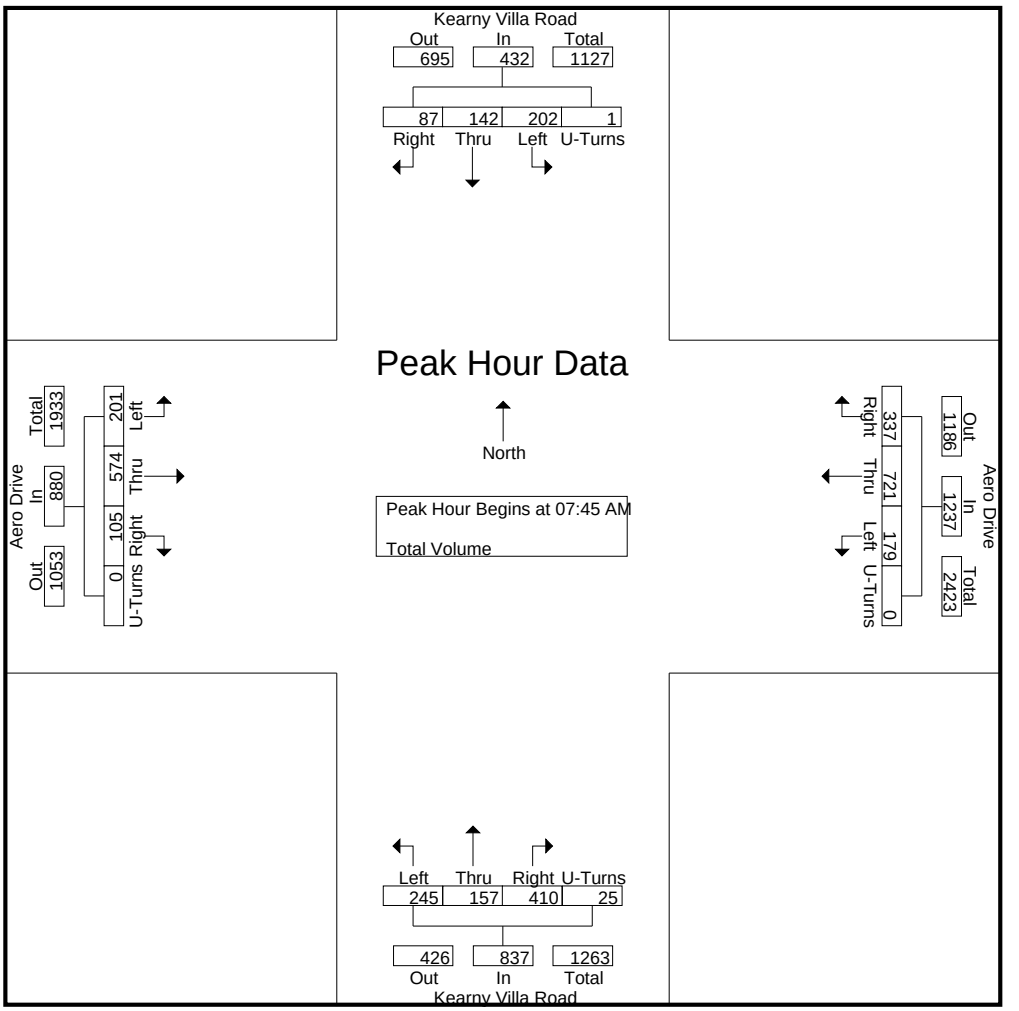
	Kearny Villa Road Southbound					Aero Drive Westbound					Kearny Villa Road Northbound					Aero Drive Eastbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
07:00 AM	18	19	5	0	42	36	82	70	0	188	60	27	54	4	145	34	57	22	0	113	488
07:15 AM	26	32	8	0	66	33	97	83	0	213	55	30	70	11	166	46	83	29	0	158	603
07:30 AM	36	32	10	0	78	42	157	97	0	296	48	35	72	12	167	58	105	28	1	192	733
07:45 AM	55	44	24	1	124	46	178	97	0	321	59	37	98	7	201	61	133	27	0	221	867
Total	135	127	47	1	310	157	514	347	0	1018	222	129	294	34	679	199	378	106	1	684	2691
08:00 AM	51	31	20	0	102	51	192	85	0	328	48	33	99	5	185	41	153	24	0	218	833
08:15 AM	35	30	17	0	82	46	189	80	0	315	68	36	101	2	207	48	158	37	0	243	847
08:30 AM	61	37	26	0	124	36	162	75	0	273	70	51	112	11	244	51	130	17	0	198	839
08:45 AM	37	29	18	0	84	37	146	81	0	264	69	33	92	10	204	49	147	21	1	218	770
Total	184	127	81	0	392	170	689	321	0	1180	255	153	404	28	840	189	588	99	1	877	3289
Grand Total	319	254	128	1	702	327	1203	668	0	2198	477	282	698	62	1519	388	966	205	2	1561	5980
Apprch %	45.4	36.2	18.2	0.1		14.9	54.7	30.4	0		31.4	18.6	46	4.1		24.9	61.9	13.1	0.1		
Total %	5.3	4.2	2.1	0	11.7	5.5	20.1	11.2	0	36.8	8	4.7	11.7	1	25.4	6.5	16.2	3.4	0	26.1	

	Kearny Villa Road Southbound					Aero Drive Westbound					Kearny Villa Road Northbound					Aero Drive Eastbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	55	**44**	24	**1**	**124**	46	178	**97**	0	321	59	37	98	7	201	**61**	133	27	0	221	**867**
08:00 AM	51	31	20	0	102	**51**	**192**	85	0	**328**	48	33	99	5	185	41	153	24	0	218	833
08:15 AM	35	30	17	0	82	46	189	80	0	315	68	36	101	2	207	48	**158**	**37**	0	**243**	847
08:30 AM	**61**	37	**26**	0	124	36	162	75	0	273	**70**	**51**	**112**	**11**	**244**	51	130	17	0	198	839
Total Volume	202	142	87	1	432	179	721	337	0	1237	245	157	410	25	837	201	574	105	0	880	3386
% App. Total	46.8	32.9	20.1	0.2		14.5	58.3	27.2	0		29.3	18.8	49	3		22.8	65.2	11.9	0		
PHF	.828	.807	.837	.250	.871	.877	.939	.869	.000	.943	.875	.770	.915	.568	.858	.824	.908	.709	.000	.905	.976

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of San Diego
N/S: Kearny Villa Road
E/W: Aero Drive
Weather: Clear

File Name : SDG_KV_Aero AM
Site Code : 05726178
Start Date : 2/24/2026
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:45 AM					07:30 AM					08:00 AM					07:45 AM				
+0 mins.	55	**44**	24	**1**	**124**	42	157	**97**	0	296	48	33	99	5	185	**61**	133	27	0	221
+15 mins.	51	31	20	0	102	46	178	97	0	321	68	36	101	2	207	41	153	24	0	218
+30 mins.	35	30	17	0	82	**51**	**192**	85	0	**328**	**70**	**51**	**112**	**11**	**244**	48	**158**	**37**	0	**243**
+45 mins.	**61**	37	**26**	0	124	46	189	80	0	315	69	33	92	10	204	51	130	17	0	198
Total Volume	202	142	87	1	432	185	716	359	0	1260	255	153	404	28	840	201	574	105	0	880
% App. Total	46.8	32.9	20.1	0.2		14.7	56.8	28.5	0		30.4	18.2	48.1	3.3		22.8	65.2	11.9	0	
PHF	.828	.807	.837	.250	.871	.907	.932	.925	.000	.960	.911	.750	.902	.636	.861	.824	.908	.709	.000	.905

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of San Diego
N/S: Kearny Villa Road
E/W: Aero Drive
Weather: Clear

File Name : SDG_KV_Aero PM
Site Code : 05726178
Start Date : 2/24/2026
Page No : 1

Groups Printed- Total Volume

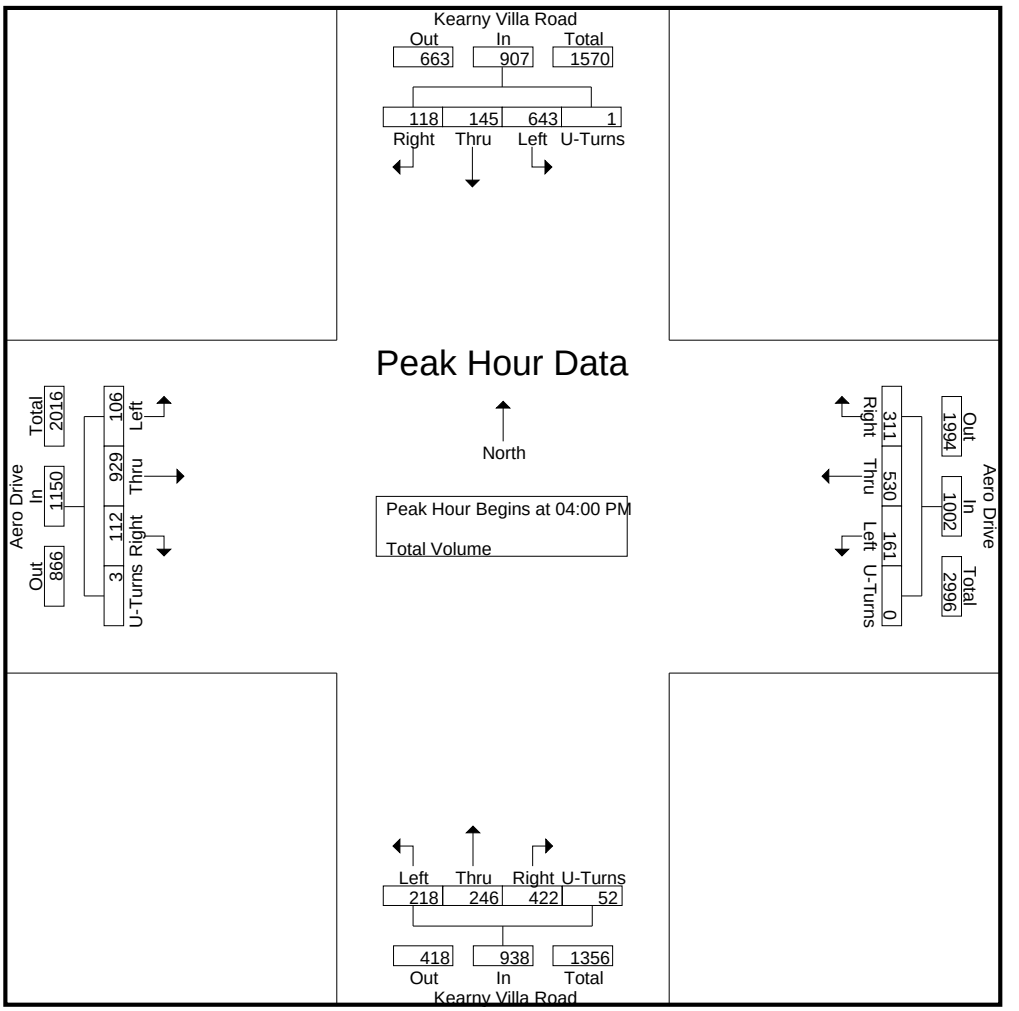
	Kearny Villa Road Southbound					Aero Drive Westbound					Kearny Villa Road Northbound					Aero Drive Eastbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
04:00 PM	127	45	36	1	209	60	122	70	0	252	62	72	113	19	266	28	222	32	1	283	1010
04:15 PM	169	31	24	0	224	30	125	77	0	232	53	61	102	10	226	28	274	31	0	333	1015
04:30 PM	181	33	24	0	238	31	132	86	0	249	59	74	95	16	244	20	190	21	0	231	962
04:45 PM	166	36	34	0	236	40	151	78	0	269	44	39	112	7	202	30	243	28	2	303	1010
Total	643	145	118	1	907	161	530	311	0	1002	218	246	422	52	938	106	929	112	3	1150	3997
05:00 PM	162	35	29	1	227	50	159	92	0	301	42	56	85	12	195	32	215	32	0	279	1002
05:15 PM	149	66	28	0	243	28	125	74	0	227	46	45	74	10	175	31	268	45	0	344	989
05:30 PM	157	53	24	0	234	44	114	74	0	232	49	38	75	9	171	34	243	44	2	323	960
05:45 PM	107	41	25	1	174	31	106	56	0	193	44	39	78	6	167	36	241	35	0	312	846
Total	575	195	106	2	878	153	504	296	0	953	181	178	312	37	708	133	967	156	2	1258	3797
Grand Total	1218	340	224	3	1785	314	1034	607	0	1955	399	424	734	89	1646	239	1896	268	5	2408	7794
Apprch %	68.2	19	12.5	0.2		16.1	52.9	31	0		24.2	25.8	44.6	5.4		9.9	78.7	11.1	0.2		
Total %	15.6	4.4	2.9	0	22.9	4	13.3	7.8	0	25.1	5.1	5.4	9.4	1.1	21.1	3.1	24.3	3.4	0.1	30.9	

	Kearny Villa Road Southbound					Aero Drive Westbound					Kearny Villa Road Northbound					Aero Drive Eastbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	127	**45**	**36**	**1**	209	**60**	122	70	0	252	**62**	72	**113**	**19**	**266**	28	222	**32**	1	283	1010
04:15 PM	169	31	24	0	224	30	125	77	0	232	53	61	102	10	226	28	**274**	31	0	**333**	**1015**
04:30 PM	**181**	33	24	0	**238**	31	132	**86**	0	249	59	**74**	95	16	244	20	190	21	0	231	962
04:45 PM	166	36	34	0	236	40	**151**	78	0	**269**	44	39	112	7	202	**30**	243	28	**2**	303	1010
Total Volume	643	145	118	1	907	161	530	311	0	1002	218	246	422	52	938	106	929	112	3	1150	3997
% App. Total	70.9	16	13	0.1		16.1	52.9	31	0		23.2	26.2	45	5.5		9.2	80.8	9.7	0.3		
PHF	.888	.806	.819	.250	.953	.671	.877	.904	.000	.931	.879	.831	.934	.684	.882	.883	.848	.875	.375	.863	.984

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of San Diego
N/S: Kearny Villa Road
E/W: Aero Drive
Weather: Clear

File Name : SDG_KV_Aero PM
Site Code : 05726178
Start Date : 2/24/2026
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM					04:15 PM					04:00 PM					05:00 PM				
+0 mins.	**181**	33	24	0	238	30	125	77	0	232	**62**	72	**113**	**19**	**266**	32	215	32	0	279
+15 mins.	166	36	**34**	0	236	31	132	86	0	249	53	61	102	10	226	31	**268**	**45**	0	**344**
+30 mins.	162	35	29	**1**	227	40	151	78	0	269	59	**74**	95	16	244	34	243	44	**2**	323
+45 mins.	149	**66**	28	0	**243**	**50**	**159**	**92**	0	**301**	44	39	112	7	202	**36**	241	35	0	312
Total Volume	658	170	115	1	944	151	567	333	0	1051	218	246	422	52	938	133	967	156	2	1258
% App. Total	69.7	18	12.2	0.1		14.4	53.9	31.7	0		23.2	26.2	45	5.5		10.6	76.9	12.4	0.2	
PHF	.909	.644	.846	.250	.971	.755	.892	.905	.000	.873	.879	.831	.934	.684	.882	.924	.902	.867	.250	.914

Counts Unlimited, Inc.

