Appendix E

Greenhouse Gas Technical Report

Montgomery-Gibbs Executive Airport Master Plan Update

Greenhouse Gas Emissions Technical Report

July 2025 | 02373.00007.001

Submitted to:

City of San Diego
Real Estate Assets, Airports Division
3750 John J. Montgomery Drive, MS 14
San Diego, CA 92123

Prepared for:

C&S Engineers, Inc.
2355 Northside Drive, Suite 350
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**

TABLE OF CONTENTS (cont.)

LIST OF APPENDICES

LIST OF FIGURES

LIST OF TABLES

ACRONYMS AND ABBREVIATIONS

AB	Assembly Bill
ALP	Airport Layout Plan
AMP	Airport Master Plan
APS	alternative planning strategy
CAA	Clean Air Act
CAFE	Corporate Average Fuel Economy
CalEEMod	California Emission Estimator Model
CALGreen	California Green Building Standards Code
CAP	Climate Action Plan
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CBSC	California Building Standards Commission
CCR	California Code of Regulations
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CFCs	chlorofluorocarbons
CH_4	methane
City	City of San Diego
CO_2	carbon dioxide
CO_2e	CO_2-equivalent
EO	Executive Order
EPIC	University of San Diego School of Law, Energy Policy Initiative Center
EV	electric vehicles
°F	Fahrenheit (degrees)
FAA	Federal Aviation Administration
GHG	greenhouse gas
GWP	Global Warming Potential
HFCs	hydrofluorocarbons
HVAC	heating, ventilation, and air conditioning
IPCC	United Nations Intergovernmental Panel on Climate Change

ACRONYMS AND ABBREVIATIONS (cont.)

LCFS	Low Carbon Fuel Standard
LOS	level of service
MMT	million metric tons
mpg	miles per gallon
MPOs	Metropolitan Planning Organizations
MT	metric ton
MYF	Montgomery-Gibbs Executive Airport
N_2O	nitrous oxide
NASA	National Aeronautics and Space Administration
NHTSA	National Highway Traffic Safety Administration
NOAA	National Oceanic and Atmospheric Administration
NO_X	nitrogen oxides
PFCs	perfluorocarbons
ppm	parts per million
RPS	Renewables Portfolio Standard
RTP	Regional Transportation Plan
SANDAG	San Diego Association of Governments
SB	Senate Bill
SCS	Sustainable Communities Strategy
SF	square feet/foot
SF_6	sulfur hexafluoride
TPA	Transit Priority Area
USEPA	U.S. Environmental Protection Agency
VMT	vehicle miles traveled

EXECUTIVE SUMMARY

This report presents an assessment of potential GHG emissions impacts associated with construction and operation (non-flight emissions related to vehicular use and building energy use) of the proposed Airport Master Plan (AMP; Project) for Montgomery-Gibbs Executive Airport (Airport) operated by the City of San Diego (City) located in the community of Kearny Mesa. The AMP would involve both landside and airside components, which would be carried out in phases over a 20-year period. Construction within the AMP area would include demolition of existing airport infrastructure and the construction of new and expanded facilities.

Construction activities during the 20-year AMP planning period would result in GHG emissions from heavy construction equipment and worker vehicle trips. Changes in non-aircraft operational GHG emissions sources for the Airport would result from vehicle use associated with the new hangars, aircraft tie-downs, and public observation area; and energy, solid waste, water, and refrigerant leaks associated with the expanded terminal. Implementation of the AMP could conflict with the City's 2022 CAP. Mitigation measures to require City owned and operated project buildings to be all electric (no natural gas) and require compliance with the City's construction and demolition debris ordinance would ensure implementation of the AMP would be consistent with the City's 2022 CAP. With mitigation incorporated, the project would not result in significant GHG emissions impacts or impacts related to conflicts with applicable GHG reduction plans.

This page intentionally left blank

1.0 INTRODUCTION

1.1 PURPOSE OF THE REPORT

This report analyzes, at programmatic level, potential greenhouse gas (GHG) emissions impacts associated with the preferred alternative (project) to implement the proposed Airport Master Plan (AMP; Project) for Montgomery-Gibbs Executive Airport (also referred to as "Airport" or by its Federal Aviation Administration [FAA] identifier "MYF"). The analysis includes a description of existing conditions in the Airport vicinity and an assessment of potential impacts associated with the construction and operation (non-flight operations such as vehicular use and building energy use) of improvements included within the AMP. The analysis within this report addresses the relevant issues listed in Appendix G of the California Environmental Quality Act (CEQA) Guidelines and addresses consistency with the City of San Diego's Climate Action Plan (CAP). The assessment of aircraft-related GHG emissions is not included in this report.

1.2 PROJECT BACKGROUND

The City of San Diego (City) owns and operates MYF as a general aviation airport. Airport planning occurs at the national, state, regional, and local level; in 2017, the City began developing an update to the AMP to determine the extent, type, and schedule of development needed. An AMP presents the community and airport's vision for a 20-year strategic development plan based on the forecast of activity. It is used as a decision-making tool and is intended to complement other local and regional plans.

The AMP consists of a report documenting existing conditions of the Airport, a forecast of activity, facility requirements (the Airport's needs based on the forecast and compliance with Federal Aviation Administration (FAA) Design Standards for airports), development and evaluation of alternatives to meet those needs, and a funding plan for that development. AMP objectives include maintaining a balance between airport user interests and the surrounding community, remedying areas with a history of potential risk of collisions or runway incursions, and modernizing Airport facilities. The AMP includes an Airport Layout Plan (ALP), which graphically depicts all planned development at the Airport within the 20-year planning period as determined in the AMP. This drawing requires approval by the FAA, which makes the Airport eligible to receive federal funding for airport improvements and maintenance under the FAA's Airport Improvement Program. The ALP in the AMP is referred to as the project for the purposes of this analysis (C&S Companies 2024).

1.3 PROJECT LOCATION

The project is located within the boundaries of the Airport, which is in the San Diego community of Kearny Mesa. The Airport site is north of Aero Drive, east of SR-163, south of Balboa Avenue, and west of Ruffin Road (Refer to Figure 1, *Regional Location*, and Figure 2, *Project Vicinity [Aerial Photograph]*).