PO Box 1178
Corona, CA 92878
Phone: 951-268-6268
email: counts@countsunlimited.com

City of San Diego
Airport Driveway
E/ Kearny Villa Road
24 Hour Directional Volume Count

SDG001
Site Code: 057-26200
Date Start: 3/17/26

Start Time	3/17/26 Tue	Eastbound Morning	Eastbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Westbound Morning	Westbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		0	**0**			0	0				
12:15		0	**0**			0	1				
12:30		0	**0**			0	**0**				
12:45		0	**1**	0	1	0	**0**	0	1	0	2
01:00		0	0			0	**16**				
01:15		0	0			0	**6**				
01:30		0	0			0	0				
01:45		0	1	0	1	0	0	0	22	0	23
02:00		0	0			0	1				
02:15		0	0			0	1				
02:30		0	0			0	0				
02:45		0	1	0	1	0	0	0	2	0	3
03:00		0	0			0	0				
03:15		0	0			0	0				
03:30		0	0			0	0				
03:45		0	1	0	1	0	0	0	0	0	1
04:00		0	0			0	0				
04:15		0	0			0	0				
04:30		0	0			0	0				
04:45		0	0	0	0	0	0	0	0	0	0
05:00		1	0			0	0				
05:15		0	0			0	1				
05:30		0	0			0	0				
05:45		0	0	1	0	0	2	0	3	1	3
06:00		**0**	0			0	0				
06:15		**3**	0			0	0				
06:30		**9**	0			0	0				
06:45		**10**	0	22	0	1	0	1	0	23	0
07:00		0	0			0	0				
07:15		0	0			0	0				
07:30		0	0			0	0				
07:45		1	0	1	0	0	0	0	0	1	0
08:00		0	0			0	0				
08:15		0	0			0	0				
08:30		0	0			0	0				
08:45		2	0	2	0	0	0	0	0	2	0
09:00		0	0			0	0				
09:15		2	1			0	1				
09:30		0	0			**9**	0				
09:45		3	0	5	1	**3**	0	12	1	17	2
10:00		1	0			**2**	0				
10:15		0	0			**7**	0				
10:30		0	0			1	0				
10:45		0	0	1	0	0	0	10	0	11	0
11:00		0	0			0	0				
11:15		1	0			1	0				
11:30		1	0			0	0				
11:45		1	0	3	0	0	0	1	0	4	0
Total		35	5	35	5	24	29	24	29	59	34
Combined Total		40		40		53		53		93	
AM Peak	-	06:00	-	-	-	09:30	-	-	-	-	-
Vol.	-	22	-	-	-	21	-	-	-	-	-
P.H.F.		0.550				0.583					
PM Peak	-	-	12:00	-	-	-	00:30	-	-	-	-
Vol.	-	-	1	-	-	-	22	-	-	-	-
P.H.F.			0.250				0.344				
Percentage		87.5%	12.5%			45.3%	54.7%				
ADT/AADT		ADT 93		AADT 93							

INTERSECTION: AERO & KEARNY VILLA

Group Assignment: 4019
Field Master Assignment: NONE

Street Name: KEARNY VILLA
...W Street Name: AERO

Last Database Change: 0 ...01 15:35
Timing Sheet By: MMH
Approved By: MM
System Ref. Number: 112
Drawing Number: 27602-5-D
Timing Implemented On: 11/5/01

Row	Column # ---->	AERO DR.		KEARNY VILLA RD.		AERO DR.		KEARNY VILLA RD.	
	Phase # ---->	1	2	3	4	5	6	7	8
		OPLA1+8							
0	Ped Walk		7		7		7		7
1	Ped FDW		26		22		24		33
2	Min Green	4	7	4	7	4	7	4	7
3	Type 3 Limit								
4	Add/Veh								
5	Veh Extn	2.0	2.3	2.0	2.6	2.0	5.0	2.0	3.1
6	Max Gap	2.0	2.3	2.0	2.6	2.0	5.0	2.0	3.1
7	Min Gap	2.0	0.2	2.0	0.2	2.0	0.2	2.0	0.2
8	Max Limit	30	40	30	40	30	40	30	40
9	Max Limit 2								
A	Bus Adv								
B	Call to Phs								
C	Reduce By		0.1		0.1		0.1		0.1
D	Every		1.4		1.2		0.6		1.0
E	Yellow	3.0	4.3	3.0	5.0	3.0	4.3	3.0	4.7
F	Red Clear	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

Phase Timing - Bank 1 <F Page>
F + Phase + Row

	E
RR-1 Delay	
RR-1 Clear	
EV-A Delay	0
EV-A Clear	0
EV-B Delay	0
EV-B Clear	0
EV-C Delay	0
EV-C Clear	0
EV-D Delay	0
EV-D Clear	0
RR-2 Delay	
RR-2 Clear	
View EV Delay	---
View EV Clear	---
View RR Delay	---
View RR Clear	---

Preempt Timing
F + E + Row

	F	Row
Permit	12345678	0
Red Lock		1
Yellow Lock		2
Min Recall		3
Ped Recall		4
Peds (View)	_2_4_6_8	5
Rest In Walk		6
Red Rest		7
Dbl Entry		8
Max Recall		9
Soft Recall	_2___6__	A
Max 2		B
Cond Serv		C
Ped Lock	12345678	D
Yellow Start	_2___6__	E
1st Phases	__3___7_	F

Phase Functions <F Page>
F + F + Row

Max Initial	0
Red Revert	5.0
All Red Start	0.0

F + 0 + E
F + 0 + F
F + C + O

Start / Revert Times

Drop Number	11
Zone Number	11
Area Number	5
Area Address	33
QuicNet Channel	DIGI34:

C + 0 + 0
C + 0 + 1
C + 0 + 2
C + 0 + 3
(QuicNet)

Communication Addresses

Overlap Timing

	Row	9 Green Clear	C Yellow Change	D Red Clear	0 Load-Switch #
Overlap A	A				
Overlap B	B				
Overlap C	C				
Overlap D	D				

<F Page>
F + COLOR +

<D Page>
D + 0 + OVERLAP

Manual Plan	14	C + A + 1
Manual Offset	0	C + B + 1

Manual Selection

Manual Plan
0 = Automatic
1-9 = Plan 1-9
14 = Free
15 = Flash

Manual Offset
0 = Automatic
1 = Offset A
2 = Offset B
3 = Offset C

C + F + O	F	Row
Free Lag	_2_4_6_8	0

Lag Phases <C Page>

Downtime Flash	255	(minutes)

Downtime Before Auto Manual Flash
F + 0 +8

Disable Ports	_234____

Disable Communication Ports
D + D + 9

Row	Time	Function	Day of Week	Column F Phases/Bits
0	:			
1	:			
2	:			
3	:			
4	:			
5	:			
6	:			
7	:			
8	:			
9	:			
A	:			
B	:			
C	:			
D	:			
E	:			
F	:			

TOD Function

7 + ROW

<C Page>

C + F + ROW

T.O.D. Functions
0 = Permitted Phases
1 = Rod Lock
2 = Yellow Lock
3 = Veh Min Recall
4 = Ped Recall
5 =
6 = Rest In Walk
7 = Red Rest
8 = Double Entry
9 = Veh Max Recall
A = Veh Soft Recall
B = Maximum 2
C = Conditional Service
D = Free Lag Phases
E = Bit 1 - Local Override
Bit 2 - Phase Bank 2
Bit 3 - Phase Bank 3
Bit 4 - Disable Detector OFF Monitor
Bit 7 - Detector Count Monitor
Bit 8 - Real Time Split Monitor
F = Output Bits 1 thru 4

Row		F
0		
1	RR Overlap A - Phases	
2	RR Overlap B - Phases	
3	RR Overlap C - Phases	
4	RR Overlap D - Phases	
5	Ped 2P	2
6	Ped 6P	6
7	Ped 4P	4
8	Ped 8P	8
9	Yellow Flash Phases	
A	Overlap A - Phases	1 8
B	Overlap B - Phases	
C	Overlap C - Phases	
D	Overlap D - Phases	
E	Restricted Phases	
F	Assign 5 Outputs	1

Configuration <E Page>

E + F + ROW

Row		E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Overlap A - Green Omit	8
6	Overlap B - Green Omit	
7	Overlap C - Green Omit	
8	Overlap D - Green Omit	
9	Overlap Yellow Flash	
A	EV-A Phases	2 5
B	EV-B Phases	4 7
C	EV-C Phases	1 6
D	EV-D Phases	3 8
E	Extra 1 Config. Bits	1 345
F	IC Select (Interconnect)	2

Configuration

For access, set F + 9 + E = 1

E + E + ROW

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 = Remote Download
6 = Special Event
7 = Pretimed Operation
8 = Split Ring Operation

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

Day of Week

1 = Sunday
2 = Monday
3 = Tuesday
4 = Wednesday
5 = Thursday
6 = Friday
7 = Saturday

Assign 5 Outputs
1 = Right Turn Overlap
2 = TOD Outputs
3 = EV Beacon - Steady
4 = EV Beacon - Flashing
5 = Special Event Outputs
6 = Phase 3 & 7 Ped
7 = Advanced Warning Sign
8 =

Time and Date

8-0 Hour, Minute, Day-of-Week

8-1 Day-of-Month, Year, Month

8-F Seconds

Disable Parity	0	D+B+0

Dial-Up Telephone Communications

(If set to a non-zero value, parity will be disabled)

Program Information

C + C + 0 = program

C + C + F = version

Remote Download

C + 0 + 4 = 1 -255

w/ E + E + E bit 5 on

Row	1 Delay	3 Carry-over
0		
1		1.8
2		
3		
4		
5		
6		
7		1.8
8		
9		
A		
B		
C		
D		
E	---	---
F	---	---

Detector Name	332 Input File	Detector Number
	1I1	14
	2I2U	1
	2I2L	5
	2I3U	21
	2I3L	25
	2I4	9
	3I5	16
	4I6U	3
	4I6L	7
	4I7U	23
	4I7L	27
	4I8	11
	1I9U	18
	3I9L	20
---	---	---
---	---	---

Row	2 Delay	4 Carry-over
0		
1		1.8
2		
3		
4		
5		
6		
7		1.8
8		
9		
A		
B		
C		
D		
E	---	---
F	---	---

Detector Name	332 Input File	Detector Number
	5J1	13
	6J2U	2
	6J2L	6
	6J3U	22
	6J3L	26
	6J4	10
	7J5	15
	8J6U	4
	8J6L	8
	8J7U	24
	8J7L	28
	8J8	12
	5J9U	17
	7J9L	19
---	---	---
---	---	---

Detector Delay & Carryover <D Page>

D + X (across) + ROW

Row	Detector Numbers	E
A	1 2 3 4 5 6 7 8	12345678
B	9 10 11 12 -- -- -- --	1234____
C	13 14 15 16 17 18 19 20	12345678
D	-- -- -- -- 21 22 23 24	____5678
E	-- -- -- -- -- -- -- --	1234____
F	-- 25 26 27 28 -- -- --	_2345___

Active Detectors <D Page>

Row		0 Detector #
0		
1	System Det. # 1	
2	System Det. # 2	
3	System Det. # 3	
4	System Det. # 4	
5	System Det. # 5	
6	System Det. # 6	
7	System Det. # 7	
8	System Det. # 8	

System Detectors <D Page>

Max ON (min)	5	D+A+E
Max OFF (min)	60	D+A+F

Detector Failure Monitor

Phase Number		F+C+1
Time Before Yellow		F+C+3

Advance Warning Beacon - Sign 1

Phase Number		F+D+1
Time Before Yellow		F+D+3

Advance Warning Beacon - Sign 2

Long Failure	0.5	F+0+6
Short Failure	0.5	F+0+7

Power Cycle Correction (Default = 0.5)

APPENDIX C

EXISTING INTERSECTION ANALYSIS CALCULATION SHEETS

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	0	3	3	0	2	3	699	15	6	419	2
Future Vol, veh/h	1	0	3	3	0	2	3	699	15	6	419	2
Conflicting Peds, #/hr	10	0	10	10	0	10	10	0	10	10	0	10
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	50	50	50	92	92	92	84	84	84	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	0	6	3	0	2	4	832	18	7	476	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	934	1368	259	1120	1360	445	488	0	0	860	0	0
Stage 1	501	501	-	858	858	-	-	-	-	-	-	-
Stage 2	433	867	-	262	502	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	221	146	740	161	147	561	1071	-	-	777	-	-
Stage 1	521	541	-	318	372	-	-	-	-	-	-	-
Stage 2	571	368	-	721	540	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	213	141	726	155	143	550	1061	-	-	770	-	-
Mov Cap-2 Maneuver	213	141	-	155	143	-	-	-	-	-	-	-
Stage 1	511	531	-	314	367	-	-	-	-	-	-	-
Stage 2	562	363	-	702	530	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	13.09	21.98	0.04	0.14
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1061	-	-	453	217	770	-	-
HCM Lane V/C Ratio	0.003	-	-	0.018	0.025	0.009	-	-
HCM Control Delay (s/veh)	8.4	-	-	13.1	22	9.7	-	-
HCM Lane LOS	A	-	-	B	C	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	201	574	105	179	721	337	270	157	410	203	142	87
Future Volume (veh/h)	201	574	105	179	721	337	270	157	410	203	142	87
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	221	631	115	190	767	359	314	183	477	233	163	100
Peak Hour Factor	0.91	0.91	0.91	0.94	0.94	0.94	0.86	0.86	0.86	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	244	1300	236	242	857	400	364	994	541	279	547	314
Arrive On Green	0.14	0.43	0.43	0.07	0.37	0.37	0.11	0.28	0.28	0.08	0.26	0.26
Sat Flow, veh/h	1781	2990	544	3456	2329	1088	3456	3554	1537	3456	2145	1232
Grp Volume(v), veh/h	221	374	372	190	585	541	314	183	477	233	133	130
Grp Sat Flow(s),veh/h/ln	1781	1777	1757	1728	1777	1640	1728	1777	1537	1728	1777	1600
Q Serve(g_s), s	17.5	21.6	21.7	7.8	44.4	44.6	12.8	5.6	40.1	9.5	8.7	9.4
Cycle Q Clear(g_c), s	17.5	21.6	21.7	7.8	44.4	44.6	12.8	5.6	40.1	9.5	8.7	9.4
Prop In Lane	1.00		0.31	1.00		0.66	1.00		1.00	1.00		0.77
Lane Grp Cap(c), veh/h	244	773	764	242	654	604	364	994	541	279	453	408
V/C Ratio(X)	0.91	0.48	0.49	0.78	0.89	0.90	0.86	0.18	0.88	0.83	0.29	0.32
Avail Cap(c_a), veh/h	286	773	764	723	680	628	482	994	541	313	453	408
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.0	29.0	29.0	65.6	42.7	42.7	63.1	39.2	44.0	65.0	43.0	43.3
Incr Delay (d2), s/veh	25.8	0.3	0.3	2.1	15.0	16.3	9.6	0.1	15.7	14.3	0.3	0.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.6	9.2	9.1	3.5	21.7	20.4	6.0	2.4	17.8	4.7	3.8	3.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	86.8	29.3	29.3	67.7	57.7	59.1	72.8	39.3	59.6	79.3	43.3	43.7
LnGrp LOS	F	C	C	E	E	E	E	D	E	E	D	D
Approach Vol, veh/h		967			1316			974			496	
Approach Delay, s/veh		42.5			59.7			60.0			60.3	
Approach LOS		D			E			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.1	67.7	19.1	42.6	23.6	58.1	15.6	46.1
Change Period (Y+Rc), s	4.0	5.3	4.0	6.0	4.0	5.3	4.0	* 6
Max Green Setting (Gmax), s	30.0	47.9	20.0	32.8	23.0	54.9	13.0	* 40
Max Q Clear Time (g_c+I1), s	9.8	23.7	14.8	11.4	19.5	46.6	11.5	42.1
Green Ext Time (p_c), s	0.3	3.3	0.3	1.1	0.1	6.1	0.1	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	55.4
HCM 7th LOS	E

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

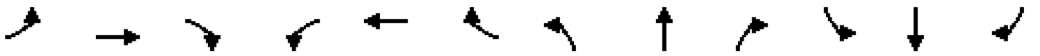
Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	0	1	3	0	3	1	779	15	6	854	2
Future Vol, veh/h	3	0	1	3	0	3	1	779	15	6	854	2
Conflicting Peds, #/hr	10	0	10	10	0	10	10	0	10	10	0	10
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	2	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	33	33	33	25	25	25	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	9	0	3	12	0	12	1	875	17	7	960	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1434	1889	501	1399	1881	466	972	0	0	902	0	0
Stage 1	984	984	-	896	896	-	-	-	-	-	-	-
Stage 2	450	904	-	503	985	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	94	70	516	100	70	543	705	-	-	749	-	-
Stage 1	266	325	-	302	357	-	-	-	-	-	-	-
Stage 2	558	354	-	519	324	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	90	68	506	97	68	533	698	-	-	742	-	-
Mov Cap-2 Maneuver	90	68	-	256	233	-	-	-	-	-	-	-
Stage 1	262	319	-	298	353	-	-	-	-	-	-	-
Stage 2	540	350	-	506	318	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	40.75	16.18	0.01	0.07
HCM LOS	E	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	698	-	-	113	346	742	-	-
HCM Lane V/C Ratio	0.002	-	-	0.108	0.069	0.009	-	-
HCM Control Delay (s/veh)	10.2	-	-	40.8	16.2	9.9	-	-
HCM Lane LOS	B	-	-	E	C	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.4	0.2	0	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	109	929	112	161	530	311	270	246	422	644	145	118
Future Volume (veh/h)	109	929	112	161	530	311	270	246	422	644	145	118
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	127	1080	130	173	570	334	307	280	480	678	153	124
Peak Hour Factor	0.86	0.86	0.86	0.93	0.93	0.93	0.88	0.88	0.88	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	150	1099	132	219	692	405	355	963	517	655	684	512
Arrive On Green	0.08	0.35	0.35	0.06	0.32	0.32	0.10	0.27	0.27	0.19	0.36	0.36
Sat Flow, veh/h	1781	3183	383	3456	2132	1248	3456	3554	1536	3456	1913	1431
Grp Volume(v), veh/h	127	602	608	173	475	429	307	280	480	678	141	136
Grp Sat Flow(s),veh/h/ln	1781	1777	1789	1728	1777	1604	1728	1777	1536	1728	1777	1567
Q Serve(g_s), s	10.4	49.5	49.7	7.3	36.4	36.4	12.9	9.2	40.0	28.0	8.2	9.0
Cycle Q Clear(g_c), s	10.4	49.5	49.7	7.3	36.4	36.4	12.9	9.2	40.0	28.0	8.2	9.0
Prop In Lane	1.00		0.21	1.00		0.78	1.00		1.00	1.00		0.91
Lane Grp Cap(c), veh/h	150	614	618	219	577	521	355	963	517	655	635	560
V/C Ratio(X)	0.85	0.98	0.98	0.79	0.82	0.82	0.86	0.29	0.93	1.03	0.22	0.24
Avail Cap(c_a), veh/h	169	614	618	281	590	532	468	963	517	655	635	560
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	66.7	47.9	47.9	68.2	45.9	46.0	65.2	42.6	47.6	59.8	33.1	33.4
Incr Delay (d2), s/veh	26.4	31.4	31.9	8.3	10.2	11.2	10.1	0.2	23.4	44.4	0.1	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.8	26.8	27.1	3.4	17.4	15.9	6.1	4.0	19.9	16.0	3.5	3.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	93.1	79.3	79.9	76.5	56.1	57.2	75.3	42.8	71.0	104.2	33.2	33.5
LnGrp LOS	F	E	E	E	E	E	E	D	E	F	C	C
Approach Vol, veh/h		1337			1077			1067			955	
Approach Delay, s/veh		80.9			59.8			64.8			83.7	
Approach LOS		F			E			E			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.4	56.3	19.2	58.8	16.4	53.3	32.0	46.0
Change Period (Y+Rc), s	4.0	5.3	4.0	6.0	4.0	5.3	4.0	* 6
Max Green Setting (Gmax), s	12.0	51.0	20.0	47.7	14.0	49.0	28.0	* 40
Max Q Clear Time (g_c+I1), s	9.3	51.7	14.9	11.0	12.4	38.4	30.0	42.0
Green Ext Time (p_c), s	0.1	0.0	0.3	1.3	0.0	6.4	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	72.5
HCM 7th LOS	E

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

APPENDIX D

BUS ROUTE SCHEDULES

Fare Information
Información de tarifas
sdmts.com/fares

PRONTO

Easy transit fare. Get a card or download the app.

¡Tarifa de transporte fácil! Obtén una tarjeta o descarga la aplicación.

RidePRONTO.com • 619-595-5636

All timetables are available online

Todos los horarios están disponibles en línea.

sdmts.com/timetables

Real Time Arrivals

Download the free **OneBusAway** app.

*Llegadas en tiempo real. Descarga la aplicación gratuita **OneBusAway**.*

sdmts.com/oba

MTS sdmts.com

MTS Security *MTS Seguridad*	**619-595-4960**
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 June 8, 2025

25

Fashion Valley Transit Center ↔ Kearny Mesa Transit Center

via Tierrasanta / Stonecrest

928

Fashion Valley Transit Center ↔ Kearny Mesa Transit Center

via Serra Mesa / Stonecrest

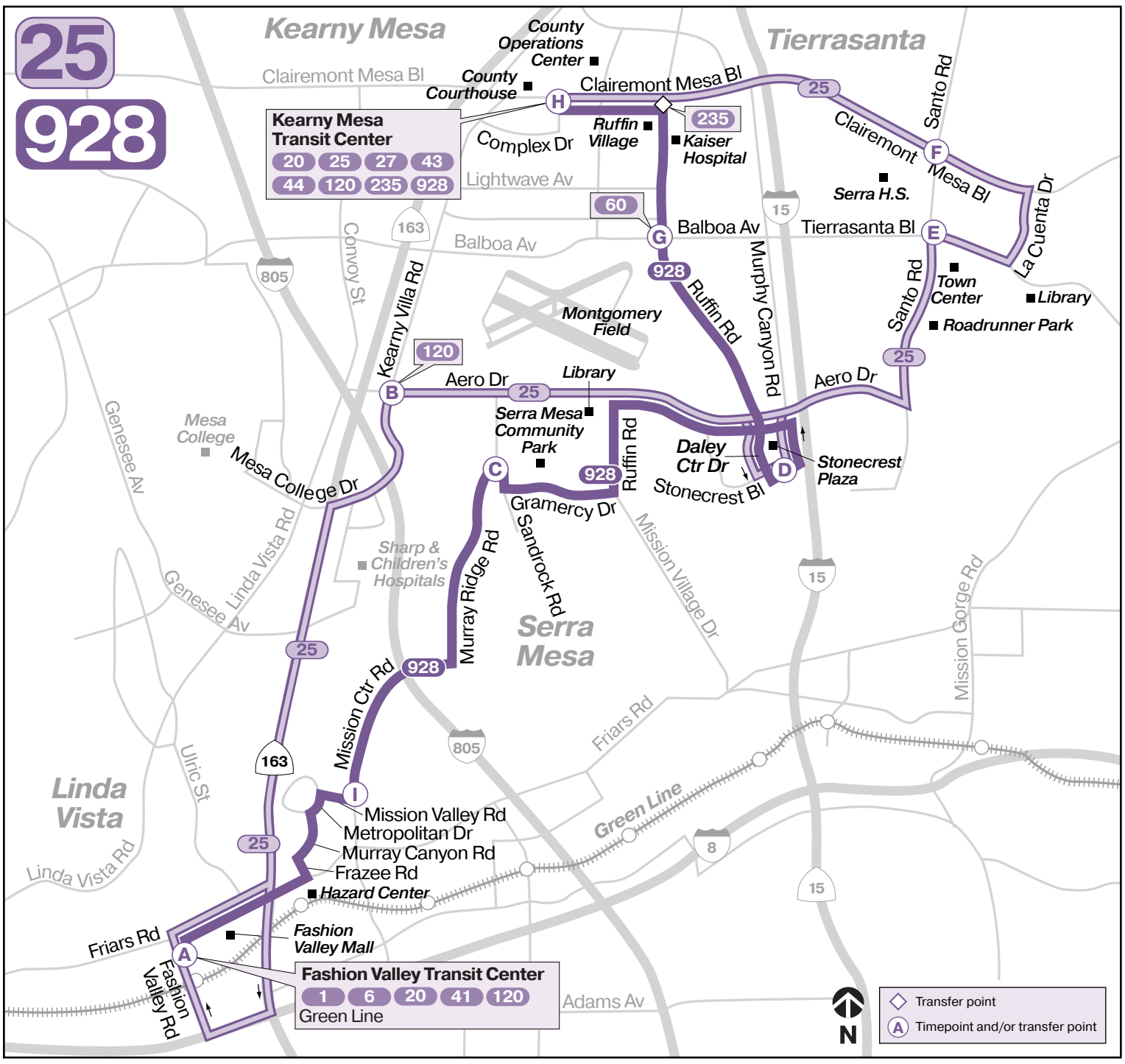
Destinations
- Fashion Valley Mall
- Hazard Center (928)
- Kaiser Hospital (Kearny Mesa)
- Kearny Mesa Courthouse
- Serra High School (25)
- Stonecrest Plaza

Trolley Connections
- Fashion Valley

Bus Routes

Subject to change without notice
Sujeto a cambios sin previo aviso

MTS



25 Monday through Friday • *lunes a viernes*

Fashion Valley Transit Center → Kearny Mesa Transit Center

A Fashion Valley Transit Center **DEPART**	B Aero Dr. & Aero Ct.	D Stonecrest Plaza	E Tierrasanta Bl. & Santo Rd.	F Clairemont Mesa Bl. & Santo Rd.	H Kearny Mesa Transit Center **ARRIVE**
—	—	6:30a	6:37a	6:43a	6:50a
7:10a	7:21a	7:29	7:36	7:42	7:50
8:10	8:21	8:29	8:36	8:42	8:50
9:10	9:21	9:29	9:36	9:42	9:50
10:10	10:21	10:29	10:36	10:42	10:50
11:10	11:22	11:31	11:39	11:45	11:53
12:10p	**12:22p**	**12:31p**	**12:39p**	**12:45p**	**12:53p**
1:10	**1:22**	**1:31**	**1:39**	**1:45**	**1:53**
2:10	**2:23**	**2:33**	**2:41**	**2:47**	**2:55**
3:10	**3:23**	**3:33**	**3:41**	**3:47**	**3:55**
4:09	**4:24**	**4:35**	**4:44**	**4:50**	**4:58**
5:09	**5:24**	**5:35**	**5:44**	**5:50**	**5:58**
6:10	**6:21**	**6:29**	**6:36**	**6:42**	**6:50**