1.4 PROJECT DESCRIPTION

The proposed AMP would involve both landside and airside components. The landside components include up to 92 new hangars, as well as space for 48 new tie-down areas, within the westernmost portion of the Airport. Implementation of several of the larger 75,000 square-foot (SF) hangars would require encroachment into the hotel leasehold. A 6,400-SF footprint expansion to the existing 10,000-SF

terminal building is proposed. This expansion is due to a deficit in existing space and would not increase services or the number of employees. Other improvements include a public viewing area (outside the fence line and an unleaded avgas fuel tank.

Airside improvements proposed by the AMP include removal of pavement at the end of Runway 5 and Taxiway F, along with reconfigurations of other taxiways and construction of new run-up areas. The main airside improvement proposed is the removal of the Runway 28R displaced threshold, which was put into place by City of San Diego Resolution R-280194 passed in 1992. This would result in the threshold being moved 1,199 feet from approximately the location of Taxiway B, eastward to Taxiway A. This component would move safety areas such as the Runway Protection Zone and approach surfaces, as well as require associated improvements such as relocation of glideslope and related equipment. As part of the proposed AMP, an approximately 4.5-acre area adjacent to Aero Drive and Glenn H Curtis Road would remain as "Aeronautical Land Use." While the specific land uses for this area have not yet been determined, it is anticipated that the uses would be consistent with the other landside aeronautical support facilities found at the Airport and dependent on future aeronautical demand. Refer to Figure 3, *Proposed Airport Plan*.

1.5 REGULATORY REQUIREMENTS APPLICABLE TO NEW BUILDING CONSTRUCTION

1.5.1 Energy Efficiencies

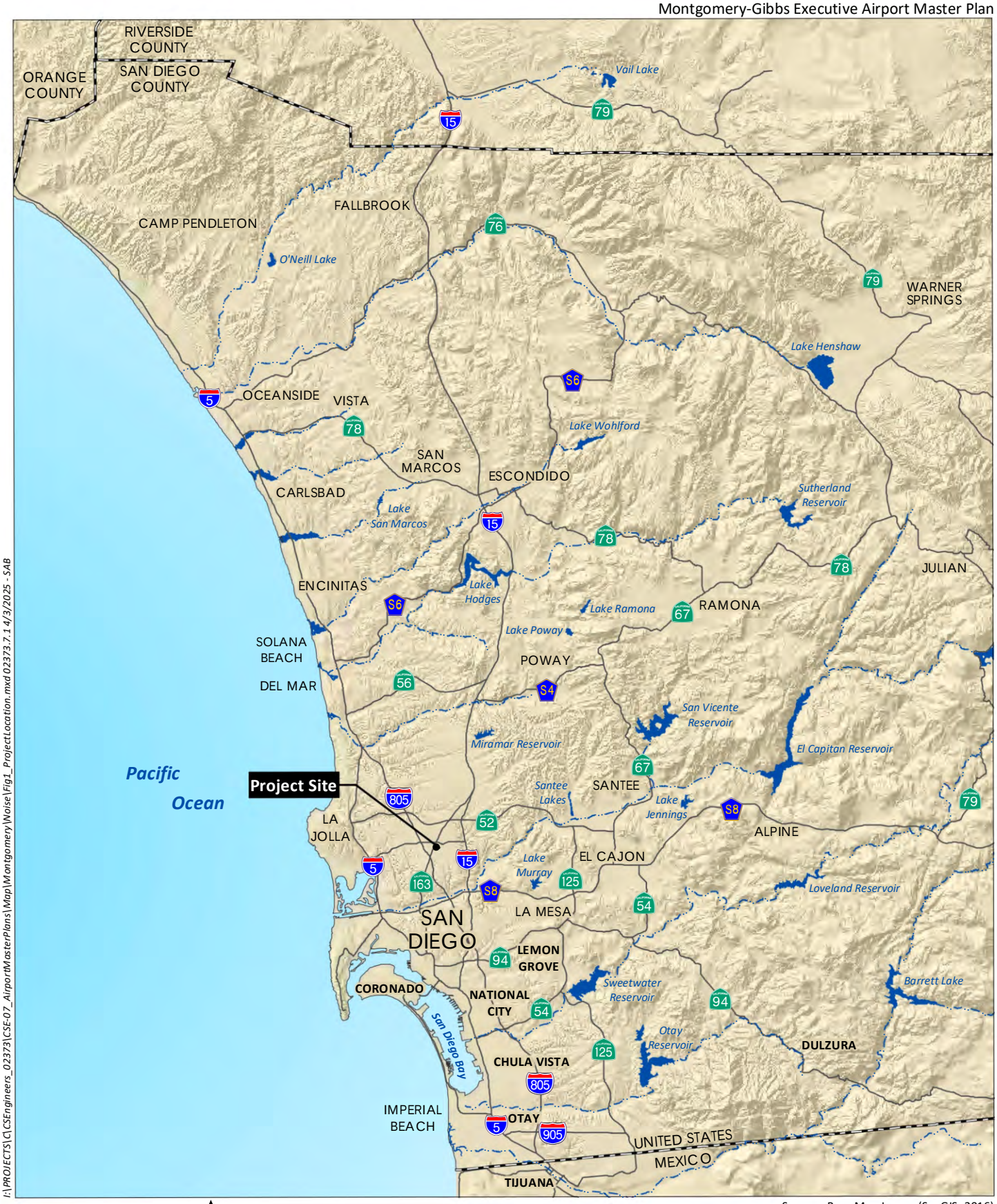
New buildings developed under the proposed AMP would, at a minimum, be designed to meet applicable Title 24 energy efficiency standards. In accordance with the requirements of the 2022 Title 24 (current at the time of this analysis), new buildings would be required to have:

- Enhanced ceiling, attic, and wall insulation,
- High efficiency window glazing,
- The installation of high-efficiency heating, ventilation, and air conditioning (HVAC) units verified by a third party, and
- The installation of photovoltaic systems (depending on the building use and size), including energy storage.