Kearny Mesa Transit Center → Fashion Valley Transit Center

H Kearny Mesa Transit Center ★ **DEPART**	F Clairemont Mesa Bl. & Santo Rd.	E Santo Rd. & Tierrasanta Bl.	D Stonecrest Plaza	B Kearny Villa Rd. & Aero Dr.	A Fashion Valley Transit Center **ARRIVE**
—	—	—	6:31a	6:40a	6:51a
7:08a	7:15a	7:21a	7:29	7:39	7:51
8:08	8:15	8:21	8:29	8:39	8:51
9:08	9:15	9:21	9:29	9:39	9:51
10:08	10:15	10:21	10:29	10:39	10:51
11:08	11:15	11:21	11:29	11:39	11:51
12:07p	**12:15p**	**12:21p**	**12:30p**	**12:40p**	**12:53p**
1:07	**1:15**	**1:21**	**1:30**	**1:40**	**1:53**
2:05	**2:13**	**2:19**	**2:29**	**2:39**	**2:53**
3:05	**3:13**	**3:19**	**3:29**	**3:39**	**3:53**
4:06	**4:16**	**4:22**	**4:32**	**4:42**	**4:57**
5:06	**5:16**	**5:22**	**5:32**	**5:42**	**5:57**
6:07	**6:15**	**6:21**	**6:30**	**6:39**	**6:51**

★ Board bus on Clairemont Mesa Bl. in front of Panera Restaurant / *Encuentra el autobús en Clairemont Mesa Bl. en frente del restaurante Panera*

Route 25 does not operate on weekends or on the following holidays and observed holidays / *La ruta 25 no ofrece servicio durante el fin de semana ó durante los siguientes días festivos y feriados observados*
New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving, Christmas

928 Monday through Friday • *lunes a viernes*

Fashion Valley Transit Center → Kearny Mesa Transit Center

A Fashion Valley Transit Center **DEPART**	I Mission Valley Rd. & Mission Center Rd.	C Sandrock & Murray Ridge	D Stonecrest Plaza	G Ruffin Rd. & Balboa Av.	H Kearny Mesa Transit Center **ARRIVE**
5:18a	5:25a	5:32a	5:42a	5:49a	5:55a
5:52	5:59	6:06	6:16	6:23	6:29
6:24	6:32	6:39	6:49	6:56	7:02
6:54	7:03	7:11	7:21	7:29	7:36
7:24	7:33	7:41	7:51	7:59	8:06
7:54	8:03	8:11	8:21	8:29	8:36
8:24	8:33	8:41	8:51	8:59	9:06
8:54	9:02	9:09	9:19	9:26	9:33
9:24	9:32	9:39	9:49	9:56	10:03
9:54	10:02	10:09	10:19	10:26	10:33
10:24	10:32	10:39	10:49	10:56	11:03
10:54	11:02	11:09	11:19	11:26	11:33
11:24	11:33	11:40	11:50	11:58	**12:05p**
11:54	**12:03p**	**12:10p**	**12:20p**	**12:28p**	**12:35**
12:24p	**12:33**	**12:40**	**12:50**	**12:58**	**1:05**
12:54	**1:03**	**1:10**	**1:20**	**1:28**	**1:35**
1:24	**1:33**	**1:40**	**1:50**	**1:58**	**2:05**
1:54	**2:03**	**2:10**	**2:20**	**2:28**	**2:35**
2:20	**2:29**	**2:37**	**2:48**	**2:56**	**3:03**
2:50	**2:59**	**3:07**	**3:18**	**3:26**	**3:33**
3:20	**3:29**	**3:37**	**3:48**	**3:56**	**4:03**
3:50	**3:59**	**4:07**	**4:19**	**4:27**	**4:35**
4:20	**4:29**	**4:37**	**4:49**	**4:57**	**5:05**
4:50	**4:59**	**5:07**	**5:19**	**5:27**	**5:35**
5:20	**5:29**	**5:37**	**5:49**	**5:57**	**6:05**
5:54	**6:03**	**6:10**	**6:21**	**6:28**	**6:35**
6:24	**6:33**	**6:40**	**6:51**	**6:58**	**7:05**
6:54	**7:02**	**7:09**	**7:19**	—	—
7:35	**7:43**	**7:50**	**8:00**	**8:06**	**8:13**
8:35	**8:42**	**8:49**	**8:59**	—	—
9:37	**9:44**	**9:51**	**10:01**	—	—

Kearny Mesa Transit Center → Fashion Valley Transit Center

H Kearny Mesa Transit Center **DEPART**	G Ruffin Rd. & Balboa Av.	D Stonecrest Plaza	C Sandrock & Murray Ridge	I Mission Valley Rd. & Mission Center Rd.	A Fashion Valley Transit Center **ARRIVE**
—	—	4:47a	4:56a	5:02a	5:10a
—	—	5:30	5:39	5:45	5:54
5:51a	5:55a	6:01	6:10	6:16	6:25
6:26	6:30	6:37	6:48	6:55	7:04
6:54	6:59	7:06	7:18	7:25	7:34
7:24	7:29	7:36	7:48	7:55	8:04
7:54	7:59	8:06	8:18	8:25	8:34
8:24	8:29	8:36	8:48	8:55	9:04
8:56	9:00	9:07	9:18	9:25	9:34
9:26	9:30	9:37	9:48	9:55	10:04
9:56	10:00	10:07	10:18	10:25	10:34
10:26	10:30	10:37	10:48	10:55	11:04
10:56	11:00	11:07	11:18	11:25	11:34
11:23	11:28	11:35	11:47	11:54	**12:04p**
11:53	11:58	**12:05p**	**12:17p**	**12:24p**	**12:34**
12:23p	**12:28p**	**12:35**	**12:47**	**12:54**	**1:04**
12:53	**12:58**	**1:05**	**1:17**	**1:24**	**1:34**
1:23	**1:28**	**1:35**	**1:47**	**1:54**	**2:04**
1:53	**1:58**	**2:05**	**2:17**	**2:24**	**2:34**
2:23	**2:28**	**2:35**	**2:47**	**2:54**	**3:04**
2:53	**2:58**	**3:05**	**3:17**	**3:24**	**3:34**
3:23	**3:28**	**3:35**	**3:47**	**3:54**	**4:04**
3:51	**3:57**	**4:05**	**4:17**	**4:24**	**4:34**
4:21	**4:27**	**4:35**	**4:47**	**4:54**	**5:04**
4:51	**4:57**	**5:05**	**5:17**	**5:24**	**5:34**
5:21	**5:27**	**5:35**	**5:47**	**5:54**	**6:04**
5:53	**5:58**	**6:05**	**6:17**	**6:24**	**6:34**
6:26	**6:30**	**6:37**	**6:48**	**6:55**	**7:04**
7:45	**7:49**	**7:55**	**8:05**	**8:11**	**8:20**
—	—	**9:01**	**9:10**	**9:16**	**9:24**

928 Saturday • *sábado*

Fashion Valley Transit Center → Stonecrest Plaza

A Fashion Valley Transit Center **DEPART**	I Mission Valley Rd. & Mission Center Rd.	C Sandrock & Murray Ridge	D Stonecrest Plaza **ARRIVE**	G Ruffin Rd. & Balboa Av.	H Kearny Mesa Transit Center
7:06a	7:13a	7:20a	7:28a	—	—
8:05	8:12	8:19	8:28	—	—
9:04	9:12	9:19	9:28	—	—
10:04	10:12	10:19	10:28	—	—
11:04	11:12	11:19	11:28	—	—
12:04p	**12:12p**	**12:19p**	**12:28p**	—	—
1:04	**1:12**	**1:19**	**1:28**	—	—
2:04	**2:12**	**2:19**	**2:28**	—	—
3:04	**3:12**	**3:19**	**3:28**	—	—
4:04	**4:12**	**4:19**	**4:28**	—	—
5:04	**5:12**	**5:19**	**5:28**	—	—
6:04	**6:12**	**6:19**	**6:28**	—	—
7:04	**7:12**	**7:19**	**7:28**	—	—
8:07	**8:14**	**8:21**	**8:29**	—	—
9:07	**9:14**	**9:21**	**9:29**	—	—

Stonecrest Plaza → Fashion Valley Transit Center

H Kearny Mesa Transit Center	G Ruffin Rd. & Balboa Av.	D Stonecrest Plaza **DEPART**	C Sandrock & Murray Ridge	I Mission Valley Rd. & Mission Center Rd.	A Fashion Valley Transit Center **ARRIVE**
—	—	6:30a	6:39a	6:45a	6:54a
—	—	7:30	7:39	7:45	7:54
—	—	8:30	8:39	8:45	8:54
—	—	9:30	9:40	9:46	9:56
—	—	10:30	10:40	10:46	10:56
—	—	11:30	11:40	11:46	11:56
—	—	**12:30p**	**12:40p**	**12:46p**	**12:56p**
—	—	**1:30**	**1:40**	**1:46**	**1:56**
—	—	**2:30**	**2:40**	**2:46**	**2:56**
—	—	**3:30**	**3:40**	**3:46**	**3:56**
—	—	**4:30**	**4:40**	**4:46**	**4:56**
—	—	**5:30**	**5:40**	**5:46**	**5:56**
—	—	**6:30**	**6:39**	**6:45**	**6:54**
—	—	**7:30**	**7:39**	**7:45**	**7:54**
—	—	**8:31**	**8:40**	**8:46**	**8:54**

928 Sunday • *domingo*

Fashion Valley Transit Center → Stonecrest Plaza

A Fashion Valley Transit Center **DEPART**	I Mission Valley Rd. & Mission Center Rd.	C Sandrock & Murray Ridge	D Stonecrest Plaza **ARRIVE**	G Ruffin Rd. & Balboa Av.	H Kearny Mesa Transit Center
9:04a	9:12a	9:19a	9:28a	—	—
10:04	10:12	10:19	10:28	—	—
11:04	11:12	11:19	11:28	—	—
12:04p	**12:12p**	**12:19p**	**12:28p**	—	—
1:04	**1:12**	**1:19**	**1:28**	—	—
2:04	**2:12**	**2:19**	**2:28**	—	—
3:04	**3:12**	**3:19**	**3:28**	—	—
4:04	**4:12**	**4:19**	**4:28**	—	—
5:04	**5:12**	**5:19**	**5:28**	—	—
6:04	**6:12**	**6:19**	**6:28**	—	—

Stonecrest Plaza → Fashion Valley Transit Center

H Kearny Mesa Transit Center	G Ruffin Rd. & Balboa Av.	D Stonecrest Plaza **DEPART**	C Sandrock & Murray Ridge	I Mission Valley Rd. & Mission Center Rd.	A Fashion Valley Transit Center **ARRIVE**
—	—	8:30a	8:39a	8:45a	8:54a
—	—	9:30	9:40	9:46	9:56
—	—	10:30	10:40	10:46	10:56
—	—	11:30	11:40	11:46	11:56
—	—	**12:30p**	**12:40p**	**12:46p**	**12:56p**
—	—	**1:30**	**1:40**	**1:46**	**1:56**
—	—	**2:30**	**2:40**	**2:46**	**2:56**
—	—	**3:30**	**3:40**	**3:46**	**3:56**
—	—	**4:30**	**4:40**	**4:46**	**4:56**
—	—	**5:30**	**5:40**	**5:46**	**5:56**

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

Fare Information
Información de tarifas
sdmts.com/fares

PRONTO

Easy transit fare. Get a card or download the app.

¡Tarifa de transporte fácil! Obtén una tarjeta o descarga la aplicación.

RidePRONTO.com • 619-595-5636

All timetables are available online
Todos los horarios están disponibles en línea.
sdmts.com/timetables

Real Time Arrivals
Download the free **OneBusAway** app.
*Llegadas en tiempo real. Descarga la aplicación gratuita **OneBusAway**.*
sdmts.com/oba

MTS
sdmts.com

MTS Security *MTS Seguridad*	**619-595-4960**
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

120

Bus Route

Downtown San Diego ↔ Kearny Mesa Transit Center

via Hillcrest / Fashion Valley / Linda Vista

Destinations
- Fashion Valley Mall
- Juvenile Hall
- Kearny Mesa Courthouse
- Mercy Hospital
- Sharp & Children's Hospitals

Trolley Connections
- 5th Avenue
- Fashion Valley

Subject to change without notice
Sujeto a cambios sin previo aviso

MTS

120 Sunday / *domingo*

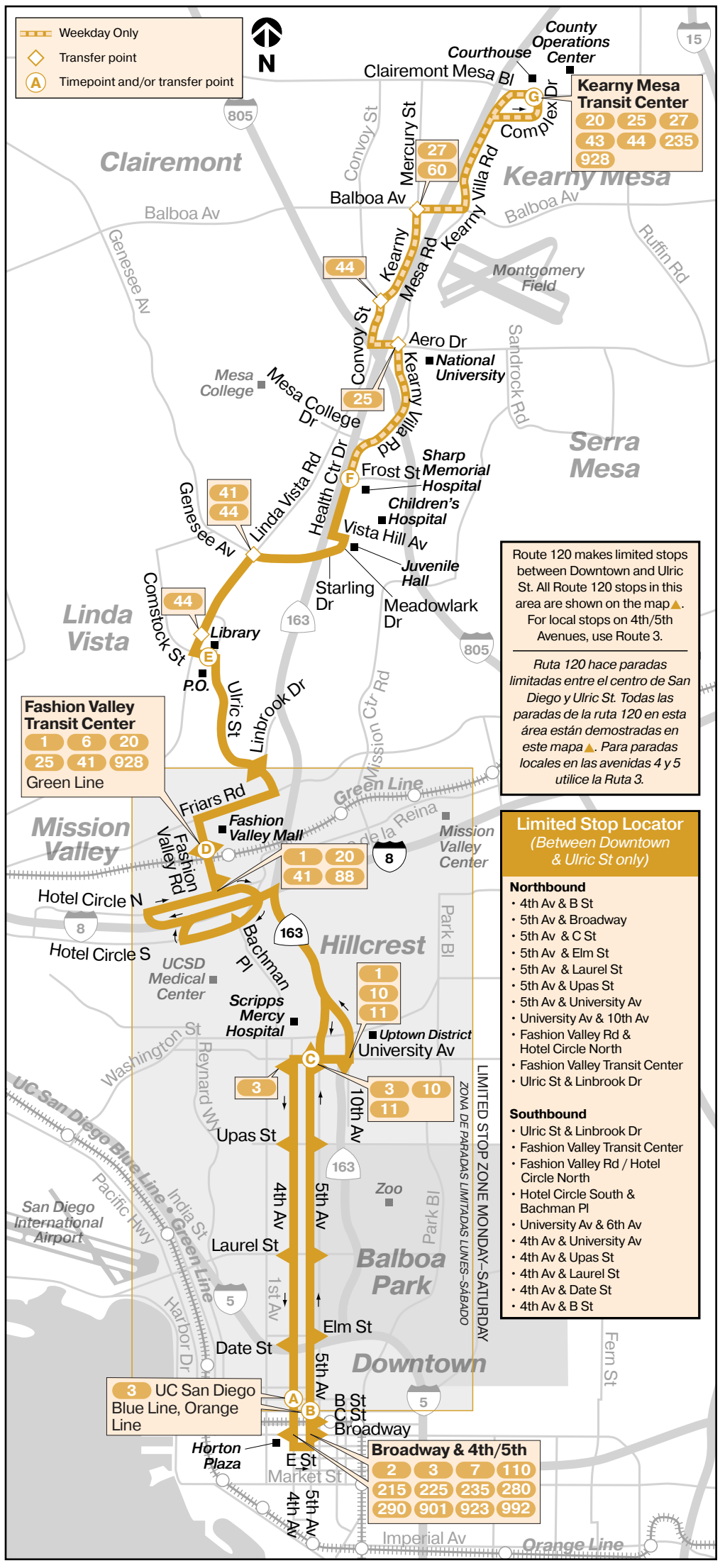
Downtown San Diego → Sharp Hospital

A 4th Av. & B St. **DEPART**	B 5th Av. & C St.	C 5th Av. & University Av.	D Fashion Valley Transit Center **ARRIVE**	D **DEPART**	E Comstock St. & Linda Vista Rd.	F Sharp Hospital **ARRIVE**	G Kearny Mesa Transit Center
LIMITED STOP ZONE / *ZONA DE PARADAS LIMITADAS*							
6:13a	6:15a	6:25a	6:33a	6:35a	6:42a	6:56a	—
7:13	7:15	7:25	7:33	7:35	7:42	7:56	—
8:12	8:14	8:25	8:33	8:35	8:43	8:57	—
9:11	9:13	9:24	9:33	9:35	9:44	9:59	—
9:41	9:43	9:54	10:03	10:05	10:14	10:29	—
10:10	10:12	10:24	10:33	10:35	10:44	10:59	—
10:40	10:42	10:54	11:03	11:05	11:14	11:29	—
11:10	11:12	11:24	11:33	11:35	11:44	11:59	—
11:40	11:42	11:54	**12:03p**	**12:05p**	**12:14 p**	**12:29p**	—
12:10p	**12:12p**	**12:24p**	**12:33**	**12:35**	**12:44**	**12:59**	—
12:40	**12:42**	**12:54**	**1:03**	**1:05**	**1:14**	**1:29**	—
1:10	**1:12**	**1:24**	**1:33**	**1:35**	**1:44**	**1:59**	—
1:40	**1:42**	**1:54**	**2:03**	**2:05**	**2:14**	**2:29**	—
2:10	**2:12**	**2:24**	**2:33**	**2:35**	**2:44**	**2:59**	—
2:40	**2:42**	**2:54**	**3:03**	**3:05**	**3:14**	**3:29**	—
3:10	**3:12**	**3:24**	**3:33**	**3:35**	**3:44**	**3:59**	—
3:40	**3:42**	**3:54**	**4:03**	**4:05**	**4:14**	**4:29**	—
4:10	**4:12**	**4:24**	**4:33**	**4:35**	**4:44**	**4:59**	—
4:40	**4:42**	**4:54**	**5:03**	**5:05**	**5:14**	**5:29**	—
5:10	**5:12**	**5:24**	**5:33**	**5:35**	**5:44**	**5:59**	—
5:40	**5:42**	**5:54**	**6:03**	**6:05**	**6:14**	**6:29**	—
6:10	**6:12**	**6:24**	**6:33**	**6:35**	**6:44**	**6:59**	—
7:12	**7:14**	**7:25**	**7:34**	**7:36**	**7:45**	**8:00**	—
8:13	**8:15**	**8:25**	**8:34**	**8:36**	**8:44**	**8:58**	—
9:14	**9:16**	**9:25**	**9:34**	**9:36**	**9:43**	**9:56**	—

120 Sunday / *domingo*

Sharp Hospital → Downtown San Diego

G Kearny Mesa Transit Center	F Sharp Hospital **DEPART**	E Comstock St. & Linda Vista Rd.	D Fashion Valley Transit Center **ARRIVE**	D **DEPART**	C University Av. & 5th Av.	A 4th Av. & B St. **ARRIVE**
			LIMITED STOP ZONE / *ZONA DE PARADAS LIMITADAS*			
—	6:22a	6:32a	6:38a	6:40a	6:47a	6:57a
—	7:23	7:33	7:39	7:41	7:48	7:58
—	8:23	8:33	8:39	8:41	8:48	8:58
—	9:23	9:33	9:39	9:41	9:48	9:59
—	9:49	10:00	10:06	10:08	10:15	10:26
—	10:19	10:30	10:36	10:38	10:45	10:56
—	10:49	11:00	11:06	11:08	11:15	11:26
—	11:19	11:30	11:36	11:38	11:46	11:58
—	11:49	**12:00p**	**12:06p**	**12:08p**	**12:16p**	**12:28p**
—	**12:19p**	**12:30**	**12:36**	**12:38**	**12:46**	**12:58**
—	**12:49**	**1:00**	**1:06**	**1:08**	**1:16**	**1:28**
—	**1:19**	**1:30**	**1:36**	**1:38**	**1:46**	**1:58**
—	**1:49**	**2:00**	**2:06**	**2:08**	**2:16**	**2:28**
—	**2:17**	**2:29**	**2:36**	**2:38**	**2:46**	**2:58**
—	**2:47**	**2:59**	**3:06**	**3:08**	**3:16**	**3:28**
—	**3:17**	**3:29**	**3:36**	**3:38**	**3:46**	**3:58**
—	**3:47**	**3:59**	**4:06**	**4:08**	**4:16**	**4:28**
—	**4:17**	**4:29**	**4:36**	**4:38**	**4:46**	**4:58**
—	**4:48**	**4:59**	**5:06**	**5:08**	**5:16**	**5:27**
—	**5:18**	**5:29**	**5:36**	**5:38**	**5:46**	**5:57**
—	**5:48**	**5:59**	**6:06**	**6:08**	**6:16**	**6:27**
—	**6:19**	**6:29**	**6:36**	**6:38**	**6:45**	**6:56**
—	**7:24**	**7:34**	**7:40**	**7:42**	**7:49**	**7:59**
—	**8:25**	**8:34**	**8:40**	**8:42**	**8:49**	**8:59**
—	**9:25**	**9:34**	**9:40**	**9:42**	**9:49**	**9:59**



Route 120 makes limited stops between Downtown and Ulric St. All Route 120 stops in this area are shown on the map▲. For local stops on 4th/5th Avenues, use Route 3.

Ruta 120 hace paradas limitadas entre el centro de San Diego y Ulric St. Todas las paradas de la ruta 120 en esta área están demostradas en este mapa▲. Para paradas locales en las avenidas 4 y 5 utilice la Ruta 3.

Limited Stop Locator
(Between Downtown & Ulric St only)

Northbound
- 4th Av & B St
- 5th Av & Broadway
- 5th Av & C St
- 5th Av & Elm St
- 5th Av & Laurel St
- 5th Av & Upas St
- 5th Av & University Av
- University Av & 10th Av
- Fashion Valley Rd & Hotel Circle North
- Fashion Valley Transit Center
- Ulric St & Linbrook Dr

Southbound
- Ulric St & Linbrook Dr
- Fashion Valley Transit Center
- Fashion Valley Rd / Hotel Circle North
- Hotel Circle South & Bachman Pl
- University Av & 6th Av
- 4th Av & University Av
- 4th Av & Upas St
- 4th Av & Laurel St
- 4th Av & Date St
- 4th Av & B St

Route 120 does not service the Kearny Mesa Transit Center on weekends. A Saturday or Sunday schedule will be operated on the following holidays and observed holidays / *La ruta 120 no presta servicio a la Kearny Mesa Transit Center durante los fines de semana. 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

120 Monday through Friday • *lunes a viernes*

Downtown San Diego → Kearny Mesa Transit Center

A	B	C	D		E	F	G
4th Av. & B St. **DEPART**	5th Av. & C St.	5th Av. & University Av.	Fashion Valley Transit Center **ARRIVE**	Fashion Valley Transit Center **DEPART**	Comstock St.& Linda Vista Rd.	Sharp Hospital	Kearny Mesa Transit Center **ARRIVE**
LIMITED STOP ZONE / *ZONA DE PARADAS LIMITADAS*							
4:59a	5:01a	5:10a	5:18a	5:20a	5:27a	5:36a	5:48a
5:29	5:31	5:40	5:48	5:50	5:57	6:06	6:18
5:59	6:01	6:10	6:18	6:20	6:27	6:38	6:52
6:28	6:30	6:40	6:48	6:50	6:58	7:10	7:24
6:56	6:58	7:09	7:18	7:20	7:29	7:42	7:58
7:26	7:28	7:39	7:48	7:50	7:59	8:12	8:28
7:56	7:58	8:09	8:18	8:20	8:29	8:42	8:58
8:26	8:28	8:39	8:48	8:50	8:58	9:10	9:25
8:57	8:59	9:10	9:19	9:21	9:29	9:41	9:56
9:27	9:29	9:40	9:49	9:51	9:59	10:11	10:26
9:57	9:59	10:10	10:19	10:21	10:29	10:41	10:56
10:27	10:29	10:40	10:49	10:51	10:59	11:11	11:26
10:56	10:58	11:10	11:19	11:21	11:30	11:42	11:57
11:26	11:28	11:40	11:49	11:51	**12:00p**	**12:12p**	**12:27p**
11:56	11:58	**12:10p**	**12:19p**	**12:21p**	**12:30**	**12:42**	**12:57**
12:26p	**12:28p**	**12:40**	**12:49**	**12:51**	**1:00**	**1:12**	**1:27**
12:56	**12:58**	**1:10**	**1:19**	**1:21**	**1:30**	**1:42**	**1:57**
1:26	**1:28**	**1:40**	**1:49**	**1:51**	**2:00**	**2:12**	**2:27**
1:56	**1:58**	**2:10**	**2:19**	**2:21**	**2:31**	**2:43**	**3:00**
2:26	**2:28**	**2:40**	**2:49**	**2:51**	**3:01**	**3:13**	**3:30**
2:56	**2:58**	**3:10**	**3:19**	**3:21**	**3:32**	**3:45**	**4:03**
3:26	**3:28**	**3:40**	**3:49**	**3:51**	**4:02**	**4:15**	**4:33**
3:56	**3:58**	**4:10**	**4:19**	**4:21**	**4:32**	**4:45**	**5:03**
4:26	**4:28**	**4:40**	**4:49**	**4:51**	**5:02**	**5:15**	**5:33**
4:56	**4:58**	**5:10**	**5:19**	**5:21**	**5:32**	**5:45**	**6:03**
5:26	**5:28**	**5:40**	**5:49**	**5:51**	**6:02**	**6:14**	**6:30**
5:57	**5:59**	**6:10**	**6:19**	**6:21**	**6:31**	**6:43**	**6:57**
6:27	**6:29**	**6:40**	**6:49**	**6:51**	**7:00**	**7:12**	**7:24**
6:57	**6:59**	**7:10**	**7:19**	**7:21**	**7:30**	**7:40**	**7:52**
7:28	**7:30**	**7:40**	**7:49**	**7:51**	**8:00**	**8:09**	**8:21**
7:58	**8:00**	**8:10**	**8:19**	**8:21**	**8:30**	**8:39**	**8:51**
8:29	**8:31**	**8:40**	**8:49**	**8:51**	**8:59**	**9:08**	**9:20**
9:01	**9:03**	**9:12**	**9:21**	**9:23**	**9:30**	**9:38**	**9:50**
9:31	**9:33**	**9:42**	**9:51**	**9:53**	**10:00**	**10:08**	**10:20**
10:02	**10:04**	**10:13**	**10:21**	**10:23**	**10:30**	**10:38**	**10:49**
10:33	**10:35**	**10:43**	**10:51**	—	—	—	—
11:03	**11:05**	**11:13**	**11:21**	—	—	—	—

Kearny Mesa Transit Center → Downtown San Diego

G	F	E	D		C	A
Kearny Mesa Transit Center **DEPART**	Sharp Hospital	Comstock St.& Linda Vista Rd.	Fashion Valley Transit Center **ARRIVE**	Fashion Valley Transit Center **DEPART**	University Av. & 5th Av.	4th Av. & B St. **ARRIVE**
			LIMITED STOP ZONE / *ZONA DE PARADAS LIMITADAS*			
5:29a	5:39a	5:49a	5:55a	6:04a	6:11a	6:21a
5:56	6:07	6:18	6:24	6:26	6:33	6:43
6:25	6:37	6:48	6:54	6:56	7:03	7:13
6:51	7:04	7:17	7:23	7:25	7:32	7:42
7:18	7:33	7:47	7:53	7:55	8:02	8:13
7:48	8:03	8:17	8:23	8:25	8:32	8:43
8:18	8:33	8:47	8:53	8:55	9:02	9:13
8:49	9:04	9:17	9:23	9:25	9:32	9:43
9:19	9:34	9:47	9:53	9:55	10:02	10:13
9:49	10:04	10:17	10:23	10:25	10:32	10:43
10:19	10:34	10:47	10:53	10:55	11:02	11:13
10:49	11:04	11:17	11:23	11:25	11:32	11:43
11:19	11:34	11:47	11:53	11:55	**12:03p**	**12:15p**
11:49	**12:04p**	**12:17p**	**12:23p**	**12:25p**	**12:33**	**12:45**
12:19p	**12:34**	**12:47**	**12:53**	**12:55**	**1:03**	**1:15**
12:49	**1:04**	**1:17**	**1:23**	**1:25**	**1:33**	**1:45**
1:19	**1:34**	**1:47**	**1:53**	**1:55**	**2:03**	**2:15**
1:49	**2:04**	**2:17**	**2:23**	**2:25**	**2:33**	**2:45**
2:17	**2:32**	**2:46**	**2:53**	**2:55**	**3:03**	**3:15**
2:43	**3:00**	**3:16**	**3:23**	**3:25**	**3:33**	**3:45**
3:13	**3:30**	**3:46**	**3:53**	**3:55**	**4:03**	**4:15**
3:40	**3:59**	**4:16**	**4:23**	**4:25**	**4:34**	**4:46**
4:11	**4:30**	**4:47**	**4:54**	**4:56**	**5:06**	**5:18**
4:41	**5:00**	**5:17**	**5:24**	**5:26**	**5:36**	**5:48**
5:11	**5:30**	**5:46**	**5:53**	**5:55**	**6:04**	**6:16**
5:45	**6:01**	**6:16**	**6:23**	**6:25**	**6:34**	**6:46**
6:18	**6:33**	**6:47**	**6:53**	**6:55**	**7:03**	**7:14**
6:53	**7:06**	**7:17**	**7:23**	**7:25**	**7:33**	**7:43**
7:25	**7:38**	**7:49**	**7:55**	**8:04**	**8:12**	**8:22**
7:55	**8:08**	**8:19**	**8:25**	**8:34**	**8:42**	**8:52**
8:27	**8:39**	**8:49**	**8:55**	**9:04**	**9:12**	**9:22**
8:57	**9:09**	**9:19**	**9:25**	**9:34**	**9:42**	**9:52**
9:27	**9:39**	**9:49**	**9:55**	**10:04**	**10:12**	**10:22**
9:59	**10:10**	**10:19**	**10:25**	**10:34**	**10:41**	**10:51**
10:29	**10:40**	**10:49**	**10:55**	**11:04**	**11:11**	**11:21**
—	—	—	—	**11:36**	**11:43**	**11:53**