1.5.2 Water Conservation

In accordance with 2022 California Green Building Standards Code (CALGreen), mandatory measures for new building development under the proposed AMP would:

- Reduce potable water use,
- Install low-flow water fixtures,
- Reduce wastewater generation,
- Install low-flow bathroom fixtures, and
- Install weather-based smart irrigation control systems.



I:\PROJECTS\C\CSEngineers_02373\CSE-07_AirportMasterPlans\Map\Montgomery\Noise\Fig1_ProjectLocation.mxd 02373.7.1 4/3/2025 - SAB

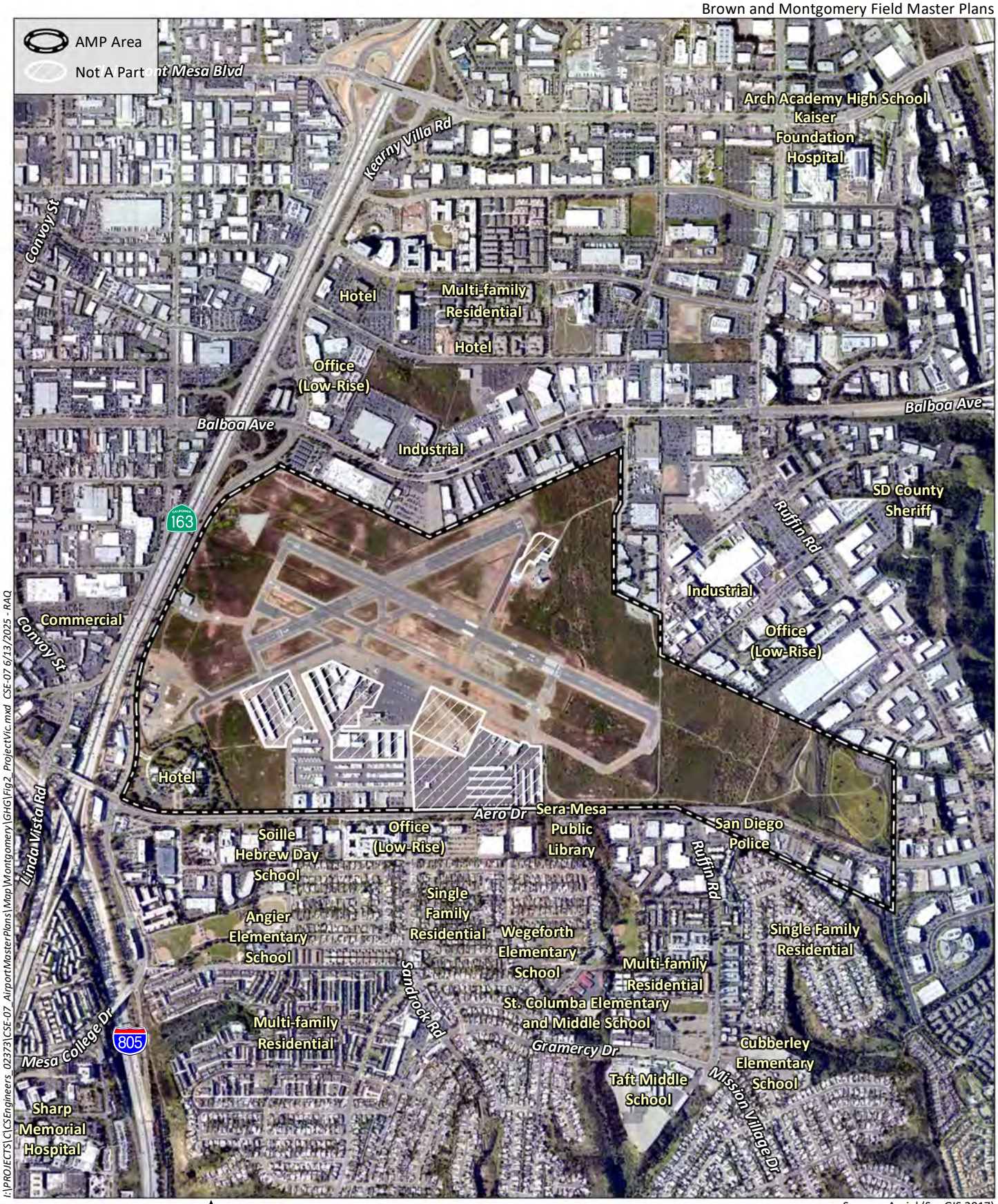
0 8 Miles

Source: Base Map Layers (SanGIS, 2016)

HELIX Environmental Planning

Regional Location

Figure 1



I:\PROJECTS\C\CSEngineers_02373\CSE-07_AirportMasterPlans\Map\Montgomery\GHG\Fig2_ProjectVic.mxd CSE-07 6/13/2025 - RAQ