120 Saturday • *sábado*

Downtown San Diego → Sharp Hospital

A	B	C	D		E	F	G
4th Av. & B St. **DEPART**	5th Av. & C St.	5th Av.& University Av.	Fashion Valley Transit Center **ARRIVE**	Fashion Valley Transit Center **DEPART**	Comstock St. & Linda Vista Rd.	Sharp Hospital **ARRIVE**	Kearny Mesa Transit Center
LIMITED STOP ZONE / *ZONA DE PARADAS LIMITADAS*							
5:45a	5:47a	5:56a	6:04a	6:06a	6:13a	6:27a	—
6:13	6:15	6:25	6:33	6:35	6:42	6:56	—
6:43	6:45	6:55	7:03	7:05	7:12	7:26	—
7:13	7:15	7:25	7:33	7:35	7:42	7:56	—
7:42	7:44	7:55	8:03	8:05	8:13	8:27	—
8:12	8:14	8:25	8:33	8:35	8:43	8:57	—
8:42	8:44	8:55	9:03	9:05	9:13	9:27	—
9:11	9:13	9:24	9:33	9:35	9:44	9:59	—
9:41	9:43	9:54	10:03	10:05	10:14	10:29	—
10:10	10:12	10:24	10:33	10:35	10:44	10:59	—
10:40	10:42	10:54	11:03	11:05	11:14	11:29	—
11:10	11:12	11:24	11:33	11:35	11:44	11:59	—
11:40	11:42	11:54	**12:03p**	**12:05p**	**12:14p**	**12:29p**	—
12:10p	**12:12p**	**12:24p**	**12:33**	**12:35**	**12:44**	**12:59**	—
12:40	**12:42**	**12:54**	**1:03**	**1:05**	**1:14**	**1:29**	—
1:10	**1:12**	**1:24**	**1:33**	**1:35**	**1:44**	**1:59**	—
1:40	**1:42**	**1:54**	**2:03**	**2:05**	**2:14**	**2:29**	—
2:10	**2:12**	**2:24**	**2:33**	**2:35**	**2:44**	**2:59**	—
2:40	**2:42**	**2:54**	**3:03**	**3:05**	**3:14**	**3:29**	—
3:10	**3:12**	**3:24**	**3:33**	**3:35**	**3:44**	**3:59**	—
3:40	**3:42**	**3:54**	**4:03**	**4:05**	**4:14**	**4:29**	—
4:10	**4:12**	**4:24**	**4:33**	**4:35**	**4:44**	**4:59**	—
4:40	**4:42**	**4:54**	**5:03**	**5:05**	**5:14**	**5:29**	—
5:10	**5:12**	**5:24**	**5:33**	**5:35**	**5:44**	**5:59**	—
5:40	**5:42**	**5:54**	**6:03**	**6:05**	**6:14**	**6:29**	—
6:10	**6:12**	**6:24**	**6:33**	**6:35**	**6:44**	**6:59**	—
6:41	**6:43**	**6:54**	**7:03**	**7:05**	**7:14**	**7:29**	—
7:11	**7:13**	**7:24**	**7:33**	**7:35**	**7:44**	**7:59**	—
7:43	**7:45**	**7:55**	**8:04**	**8:06**	**8:14**	**8:28**	—
8:13	**8:15**	**8:25**	**8:34**	**8:36**	**8:44**	**8:58**	—
8:44	**8:46**	**8:55**	**9:04**	**9:06**	**9:13**	**9:26**	—
9:44	**9:46**	**9:55**	**10:04**	**10:06**	**10:13**	**10:26**	—

Sharp Hospital → Downtown San Diego

G	F	E	D		C	A
Kearny Mesa Transit Center	Sharp Hospital **DEPART**	Comstock St. & Linda Vista Rd.	Fashion Valley Transit Center **ARRIVE**	Fashion Valley Transit Center **DEPART**	University Av. & 5th Av.	4th Av. & B St. **ARRIVE**
			LIMITED STOP ZONE / *ZONA DE PARADAS LIMITADAS*			
—	5:52a	6:02a	6:08a	6:10a	6:17a	6:27a
—	6:22	6:32	6:38	6:40	6:47	6:57
—	6:53	7:03	7:09	7:11	7:18	7:28
—	7:23	7:33	7:39	7:41	7:48	7:58
—	7:53	8:03	8:09	8:11	8:18	8:28
—	8:23	8:33	8:39	8:41	8:48	8:58
—	8:53	9:03	9:09	9:11	9:18	9:29
—	9:23	9:33	9:39	9:41	9:48	9:59
—	9:49	10:00	10:06	10:08	10:15	10:26
—	10:19	10:30	10:36	10:38	10:45	10:56
—	10:49	11:00	11:06	11:08	11:15	11:26
—	11:19	11:30	11:36	11:38	11:46	11:58
—	11:49	**12:00p**	**12:06p**	**12:08p**	**12:16p**	**12:28p**
—	**12:19p**	**12:30**	**12:36**	**12:38**	**12:46**	**12:58**
—	**12:49**	**1:00**	**1:06**	**1:08**	**1:16**	**1:28**
—	**1:19**	**1:30**	**1:36**	**1:38**	**1:46**	**1:58**
—	**1:49**	**2:00**	**2:06**	**2:08**	**2:16**	**2:28**
—	**2:17**	**2:29**	**2:36**	**2:38**	**2:46**	**2:58**
—	**2:47**	**2:59**	**3:06**	**3:08**	**3:16**	**3:28**
—	**3:17**	**3:29**	**3:36**	**3:38**	**3:46**	**3:58**
—	**3:47**	**3:59**	**4:06**	**4:08**	**4:16**	**4:28**
—	**4:17**	**4:29**	**4:36**	**4:38**	**4:46**	**4:58**
—	**4:48**	**4:59**	**5:06**	**5:08**	**5:16**	**5:27**
—	**5:18**	**5:29**	**5:36**	**5:38**	**5:46**	**5:57**
—	**5:48**	**5:59**	**6:06**	**6:08**	**6:16**	**6:27**
—	**6:19**	**6:29**	**6:36**	**6:38**	**6:45**	**6:56**
—	**6:56**	**7:06**	**7:12**	**7:14**	**7:21**	**7:31**
—	**7:26**	**7:36**	**7:42**	**7:44**	**7:51**	**8:01**
—	**7:55**	**8:04**	**8:10**	**8:12**	**8:19**	**8:29**
—	**8:25**	**8:34**	**8:40**	**8:42**	**8:49**	**8:59**
—	**8:55**	**9:04**	**9:10**	**9:12**	**9:19**	**9:29**
—	**9:25**	**9:34**	**9:40**	**9:42**	**9:49**	**9:59**
—	**9:55**	**10:04**	**10:10**	**10:12**	**10:19**	**10:29**

APPENDIX E

OPENING YEAR 2028 WITHOUT PROJECT INTERSECTION ANALYSIS WORKSHEETS

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	0	3	3	0	2	3	727	16	6	436	2
Future Vol, veh/h	1	0	3	3	0	2	3	727	16	6	436	2
Conflicting Peds, #/hr	10	0	10	10	0	10	10	0	10	10	0	10
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	50	50	50	92	92	92	84	84	84	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	0	6	3	0	2	4	865	19	7	495	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	970	1422	269	1164	1414	462	508	0	0	895	0	0
Stage 1	520	520	-	892	892	-	-	-	-	-	-	-
Stage 2	450	902	-	271	521	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	208	135	729	150	137	546	1053	-	-	754	-	-
Stage 1	507	530	-	303	358	-	-	-	-	-	-	-
Stage 2	558	355	-	711	530	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	200	131	715	144	132	536	1043	-	-	747	-	-
Mov Cap-2 Maneuver	200	131	-	144	132	-	-	-	-	-	-	-
Stage 1	498	520	-	299	354	-	-	-	-	-	-	-
Stage 2	549	350	-	692	520	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	13.42	23.19	0.03	0.13
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1043	-	-	435	203	747	-	-
HCM Lane V/C Ratio	0.003	-	-	0.018	0.027	0.009	-	-
HCM Control Delay (s/veh)	8.5	-	-	13.4	23.2	9.9	-	-
HCM Lane LOS	A	-	-	B	C	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	209	597	109	186	750	351	281	163	427	211	148	91
Future Volume (veh/h)	209	597	109	186	750	351	281	163	427	211	148	91
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	230	656	120	198	798	373	327	190	497	243	170	105
Peak Hour Factor	0.91	0.91	0.91	0.94	0.94	0.94	0.86	0.86	0.86	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	252	1310	239	249	861	401	376	974	536	288	532	308
Arrive On Green	0.14	0.44	0.44	0.07	0.37	0.37	0.11	0.27	0.27	0.08	0.25	0.25
Sat Flow, veh/h	1781	2988	546	3456	2332	1086	3456	3554	1536	3456	2137	1238
Grp Volume(v), veh/h	230	390	386	198	607	564	327	190	497	243	139	136
Grp Sat Flow(s),veh/h/ln	1781	1777	1756	1728	1777	1641	1728	1777	1536	1728	1777	1598
Q Serve(g_s), s	18.6	23.1	23.2	8.2	47.9	48.3	13.6	6.0	40.1	10.1	9.4	10.2
Cycle Q Clear(g_c), s	18.6	23.1	23.2	8.2	47.9	48.3	13.6	6.0	40.1	10.1	9.4	10.2
Prop In Lane	1.00		0.31	1.00		0.66	1.00		1.00	1.00		0.77
Lane Grp Cap(c), veh/h	252	779	770	249	656	606	376	974	536	288	442	398
V/C Ratio(X)	0.91	0.50	0.50	0.79	0.93	0.93	0.87	0.20	0.93	0.84	0.32	0.34
Avail Cap(c_a), veh/h	280	779	770	709	667	616	472	974	536	307	442	398
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.9	29.5	29.6	66.8	44.2	44.3	64.2	40.7	46.2	66.1	44.8	45.1
Incr Delay (d2), s/veh	28.8	0.3	0.3	2.2	19.5	21.5	11.7	0.1	22.6	16.8	0.3	0.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.3	9.8	9.7	3.7	24.1	22.8	6.5	2.6	20.3	5.1	4.1	4.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	90.7	29.8	29.9	69.0	63.8	65.8	75.9	40.8	68.8	82.9	45.1	45.5
LnGrp LOS	F	C	C	E	E	E	E	D	E	F	D	D
Approach Vol, veh/h		1006			1369			1014			518	
Approach Delay, s/veh		43.8			65.4			65.9			63.0	
Approach LOS		D			E			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.6	69.4	19.9	42.4	24.7	59.3	16.2	46.1
Change Period (Y+Rc), s	4.0	5.3	4.0	6.0	4.0	5.3	4.0	* 6
Max Green Setting (Gmax), s	30.0	47.9	20.0	32.8	23.0	54.9	13.0	* 40
Max Q Clear Time (g_c+I1), s	10.2	25.2	15.6	12.2	20.6	50.3	12.1	42.1
Green Ext Time (p_c), s	0.3	3.4	0.3	1.2	0.1	3.7	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	59.6
HCM 7th LOS	E

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

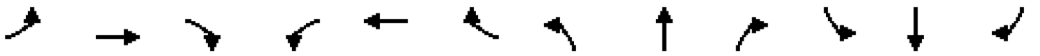
Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	0	1	3	0	3	1	810	16	6	889	2
Future Vol, veh/h	3	0	1	3	0	3	1	810	16	6	889	2
Conflicting Peds, #/hr	10	0	10	10	0	10	10	0	10	10	0	10
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	2	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	33	33	33	25	25	25	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	9	0	3	12	0	12	1	910	18	7	999	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1491	1964	521	1454	1956	484	1011	0	0	938	0	0
Stage 1	1023	1023	-	931	931	-	-	-	-	-	-	-
Stage 2	467	940	-	523	1025	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	86	62	501	91	63	529	681	-	-	726	-	-
Stage 1	252	311	-	287	344	-	-	-	-	-	-	-
Stage 2	545	340	-	505	311	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	81	61	491	88	61	519	675	-	-	719	-	-
Mov Cap-2 Maneuver	81	61	-	244	222	-	-	-	-	-	-	-
Stage 1	247	305	-	284	340	-	-	-	-	-	-	-
Stage 2	527	336	-	493	305	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	44.77	16.7	0.01	0.07
HCM LOS	E	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	675	-	-	103	332	719	-	-
HCM Lane V/C Ratio	0.002	-	-	0.118	0.072	0.009	-	-
HCM Control Delay (s/veh)	10.3	-	-	44.8	16.7	10.1	-	-
HCM Lane LOS	B	-	-	E	C	B	-	-
HCM 95th %tile Q(veh)	0	-	-	0.4	0.2	0	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	113	967	117	168	551	324	281	256	439	670	151	123
Future Volume (veh/h)	113	967	117	168	551	324	281	256	439	670	151	123
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	131	1124	136	181	592	348	319	291	499	705	159	129
Peak Hour Factor	0.86	0.86	0.86	0.93	0.93	0.93	0.88	0.88	0.88	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	154	1096	132	227	690	405	367	960	519	654	675	506
Arrive On Green	0.09	0.34	0.34	0.07	0.32	0.32	0.11	0.27	0.27	0.19	0.35	0.35
Sat Flow, veh/h	1781	3181	384	3456	2129	1251	3456	3554	1536	3456	1910	1433
Grp Volume(v), veh/h	131	627	633	181	494	446	319	291	499	705	147	141
Grp Sat Flow(s),veh/h/ln	1781	1777	1789	1728	1777	1603	1728	1777	1536	1728	1777	1566
Q Serve(g_s), s	10.7	51.0	51.0	7.6	38.5	38.6	13.5	9.6	40.0	28.0	8.6	9.5
Cycle Q Clear(g_c), s	10.7	51.0	51.0	7.6	38.5	38.6	13.5	9.6	40.0	28.0	8.6	9.5
Prop In Lane	1.00		0.21	1.00		0.78	1.00		1.00	1.00		0.92
Lane Grp Cap(c), veh/h	154	612	616	227	576	519	367	960	519	654	628	553
V/C Ratio(X)	0.85	1.02	1.03	0.80	0.86	0.86	0.87	0.30	0.96	1.08	0.23	0.25
Avail Cap(c_a), veh/h	168	612	616	280	588	531	467	960	519	654	628	553
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	66.7	48.5	48.5	68.2	46.8	46.8	65.1	42.9	48.3	60.0	33.8	34.0
Incr Delay (d2), s/veh	28.2	42.5	43.5	9.9	13.0	14.2	11.4	0.2	29.8	58.2	0.2	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.0	29.3	29.6	3.7	18.8	17.1	6.4	4.2	21.8	17.3	3.7	3.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	94.9	91.0	92.0	78.0	59.9	61.1	76.5	43.1	78.2	118.3	33.9	34.2
LnGrp LOS	F	F	F	E	E	E	E	D	E	F	C	C
Approach Vol, veh/h		1391			1121			1109			993	
Approach Delay, s/veh		91.8			63.3			68.5			93.8	
Approach LOS		F			E			E			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.7	56.3	19.7	58.3	16.8	53.3	32.0	46.0
Change Period (Y+Rc), s	4.0	5.3	4.0	6.0	4.0	5.3	4.0	* 6
Max Green Setting (Gmax), s	12.0	51.0	20.0	47.7	14.0	49.0	28.0	* 40
Max Q Clear Time (g_c+I1), s	9.6	53.0	15.5	11.5	12.7	40.6	30.0	42.0
Green Ext Time (p_c), s	0.1	0.0	0.3	1.4	0.0	5.5	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	79.7
HCM 7th LOS	E

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

APPENDIX F

OPENING YEAR 2028 + PROJECT INTERSECTION ANALYSIS WORKSHEETS

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	0	3	7	0	4	3	727	51	25	436	2
Future Vol, veh/h	1	0	3	7	0	4	3	727	51	25	436	2
Conflicting Peds, #/hr	10	0	10	10	0	10	10	0	10	10	0	10
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	50	50	50	92	92	92	84	84	84	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	0	6	8	0	4	4	865	61	28	495	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1013	1507	269	1228	1478	483	508	0	0	936	0	0
Stage 1	563	563	-	913	913	-	-	-	-	-	-	-
Stage 2	450	943	-	315	565	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	193	120	729	134	125	529	1053	-	-	727	-	-
Stage 1	478	507	-	294	350	-	-	-	-	-	-	-
Stage 2	558	339	-	671	506	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	180	113	715	125	117	519	1043	-	-	720	-	-
Mov Cap-2 Maneuver	180	113	-	125	117	-	-	-	-	-	-	-
Stage 1	455	482	-	291	346	-	-	-	-	-	-	-
Stage 2	546	335	-	633	482	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	13.96	27.38	0.03	0.55
HCM LOS	B	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1043	-	-	410	173	720	-	-
HCM Lane V/C Ratio	0.003	-	-	0.02	0.069	0.039	-	-
HCM Control Delay (s/veh)	8.5	-	-	14	27.4	10.2	-	-
HCM Lane LOS	A	-	-	B	D	B	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.2	0.1	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	211	597	109	186	750	354	281	193	427	212	150	92
Future Volume (veh/h)	211	597	109	186	750	354	281	193	427	212	150	92
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	232	656	120	198	798	377	327	224	497	244	172	106
Peak Hour Factor	0.91	0.91	0.91	0.94	0.94	0.94	0.86	0.86	0.86	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	254	1313	240	249	857	403	375	972	534	289	531	307
Arrive On Green	0.14	0.44	0.44	0.07	0.37	0.37	0.11	0.27	0.27	0.08	0.25	0.25
Sat Flow, veh/h	1781	2988	546	3456	2323	1093	3456	3554	1536	3456	2139	1237
Grp Volume(v), veh/h	232	390	386	198	610	565	327	224	497	244	141	137
Grp Sat Flow(s),veh/h/ln	1781	1777	1757	1728	1777	1639	1728	1777	1536	1728	1777	1599
Q Serve(g_s), s	18.8	23.1	23.2	8.3	48.3	48.7	13.7	7.2	40.1	10.2	9.5	10.3
Cycle Q Clear(g_c), s	18.8	23.1	23.2	8.3	48.3	48.7	13.7	7.2	40.1	10.2	9.5	10.3
Prop In Lane	1.00		0.31	1.00		0.67	1.00		1.00	1.00		0.77
Lane Grp Cap(c), veh/h	254	781	772	249	656	605	375	972	534	289	441	397
V/C Ratio(X)	0.91	0.50	0.50	0.79	0.93	0.93	0.87	0.23	0.93	0.85	0.32	0.35
Avail Cap(c_a), veh/h	279	781	772	707	665	614	471	972	534	306	441	397
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	62.0	29.5	29.6	67.0	44.5	44.6	64.4	41.3	46.4	66.3	45.0	45.3
Incr Delay (d2), s/veh	29.4	0.3	0.3	2.2	20.2	22.2	11.8	0.1	23.1	17.1	0.3	0.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.5	9.8	9.7	3.7	24.4	23.1	6.5	3.1	20.4	5.1	4.2	4.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	91.4	29.8	29.9	69.2	64.7	66.8	76.1	41.5	69.5	83.4	45.3	45.7
LnGrp LOS	F	C	C	E	E	E	E	D	E	F	D	D
Approach Vol, veh/h		1008			1373			1048			522	
Approach Delay, s/veh		44.0			66.2			65.6			63.2	
Approach LOS		D			E			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.6	69.7	19.9	42.4	24.9	59.4	16.3	46.1
Change Period (Y+Rc), s	4.0	5.3	4.0	6.0	4.0	5.3	4.0	* 6
Max Green Setting (Gmax), s	30.0	47.9	20.0	32.8	23.0	54.9	13.0	* 40
Max Q Clear Time (g_c+I1), s	10.3	25.2	15.7	12.3	20.8	50.7	12.2	42.1
Green Ext Time (p_c), s	0.3	3.4	0.3	1.2	0.1	3.4	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	60.0
HCM 7th LOS	E

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

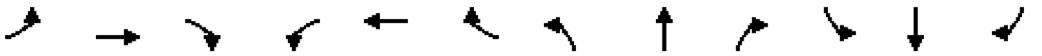
Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	0	1	7	0	5	1	810	51	25	889	2
Future Vol, veh/h	3	0	1	7	0	5	1	810	51	25	889	2
Conflicting Peds, #/hr	10	0	10	10	0	10	10	0	10	10	0	10
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	2	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	33	33	33	25	25	25	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	9	0	3	28	0	20	1	910	57	28	999	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1533	2046	521	1517	2018	504	1011	0	0	977	0	0
Stage 1	1066	1066	-	951	951	-	-	-	-	-	-	-
Stage 2	467	980	-	566	1067	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	80	55	501	82	58	513	681	-	-	702	-	-
Stage 1	237	297	-	279	336	-	-	-	-	-	-	-
Stage 2	545	326	-	477	297	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	72	52	491	76	54	504	675	-	-	695	-	-
Mov Cap-2 Maneuver	72	52	-	232	209	-	-	-	-	-	-	-
Stage 1	226	282	-	276	333	-	-	-	-	-	-	-
Stage 2	518	323	-	450	282	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	50.4	19.31	0.01	0.28
HCM LOS	F	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	675	-	-	91	299	695	-	-
HCM Lane V/C Ratio	0.002	-	-	0.133	0.16	0.04	-	-
HCM Control Delay (s/veh)	10.3	-	-	50.4	19.3	10.4	-	-
HCM Lane LOS	B	-	-	F	C	B	-	-
HCM 95th %tile Q(veh)	0	-	-	0.4	0.6	0.1	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	115	967	117	168	551	327	281	286	439	671	153	124
Future Volume (veh/h)	115	967	117	168	551	327	281	286	439	671	153	124
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	134	1124	136	181	592	352	319	325	499	706	161	131
Peak Hour Factor	0.86	0.86	0.86	0.93	0.93	0.93	0.88	0.88	0.88	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	156	1096	132	227	683	406	367	960	519	654	673	507
Arrive On Green	0.09	0.34	0.34	0.07	0.32	0.32	0.11	0.27	0.27	0.19	0.35	0.35
Sat Flow, veh/h	1781	3181	384	3456	2118	1259	3456	3554	1536	3456	1907	1436
Grp Volume(v), veh/h	134	627	633	181	497	447	319	325	499	706	149	143
Grp Sat Flow(s),veh/h/ln	1781	1777	1789	1728	1777	1601	1728	1777	1536	1728	1777	1566
Q Serve(g_s), s	11.0	51.0	51.0	7.6	38.9	38.9	13.5	10.9	40.0	28.0	8.8	9.6
Cycle Q Clear(g_c), s	11.0	51.0	51.0	7.6	38.9	38.9	13.5	10.9	40.0	28.0	8.8	9.6
Prop In Lane	1.00		0.21	1.00		0.79	1.00		1.00	1.00		0.92
Lane Grp Cap(c), veh/h	156	612	616	227	573	516	367	960	519	654	628	553
V/C Ratio(X)	0.86	1.02	1.03	0.80	0.87	0.87	0.87	0.34	0.96	1.08	0.24	0.26
Avail Cap(c_a), veh/h	168	612	616	280	588	530	467	960	519	654	628	553
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	66.6	48.5	48.5	68.2	47.2	47.2	65.1	43.4	48.3	60.0	33.8	34.1
Incr Delay (d2), s/veh	29.4	42.5	43.5	9.9	13.8	15.1	11.4	0.2	29.8	58.8	0.2	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	29.3	29.6	3.7	19.1	17.4	6.4	4.8	21.8	17.3	3.8	3.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	96.0	91.0	92.0	78.0	61.0	62.3	76.5	43.6	78.2	118.8	34.0	34.3
LnGrp LOS	F	F	F	E	E	E	E	D	E	F	C	C
Approach Vol, veh/h		1394			1125			1143			998	
Approach Delay, s/veh		91.9			64.2			67.9			94.0	
Approach LOS		F			E			E			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.7	56.3	19.7	58.3	17.0	53.0	32.0	46.0
Change Period (Y+Rc), s	4.0	5.3	4.0	6.0	4.0	5.3	4.0	* 6
Max Green Setting (Gmax), s	12.0	51.0	20.0	47.7	14.0	49.0	28.0	* 40
Max Q Clear Time (g_c+I1), s	9.6	53.0	15.5	11.6	13.0	40.9	30.0	42.0
Green Ext Time (p_c), s	0.1	0.0	0.3	1.4	0.0	5.3	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	79.8
HCM 7th LOS	E

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Appendix J

Vehicle Miles Traveled Screening Memo

MEMORANDUM

4542 Ruffner Street
Suite 100
San Diego, CA 92111
858.300.8800 T
www.llgengineers.com

Pasadena
Irvine
San Diego

To:	Ms. Yara Fisher HELIX Environmental Planning	Date:	July 1, 2026
From:	John Boarman, P.E. and Renald Espiritu LLG, Engineers	LLG Ref:	3-26-4190
Subject:	San Diego Miramar College Aviation Instructional Center at Montgomery-Gibbs Executive Airport Project VMT Screening		

Linscott, Law & Greenspan, Engineers (LLG) has prepared this technical memorandum for the San Diego Miramar College Aviation Instructional Center at Montgomery-Gibbs Executive Airport Project (hereafter referred to as the "Project"). The Project is located on the west side of Montgomery-Gibbs Executive Airport (MYF) within the Kearny Mesa community of the City of San Diego.

PROJECT DESCRIPTION

The Project proposes the demolition of the existing 6,300 SF Miramar Hangar and the construction of a new approximately 18,000 SF Miramar College Aviation Instructional Center (AIC) hangar and supporting facilities, expanding the existing 0.42-acre lease area to 1.06 acres.

The Project would provide an upgraded instructional facility for aviation maintenance technology and related Federal Aviation Administration (FAA)-certified programs to serve Miramar College students and regional workforce needs. The new Miramar College AIC would be two stories. Level 1 would include a lobby, a maintenance/hangar bay, two classrooms, offices, a custodial room, hazardous materials storage, restrooms, and utility and storage rooms. Level 2 would include one classroom, four pilot debrief rooms, air traffic control tower and en route training facilities, a conference room, break room, study room, and restrooms. The expanded instructional facility would allow for an additional 15 class sessions per week to occur, each containing approximately 23 students. The Project would additionally include an open-air storage area, student parking, and engine testing pad.

Access to the site would be provided by the existing MYF Gate 4 east of Kearny Villa Road. The proposed Aviation Instructional Center hangar would be designed to achieve District sustainability standards.

Construction is anticipated to begin in August 2027 and be completed in September 2028, with District courses resuming in the new facility in the Fall 2028 semester. During construction of the Project, the District would continue aviation instruction at a temporary location that is yet to be determined.

Figure 1 shows the Project vicinity ***Figure 2*** shows a more detailed Project area map. ***Figure 3*** shows the Project site plan.

VMT Significance Criteria and Methodology

The SDCCD is the project proponent for the Aviation Instructional Center. Because the Project is proposed on City of San Diego property leased to the District, the *City of San Diego Transportation Study Manual (TSM, September 19, 2022)* was used for this VMT assessment.