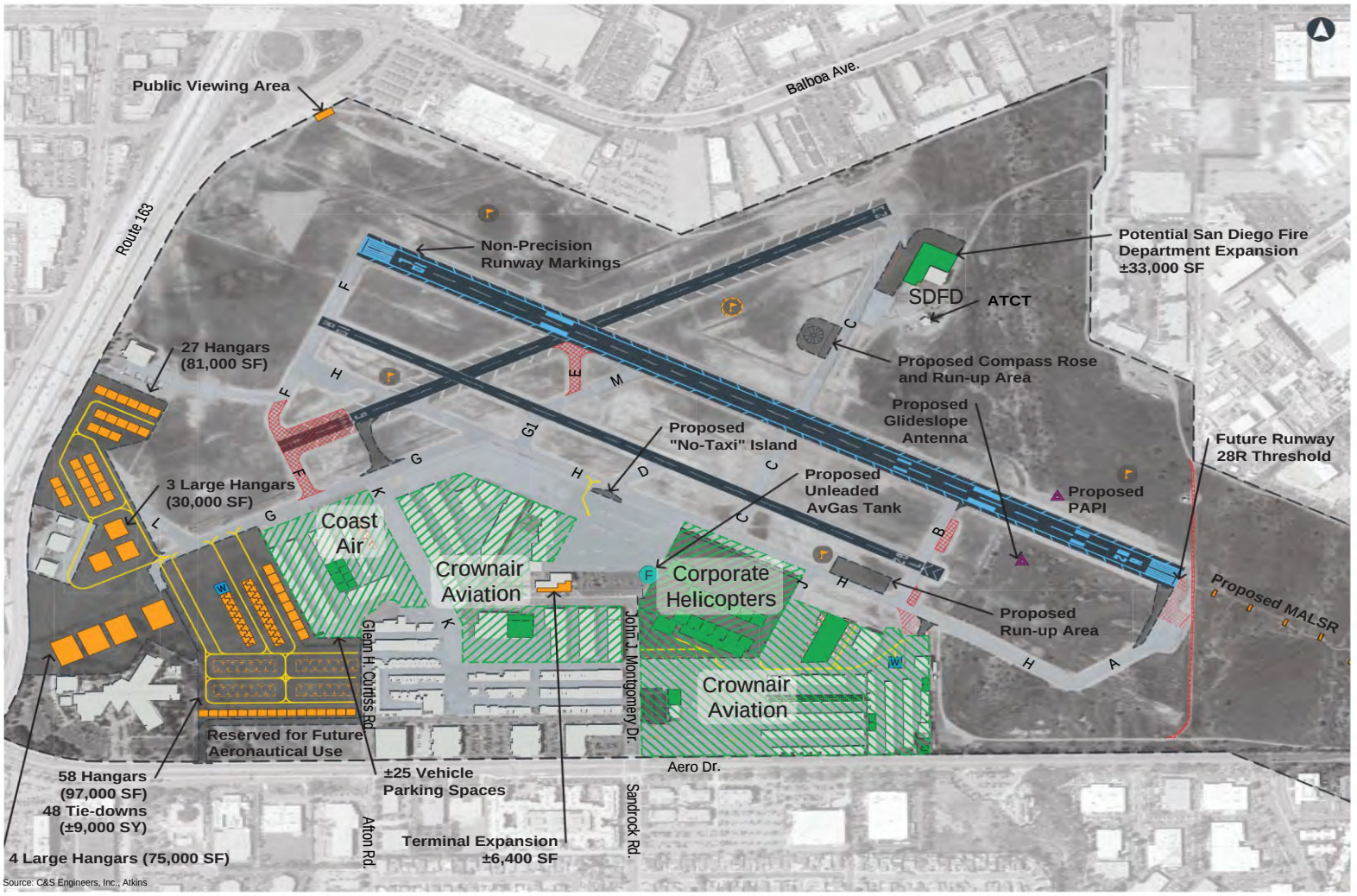
0 1,500 Feet

Source: Aerial (SanGIS 2017)

HELIX Environmental Planning

Project Vicinity (Aerial Photograph)

Figure 2



SD Airports

Montgomery-Gibbs Executive Airport Master Plan

Legend

- Property Line
- Existing Buildings
- Proposed Buildings
- Existing Airfield Pavement
- Proposed Pavement
- Proposed Demolition
- Private Leasehold Area
- Private Leasehold Proposed Development
- Proposed Taxiway/Taxilane Centerline
- Proposed Runway Markings
- Proposed Aircraft Tie-Downs
- Proposed Wash Rack
- Proposed Fuel Island
- Proposed Segmented Circle
- Proposed Wind Cone
- Proposed Navigational Aid

250' 0' 250' 500'

ATKINS
Member of the SNC-Lavalin Group

C&S COMPANIES

I:\PROJECTS\C\CSEngineers_02373\CSE-07_AirportMasterPlans\Map\Montgomery\Noise\Fig3_ProposedAirportPlan.indd 02373.7.1 4/3/2025 - SAB

Source: C&S Companies 2024

HELIX Environmental Planning

Proposed Airport Plan

Figure 3

1.5.3 Solid Waste Reduction

- Divert at least 75 percent of construction and demolition debris in accordance with City Municipal Ordinances.
- Divert at least 75 percent of operational waste from landfills through reuse and recycling in accordance with Assembly Bill (AB) 341.
- Provide areas for storage and collection of recyclables and yard waste in accordance with 2022 CALGreen.

2.0 ENVIRONMENTAL SETTING

2.1 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 like 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 2023 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 2023 were around 2.1 degrees Fahrenheit (°F; 1.2 degrees Celsius) above NASA's 1951-1980 baseline period average (NASA 2024). 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).

2.2 GREENHOUSE GASES

The GHGs 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).

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 for approximately

10,000 years. The atmospheric CO_2 concentration in 2010 was 390 ppm, 39 percent above the concentration at the start of the Industrial Revolution (about 280 ppm in 1750). As of February 2025, the CO_2 concentration exceeded 426 ppm (National Oceanic and Atmospheric Administration [NOAA] 2025).

Methane. CH_4 is the main component of natural gas used in homes. A natural source of methane is from the decay of organic matter. Geological deposits known as natural gas fields contain methane, which is extracted for fuel. Other sources are from 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.

Hydrofluorocarbons. Fluorocarbons are gases formed synthetically by replacing all hydrogen atoms in methane or ethane with chlorine and/or fluorine atoms. Chlorofluorocarbons are nontoxic, nonflammable, insoluble, and chemically nonreactive in the troposphere (the layer of air at Earth's surface). Chlorofluorocarbons 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 1989 Montreal Protocol.

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 semi-conductor 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 produce CO_2e.

Historically, GHG emission inventories have been calculated using the GWPs from the IPCC's Second Assessment Report (SAR). 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. In 2013, IPCC again updated the GWP values based on the latest science in its Fifth Assessment Report (AR5) (IPCC 2013). 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 values. By applying the GWP ratios, project-related CO_2e emissions can be tabulated in metric tons 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 1, *Global Warming Potentials and Atmospheric Lifetimes*.

Table 1
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-324a	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

2.3 REGULATORY FRAMEWORK

All levels of government have some responsibility for the protection of air quality, and each level (federal, State, and regional/local) has specific responsibilities relating to air quality regulation. GHG emissions and the regulation of GHGs are a relatively new component of air quality.

2.3.1 Federal

2.3.1.1 Federal Clean Air Act

The U.S. Supreme Court ruled on April 2, 2007, in *Massachusetts v. U.S. Environmental Protection Agency* (USEPA*)* that CO_2 is an air pollutant, as defined under the Clean Air Act (CAA), and that the USEPA has the authority to regulate emissions of GHGs. The USEPA announced that GHGs (including CO_2, CH_4, N_2O, HFC, PFC, and SF_6) threaten the public health and welfare of the American people. 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 United States Department of Transportation's National Highway Traffic Safety Administration (NHTSA).

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

The USEPA and the NHTSA have been working together on developing a national program of regulations to reduce GHG emissions and to improve fuel economy of light-duty vehicles. The USEPA established the first-ever national GHG emissions standards under the 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 March 2022, the agencies finalized standards for model years 2024 through 2026 and established an industry-wide fleet average of approximately 49 miles per gallon for passenger cars and light trucks in model year 2026 (NHTSA 2023).

2.3.2 California Greenhouse Gas Regulations

There are numerous State plans, policies, regulations, and laws related to GHG emissions and global climate change. Following is a discussion of some of these plans, policies, and regulations that (1) establish overall State policies and GHG emission reduction targets; (2) require State or local actions that result in direct or indirect GHG emission reductions for the proposed project; and (3) require CEQA analysis of GHG emissions.

2.3.2.1 Assembly Bill 32 – Global Warming Solution Act of 2006

The California Global Warming Solutions Act of 2006, widely known as AB 32, requires that the California Air Resources Board (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.

2.3.2.2 Assembly Bill 341 – Mandatory Commercial Recycling Law

The State legislature enacted AB 341 (California Public Resources Code Section 42649.2), increasing the diversion target to 75 percent statewide. AB 341 requires all businesses and public entities that generate 4 cubic yards or more of waste per week to have a recycling program in place. The final regulation was approved by the Office of Administrative Law on May 7, 2012, and went into effect on July 1, 2012.

2.3.2.3 Assembly Bill 1279 – California Climate Crisis Act

Approved by Governor Newsom on September 16, 2022, AB 1279, the California Climate Crisis Act, declares 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 the 1990 levels. AB 1279 anticipates achieving these policies through direct GHG emissions reductions, removal of CO_2 from the atmosphere (carbon capture), and an almost complete transition away from fossil fuels.

2.3.2.4 Assembly Bill 1493 – Vehicular Emissions of Greenhouse Gases

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 intend 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 prepare California to merge its rules with the federal CAFE rules for passenger vehicles (CARB 2017a). In January 2012, CARB approved a new emissions-control program for model years 2017 through 2025. The program combines the control of smog, soot, and global warming gases and requirements for greater numbers of zero-emission vehicles into a single packet of standards called Advanced Clean Cars (CARB 2025a).

2.3.2.5 California Air Resources Board: Climate Change 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 California's society and economy to reduce emissions and reach 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 business as usual. 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 emission targets. The 2013 Scoping Plan assessed progress toward achieving the 2020 mandate and made the case for addressing short-lived climate pollutants (SLCPs). The 2017 Scoping Plan also assessed 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 Assembly Bill 1279. The actions and outcomes in the plan will achieve significant reductions in fossil fuel combustion by deploying clean technologies and fuels; further reductions in SLCPs; 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).

2.3.2.6 California Code of Regulations, Title 24, Part 6

California Code of Regulations (CCR) Title 24 Part 6: California's Energy Efficiency Standards for Residential and Nonresidential 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 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 2022 Title 24 standards became effective on January 1, 2023. The 2022 update to the Building Energy Efficiency Standards focuses on several key areas to improve the energy efficiency of newly constructed buildings and additions and alterations to existing buildings. New for the 2022 Title 24 standards are nonresidential on-site PV (solar panels) electricity generation and energy storage requirements (California Energy Commission [CEC] 2022). The 2025 Title 24 standards will become effective on January 1, 2026. For non-residential buildings, the 2025 update to the Building Energy Efficiency Standards increases efficiency requirements for HVAC systems, encourages expanded use of heat pumps, establishes electric-ready requirements for commercial kitchens, and updates photovoltaic and battery energy storage standards (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.

2.3.2.7 California Code of Regulations, Title 24, Part 11

CCR Title 24, Part 11: The California Green Building Standards Code (CALGreen) is a code with mandatory requirements for all nonresidential 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. The 2022 Standards for new construction of, and additions and alterations to, residential and nonresidential buildings became effective on January 1, 2023 (California Building Standards Commission [CBSC] 2022). The 2025 CALGreen standards will become effective on January 1, 2026. At the time of this analysis, the 2025 CALGreen standards had not been published.

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 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.

2.3.2.8 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. California is on track to meet or exceed the target of reducing GHG emissions to 1990 levels by 2020, as established in AB 32. California's new 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 below 1990 levels by 2050.

2.3.2.9 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.

2.3.2.10 Executive Order S-01-07 – Low Carbon Fuel Standard

This EO, signed by Governor Schwarzenegger on January 18, 2007, directs 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 orders that a Low Carbon Fuel Standard (LCFS) for transportation fuels be established for California and directs CARB to determine whether an LCFS can 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 reversed the District Court's opinion and rejected arguments that implementing LCFS violates the interstate commerce clause in September 2013. CARB is therefore continuing to implement the LCFS statewide.

2.3.2.11 Executive Order S-3-05

On June 1, 2005, Executive Order (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, 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 the year 2000 level by 2010, to year 1990 levels by 2020, and to 80 percent below 1990 levels by 2050.

2.3.2.12 Senate Bill 32 and Assembly Bill 197

As a follow-up to AB 32 and in response to EO-B-30-15, SB 32 was passed by the California legislature in August 2016 to codify the EO's California GHG emission reduction target of 40 percent below 1990 levels by 2030 and requires the State to invest in the communities most affected by climate change. AB 197 establishes a legislative committee on climate change policies to help continue the State's activities to reduce GHG emissions.

2.3.2.13 Senate Bill 97

SB 97 required the Governor's Office of Planning and Research to develop recommended amendments to the State CEQA Guidelines for addressing GHG emissions, including the effects associated with transportation and energy consumption. The amendments became effective on March 18, 2010.