According to the TSM, a project that meets at least one of the following screening criteria would have less than significant VMT impact due to project characteristics and/or location.

1. **Residential or Commercial Project Located in a VMT Efficient Area:** The project is a residential or commercial employment project located in a VMT efficient area (15% or more below the base year average household VMT/capita or VMT/employee) based on the applicable location-based screening map produced by SANDAG.

2. **Industrial Project Located in a VMT Efficient Area:** The project is an industrial employment project located in VMT efficient area (in an area with average or below average base year VMT/employee) based on the applicable location-based screening map produced by SANDAG.

3. **Small Project:** The project is a small project defined as generating less than 300 daily unadjusted driveway trips using the City of San Diego trip generation rates/procedures.

4. **Locally Serving Retail/Recreational Project:** The project is a locally serving retail/recreational project defined as having 100,000 square feet gross floor area or less and demonstrates through a market area study that the market capture area for the project is approximately three miles (or less) and serves a population of roughly 25,000 people or less. Locally serving retail is consistent with the definitions of Neighborhood Shopping Center in the San Diego Municipal Code Land Development Code Trip Generation Manual. Locally serving recreation is consistent with the land uses listed in Appendix B of the TSM, given that it meets the square footage and market capture area above. Adding retail/recreation square footage (even if it is 100,000 square feet gross floor area or less) to an existing regional retail shopping area is not screened out.

5. **Locally Serving Public Facility:** The project is a locally serving public facility defined as a public facility that serves the surrounding community or a public facility that is a passive use. The following are considered locally serving public facilities: transit centers, public schools, libraries, post offices, park-and-ride lots, police and fire facilities, and government offices. Passive public uses include communication and utility buildings, water sanitation, and waste management.

6. **Affordable Housing:** The project has access to transit* and is wholly or has a portion that meets one of the following criteria: is affordable to persons with a household income equal to or less than 50% of the area median income (as defined by California Health and Safety Code Section 50093), housing for senior citizens [as defined in Section 143.0720I], housing for transitional foster youth, disabled veterans, or homeless persons [as defined in 143.0720(f)]. The units shall remain deed restricted for a period of at least 55 years. The project shall provide no more than the minimum amount of parking per unit, per San Diego Municipal Code Section 143.0744. Only the portion of the project that meets the above criteria is screened out. For example, if the project is 100 units with ten deed-restricted affordable housing units, transportation VMT analysis would not be necessary for the ten affordable units but would be necessary for the remaining 90 units (unless they meet one of the other screening criteria). For purposes of applying the small project screening criteria, the applicant would only include the trip generation for the non-affordable housing portion of the project (since the affordable housing portion is screened out).

   *Access to transit is defined as transit being located within a reasonable walking distance (1/2 mile) from the project driveway.

7. **Mixed-Use Project Screening Considerations:** The project's individual land uses should be compared to the screening criteria above. It is possible for some of the mixed-use project's land uses to be screened out and some to require further analysis. For purposes of applying the small project screening criteria, the applicant would only include the trip generation for portions of the project that are not screened out based on other screening criteria. For example, if a project includes residential and retail, and the retail component was screened out because it is locally serving; only the trip generation of the residential portion would be used to determine if the project meets the definition of a small project.

8. **Redevelopment Project Screening Considerations:** The project is a redevelopment project that demonstrates that the proposed project's total project VMT is less than the existing land use's total VMT. Exception: If a project replaces affordable housing (either deed restricted or other types of affordable housing) with a smaller number of moderate-income or high-income residential units, the project is not screened out and must analyze VMT impacts per Table 3 of the TSM.

PROJECT VMT SCREENING ASSESSMENT

As mentioned in *Section 2.0* of the Focused Local Mobility Analysis report prepared under separate cover, the Project proposes to increase enrollment and the number of class sessions per week, with approximately 15 additional weekly (3 per day) sessions compared to existing conditions and an average of 23 students per class.

With the increase in enrollment and class frequency, a typical weekday scenario conservatively assumes three additional classes in a day, with a maximum of 35 students and two instructors per class. Under this scenario, total additional person trips are calculated as follows:

- Students = 3 classes x 35 students = 105 students
- Instructors = 3 classes x 2 instructors = 6 instructors
- Total = 111 additional persons on site equating to 222 ADT (assuming no carpooling)

A majority of traffic generated by the Project occurs outside of the typical commuter peak periods of 7:00 – 9:00 AM and 4:00 – 6:00 PM. To remain conservative, trip generation assumes approximately 25% of the daily trips occur during the AM peak hour and 25% of the daily trips occur during the PM peak hour, even though existing traffic counts indicate that students and instructors typically arrive and depart outside of peak commuter periods.

Table 1 shows the Project trip generation. As shown in *Table 1*, the Project is expected to generate approximately 222 additional average daily trips with 60 additional trips during the AM peak hour (54 inbound/ 6 outbound trips) and 60 additional trips during the PM peak hour (54 inbound/ 6 outbound trips).

TABLE 1
PROJECT TRIP GENERATION

Land Use	Volume	AM Peak Hour Volume			PM Peak Hour Volume		
		In	Out	Total	In	Out	Total
Aviation Instructional Center[a]	222	54	6	60	54	6	60

Footnotes:
a. Per coordination with the applicant, the Project proposes to increase enrollment and the number of class sessions per week, with approximately 15 additional weekly (3 per day) sessions compared to existing conditions and an average of 23 students per class. To be conservation, the trip generation calculations for the ADT assumes three additional classes occurring concurrently. While the average class size was estimated at 25 students (midpoint of 15-35), a maximum of 35 students per class was assumed, plus 2 faculty members per class. To remain conservative, approximately 25% of the daily trips occur during the AM peak hour and 25% of the daily trips occur during the PM peak hour, even though existing traffic counts indicate that students and instructors typically arrive and depart outside of peak commuter periods..

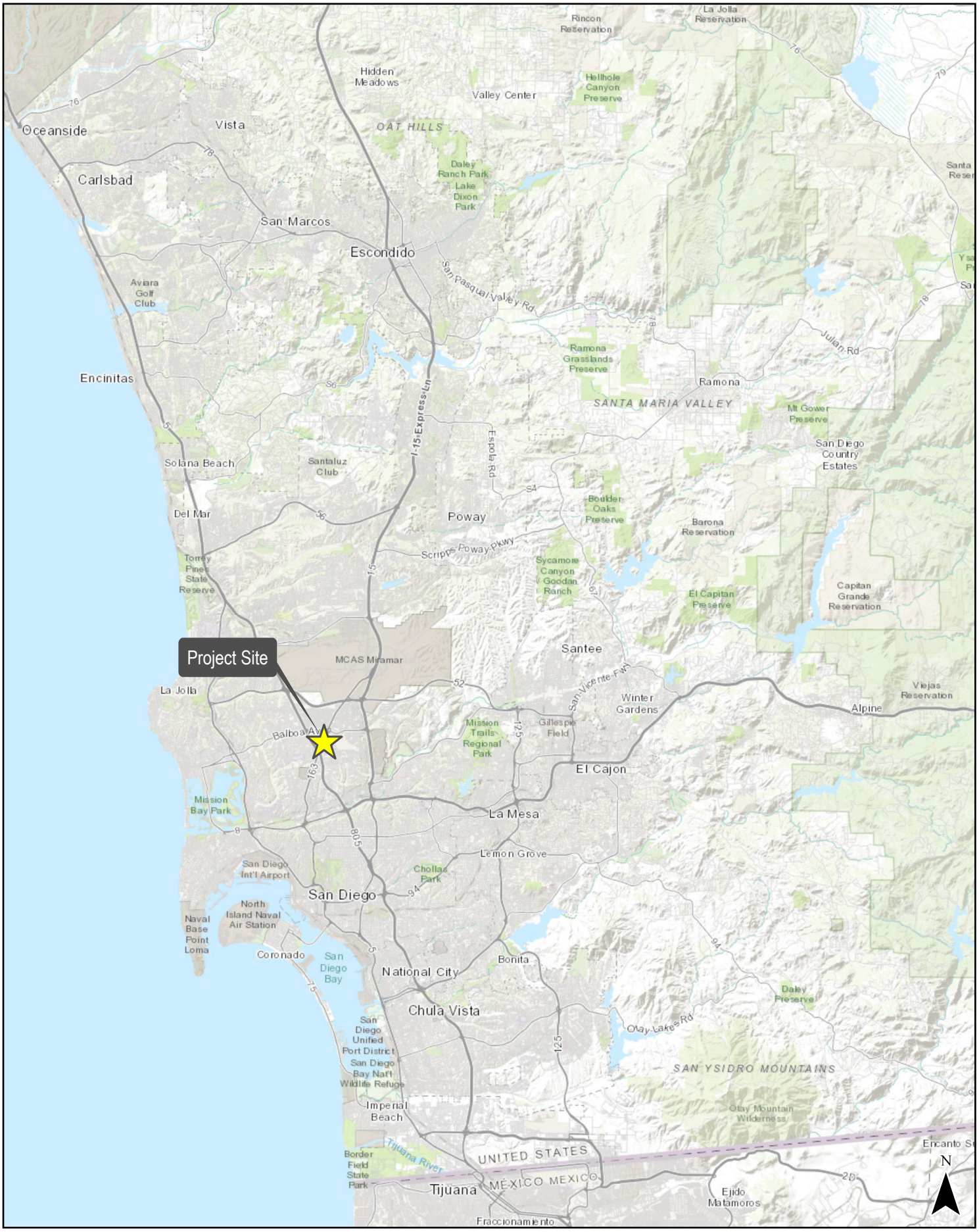
Per the TSM, the project qualifies as a small project, defined as generating less than 300 daily unadjusted driveway trips. Because the Project is calculated to generate fewer than 300 trips (222 trips), it can be screened out and is presumed to result in a less than significant CEQA VMT impact based on the screening criteria outlined in the City of San Diego TSM.

Please let us know if you have any questions. Thank you.

cc: File

TABLES
Table 1: Project Trip Generation

FIGURES
Figure 1: Vicinity Map
Figure 2: Project Area Map
Figure 3: Site Plan

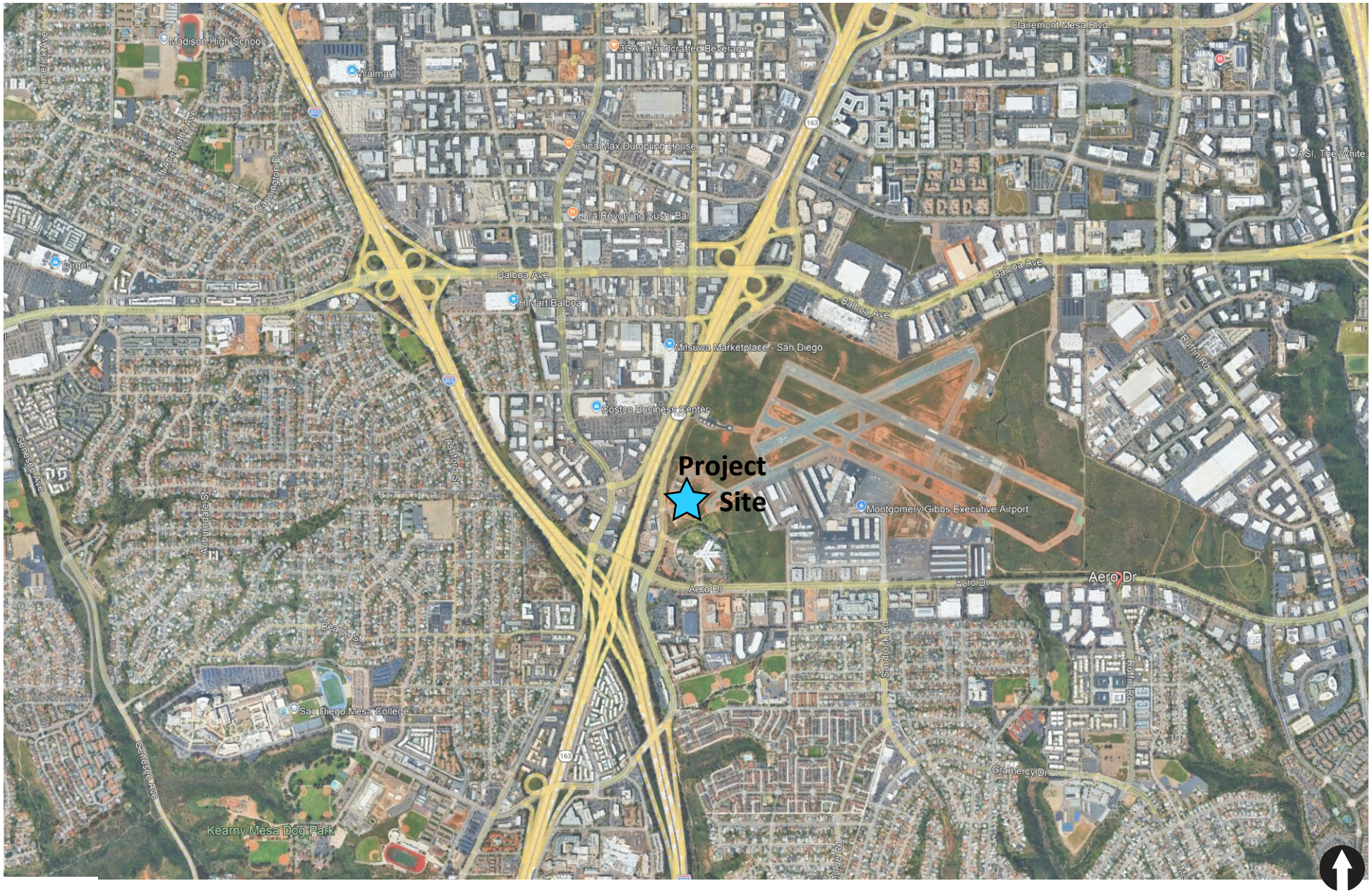


N:\4190\Figure
Date: 4/9/2026

SanGIS, Bureau of Land Management, Esri, HERE, Garmin, USGS, NGA, EPA, USDA, NPS

Figure 1
Vicinity Map

Miramar College AIC Project



N:\4190\Figures
Date:4/10/26

Figure 2

Project Area Map



LLG

N:\4190\Figures
Date: 05/06/26

Figure 3

Site Plan

Miramar College AIC Project