2.3.2.14 Senate Bill 100

Approved by Governor Brown on September 10, 2018, SB 100 extends the renewable electricity procurement goals and requirements of SB 350. SB 100 requires that all retail sales of electricity to California end-use customers be procured from 100 percent eligible renewable energy resources and zero-carbon resources by the end of 2045.

2.3.2.15 Senate Bill 350

Approved by Governor Brown on October 7, 2015, SB 350 increases California's renewable electricity procurement goal from 33 percent by 2020 to 50 percent by 2030. This will increase the use of Renewables Portfolio Standard eligible resources, including solar, wind, biomass, and geothermal. In addition, large utilities are required to develop and submit Integrated Resource Plans to detail how each entity will meet their customers' resource needs, reduce GHG emissions, and increase the use of clean energy.

2.3.2.16 Senate Bill 375

Senate Bill (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 (APS) to meet the targets. The APS is not a part of the RTP. Qualified projects consistent with an approved SCS or Alternative Planning Strategy categorized as "transit priority projects" would receive incentives to streamline CEQA processing.

The San Diego Association of Governments (SANDAG) is San Diego's local MPO and has responded to the requirements of SB 375 with the preparation of The Regional Plan (SANDAG 2015), discussed in greater detail in Section 2.3.3, below.

2.3.2.17 Senate Bill 743

On September 27, 2013, California Governor Jerry Brown signed SB 743 into law and started a process that changes transportation impact analysis as part of CEQA compliance. These changes include the elimination of auto delay, level of service (LOS), and other similar measures of vehicular capacity or traffic congestion as a basis for determining significant impacts for land use projects and plans in California. Further, parking impacts will not be considered significant impacts on the environment for select development projects within infill areas with nearby frequent transit service. According to the legislative intent contained in SB 743, these changes to current practice were necessary to more appropriately balance the needs of congestion management with statewide goals related to infill development, promotion of public health through active transportation, and reduction of GHG emissions.

2.3.2.18 Senate Bill 905

Approved by Governor Newsom on September 16, 2022, SB 905, Carbon Sequestration: Carbon Capture, Removal, Utilization, and Storage Program, 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.

2.3.3 Local

2.3.3.1 San Diego Association of Governments San Diego Forward: Regional Plan

SANDAG's 2021 Regional Plan (Regional Plan) is a long-range planning document developed to address the region's housing, economic, transportation, environmental, and overall quality-of-life needs. The underlying purpose is to provide direction and guidance on future regional growth (i.e., the location of new residential and nonresidential land uses) and transportation patterns throughout the region. The 2021 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 2021 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 the CARB; compliance with federal civil rights requirements (Title VI); environmental justice considerations; air quality conformity; and public participation (SANDAG 2021).

2.3.3.2 City of San Diego General Plan

The City of San Diego General Plan includes several climate change-related policies aimed at reducing GHG emissions from future development and City operations. For example, Conservation Element policy CE-A.2 aims to reduce the City's carbon footprint and to develop and adopt new or amended regulations, programs, and incentives as appropriate to implement the goals and policies set forth related to climate change (City 2008). The Land Use and Community Planning Element; the Mobility Element; the Urban Design Element; and the Public Facilities, Services and Safety Element also identify GHG reduction and climate change adaptation goals. These elements contain policy language related to sustainable land use patterns, alternative modes of transportation, energy efficiency, water conservation, waste reduction, and greater landfill efficiency. The overall intent of these policies is to support climate protection actions, while retaining flexibility in the design of implementation measures, which could be influenced by new scientific research, technological advances, environmental conditions, or State and federal legislation. The 2008 General Plan was adopted in 2009 and amended in 2010 and 2012.

2.3.3.3 City of San Diego Climate Action Plan

A Climate Action Plan (CAP) was adopted by the City Council in December 2015. The CAP quantifies existing GHG emissions as well as projected emissions for the years 2030 and 2035, resulting from activities within the City's jurisdiction. The CAP also identifies City target emissions levels, below which the Citywide GHG impacts would be less than significant. The CAP and the accompanying certified Final Environmental Impact Report (EIR) also identify and analyze the GHG emissions that would result from the business-as-usual scenario for the years 2030 and 2035. The CAP includes a monitoring and reporting program to ensure its progress toward achieving the specified GHG emission reductions and specifies actions that, if implemented, would achieve the specified GHG emission reduction targets. In 2015, the CAP was adopted in a public process following certification of the EIR [SCH No. 2015021053]. After the adoption of the CAP, the City also established additional specific measures (CAP Consistency Checklist) that, if implemented on a project-by-project basis, would further ensure that the City achieves the specified GHG emission reduction targets in the CAP.

On August 2, 2022, the City Council adopted an update to the CAP (2022 CAP), in a public process following certification of the Second Addendum to Final EIR [SCH No. 2015021053 (City 2022a)]. 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 as the measures that could be implemented on a project-by-project basis pursuant to CEQA Guidelines Section 15183.5(b)(1)(D). Proposed new development projects that are consistent with the CAP, as determined through compliance with the CAP Consistency Regulations, or as determined from City consistency guidance for program- and plan-level documents and infrastructure projects, may rely on the CAP for the cumulative impact analysis of GHG emissions.

The City's 2022 CAP lays out a set of 6 strategies to achieve City's interim 2030 fair-share GHG emissions reduction goal and 2035 goal of net zero greenhouse gas (GHG) emissions (City 2022a).

- Strategy 1: Decarbonization of the Built Environment: Decarbonization is defined in the 2022 CAP as the removal of carbon from a system, with a focus on the source with the greatest potential for reduction: natural gas or methane. For municipal buildings and facilities, including Brown Field Municipal Airport, the 2022 CAP has this goal (City 2022a p. 43):

  > *The City is committed to leading by example in the building decarbonization effort. The City has adopted a goal to achieve zero emissions municipal buildings and operations by 2035 and has developed a Municipal Energy Implementation Plan and supporting policies that will be brought forward to the City Council for consideration immediately following the adoption of the CAP. These actions will ensure all new construction projects and major retrofits of City owned and operated facilities achieve zero emissions - meaning the buildings are very energy efficient, all-electric, and powered by 100% renewable energy - either from onsite generation like solar panels or purchase of 100% renewable electricity from SDCP* [San Diego Community Power].

- Strategy 2: Access to Clean & Renewable Energy: Transitioning the City's and community's energy system away from fossil fuels and toward clean and renewable sources. This strategy includes working to provide City operations and the community with electricity sources from 100 percent renewable sources; supporting the transition to electric vehicles (EV) through programs to increase the availability of EV charging stations; supporting the installation of renewable electricity generation and energy storage for new and existing development and City facilities; and transition to low or zero-emission vehicles in the City's municipal fleet.

- Strategy 3: Mobility & Land Use: Reduce GHG emissions and other pollutant emissions from cars, diesel-powered trucks, buses, and other heavy-duty equipment. This strategy includes reducing vehicle miles traveled (VMT) for trips through transportation infrastructure and technology improvements, transportation demand management programs, and land use changes.

- Strategy 4: Circular Economy & Clean Communities: Reducing discharges to land, water, or air that threaten public and environmental health. This strategy includes waste diversion methods, such as composting, reduction, and reuse.

- Strategy 5: Resilient Infrastructure and Healthy Ecosystems: Actions related to climate-resilient systems in both natural and built environments. This strategy includes developing a Parks Master Plan prioritizing underserved communities, issuing an Urban Forest Management Plan, and planning for the long-term maintenance of additional trees.

- Strategy 6: Emerging Climate Actions: Further action, new policies, technological innovation, partnerships, and research for GHG emissions reductions and capture beyond the current ability to quantify and assess. This strategy includes collaboration on research and projects with the private sector; advancements to ensure energy resilience and exploration of alternative fuel sources; further research to understand potential land and water carbon sequestration opportunities; and developing pilot projects that catalyze new techniques and technologies from all sectors.

3.0 EXISTING CONDITIONS

3.1 WORLDWIDE AND NATIONAL GREENHOUSE GAS INVENTORY

In 2020, total anthropogenic GHG emissions worldwide were estimated at 49,800 million metric tons (MMT) of CO_2e emissions (PBL Netherlands Environmental Assessment Agency [PBL] 2022). The five largest emitting countries and the European Union (EU-27), together account for about 60 percent of total global GHG emissions: China (27%), the United States (12%), the European Union (about 7%), India (7%), the Russian Federation (4.5%) and Japan (2.4%) (PBL 2022).

Per USEPA Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2020, total United States GHG emissions were approximately 5,981 MMT CO_2e in 2020 (USEPA 2022). The primary GHG emitted by human activities in the United States was CO_2, which represented approximately 76.4% of total GHG emissions (4,760 MMT CO_2e). The largest source of CO_2, and of overall GHG emissions, was fossil-fuel combustion, which accounted for approximately 92.8% of CO_2 emissions in 2018 (5,031.8 MMT CO_2e). Relative to 1990, gross United States GHG emissions in 2020 were lower by 7.3%, down from a high of 15.2% above 1990 levels in 2007. GHG emissions decreased from 2019 to 2020 by 10.6% and overall, net emissions in 2020 were 21.4% below 2005 levels (USEPA 2022).

3.2 STATE AND REGIONAL GHG INVENTORIES

CARB performed statewide inventories for the years 2000 to 2020, as shown in Table 2, *California Greenhouse Gas Emissions by Sector*. The inventory is divided into five broad sectors of economic activity: agriculture, commercial and residential, electricity generation, industrial, and transportation. Emissions are quantified in MMT CO_2e.

Table 2
CALIFORNIA GREENHOUSE GAS EMISSIONS BY SECTOR

Sector	Emissions (MMT CO_2e)			
	1990	2000	2010	2020
Agriculture and Forestry	18.9 (4%)	31.0 (7%)	33.7 (8%)	31.6 (9%)
Commercial and Residential	44.1 (10%)	45.8 (10%)	52.2 (12%)	38.7 (10%)
Electricity Generation	110.5 (26%)	105.4 (22%)	90.6 (20%)	59.5 (16%)
Industrial	105.3 (24%)	105.8 (22%)	101.8 (23%)	73.3 (20%)

Sector	Emissions (MMT CO_2e)			
	1990	2000	2010	2020
Transportation	150.6 (35%)	183.2 (39%)	170.2 (38%)	135.8 (37%)
Unspecified Remaining	1.3 (<1%)	0.0 (0%)	0.0 (0%)	30.2 (8%)
Total	**430.7**	**471.1**	**448.5**	**369.1**

Source: CARB 2007; CARB 2025b
MMT = million metric tons; CO_2e = carbon dioxide equivalent

As shown in Table 7, statewide GHG source emissions totaled 430.7 MMT CO_2e in 1990, 471.1 MMT CO_2e in 2000, 448.5 MMT CO_2e in 2010, and 369.1 MMT CO_2e in 2020. Transportation-related emissions consistently contribute the most GHG emissions, followed by electricity generation and industrial emissions (CARB 2007 and CARB 2025b).

A San Diego regional emissions inventory was prepared by the University of San Diego School of Law, Energy Policy Initiative Center (EPIC), which took into account the unique characteristics of the region. Their 2014 emissions inventory for San Diego is duplicated below in Table 3, *San Diego County Greenhouse Gas Emissions by Sector*. The sectors included in this inventory are somewhat different from those in the statewide inventory. Similar to the statewide emissions, transportation-related GHG emissions contributed the most countywide, followed by emissions associated with energy use (County of San Diego 2014).

Table 1
SAN DIEGO COUNTY GHG EMISSIONS BY SECTOR IN 2014

Sector	2014 Emissions MMT CO_2e (% total)[1]
On-Road Transportation	1.46 (45%)
Electricity	0.76 (24%)
Solid Waste	0.34 (11%)
Natural Gas Consumption	0.29 (9%)
Agriculture	0.16 (5%)
Water	0.13 (4%)
Off-Road Transportation	0.04 (1%)
Wastewater	0.02 (1%)
Propane	0.01 (<0.5%)
Total	**3.21**

Source: County of San Diego 2014
[1] Percentages may not total 100 due to rounding.
MMT = million metric tons; CO2e = carbon dioxide equivalent

3.3 CITY OF SAN DIEGO CAP INVENTORY

As reported in the City of San Diego CAP Annual Report 2020, the total community-wide GHG emissions from the City of San Diego in 2019 were approximately 9.6 million MMT CO_2e, a 25 percent decrease in emissions from 2010. Decreases in GHG emissions from electricity consumption, transportation, solid waste, and water use offset some increase seen from natural gas consumption and wastewater production year-over-year (City 2020).

4.0 METHODOLOGY AND SIGNIFICANCE CRITERIA

4.1 METHODOLOGY

GHG emissions from the project construction activities and non-aircraft operational sources were calculated using the California Emissions Estimator Model (CalEEMod), Version 2022.1. CalEEMod is a computer model used to estimate air emissions resulting from land development projects throughout the state of California. CalEEMod was developed by the South Coast Air Quality Management District (SCAQMD) with the input of several air quality management and pollution control districts.

In brief, CalEEMod is a computer model that estimates criteria air pollutant and greenhouse gas 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, and solid waste disposal. Emissions are estimated based on land use information input to the model by the user.

In the first module, the user defines the specific land uses that will occur at the project site. The user also selects the appropriate land use setting (urban or rural), operational year, location, climate zone, and utility provider. The input land uses, size features, and population are used throughout CalEEMod in determining default variables and calculations in each of the subsequent modules. The input for land use information consists of land use subtypes (such as the residential subtypes of single-family residential and multi-family medium-rise residential) and their unit or square footage quantities.

Subsequent modules include construction (including off-road vehicle emissions), mobile (on-road vehicle emissions), area sources (woodstoves, fireplaces, consumer products [cleansers, aerosols, solvents], landscape maintenance equipment, architectural coatings), water and wastewater, and solid waste. Each module comprises multiple components, including an associated mitigation module to account for further reductions in the reported baseline calculations. Other inputs include trip generation rates, trip lengths, vehicle fleet mix (percentage autos, medium trucks, etc.), trip distribution (i.e., percent work to home, etc.), duration of construction phases, construction equipment usage, grading areas, season, and ambient temperature, as well as other parameters. The calculation methodology and default data used in CalEEMod can be found in the CalEEMod User's Guide Appendices A, D, and E (CAPCOA 2022).

In various places, the user can input additional information and/or override the default assumptions to account for project- or location-specific parameters. For this assessment, the default parameters were not changed unless otherwise noted. The CalEEMod output files for the project are included in Appendix A to this report.

4.1.1 Construction Emissions

Construction emissions were estimated using CalEEMod based on the proposed construction phases and equipment described below. CalEEMod output files for the project are included in Appendix A to this report.

4.1.1.1 Construction Phasing

Airport improvements identified in the AMP are proposed over the 20-year planning period and are broken down into two 5-year periods (Phase I and Phase II) and one 10-year period (Phase III). Table 4, *MYF Airport Master Plan Phasing*, lists the improvement tasks and the phasing. All tasks are assumed to occur sequentially (no overlap). Because a portion of the AMP planning period has already passed, for the purposes of this analysis, Phase I construction is assumed to commence in January 2026, followed by Phase II construction in January 2028, and Phase III in January 2030. Construction is assumed to occur 8 hours per day, 5 days per week. Some construction activities may occur at night.

Table 4
MYF AIRPORT MASTER PLAN PHASING

Task #	Improvement
	Phase I Near-Term 0 - 5 Years
1-1	Runway 10L/28R grooving and marking
1-2	Runway 10R/28L, Taxiways B/C/F and Taxilane A rehabilitation, Taxiways E demolition, and compass calibration pad
1-3	Taxiways H/A/J/B rehabilitation; Runway 28L runup area improvements
1-4	Taxiway K and Terminal apron rehabilitation, and “No-Taxi” island
1-5	Coast Air leasehold development to include new box hangars
1-6	Crownair leasehold development to include new box hangars
1-7	Corporate Helicopters leasehold development to include new box hangars
1-8	San Diego Fire Department development to include large box hangar and apron
1-9	Construct VSR between Taxilane P and Taxilane J. Close portion of VSR near Runway 28R end
1-10	Relocate segmented circle and wind cones out of safety areas
1-11	Avigation easements for Runway 28R existing approach runway protection zone
1-12	Executive Airpark leasehold development to include FBO expansion and vehicle parking
1-13	Unleaded avgas fuel tank
1-14	Property to be released
	Phase II Mid-Term 6 - 10 Years
2-1	Preventative maintenance on section of Runway 10L/28R
2-2	Hangar area pavement
2-3	Construct hangars south of Taxiway G
2-4	Executive Airpark leasehold development to include new hangars, tie-downs, wash rack, fuel tanks, solar panels on shade hangars, and vehicle parking.
2-5	Airfield lighting and electrical upgrades
2-6	Perimeter fencing improvements
2-7	Reserved for future aeronautical land uses
	Phase III Long-Term 11 - 20 Years
3-1	Runway 10L non-precision markings and avigation easements for future approach RPZ
3-2	Public viewing area
3-3	Terminal expansion
3-4	Runway 5 end relocation and new connector taxiways
3-5	Construct large conventional hangar
3-6	Runway 28R threshold relocation (Taxiway A fillet), reduce runway width to 100 feet, and avigation easements for future approach RPZ
3-7	Runway 28R threshold relocation – Navigational aids (glidescope equipment and PAPI) and MALSR relocation
3-8	New hangars in the Spiders area (north of the Four Points by Sheraton hotel)

4.1.1.2 Runway Grooving

Runway grooving is a process in which transverse grooves, typically 0.25 inches wide by 0.25 inches deep on 1.5-inch centers, are cut into a runway to reduce aircraft hydroplaning. Grooving is typically done with a specialized machine that uses a wet grinding process. Water for the process is provided by an accompanying tank truck. The resulting concrete or asphalt waste slurry is either vacuumed by the grooving machine and pumped to the tank truck or flushed from the runway with water. It is assumed that a sweeper/scrubber would be used to further clean the runway at the end of each grinding shift. Approximately 439,400 SF of surface is assumed to require runway grooving. Runway grooving is assumed to require a 400 horsepower (hp) grooving machine, processing approximately 25,000 SF per day.

4.1.1.3 Pavement Maintenance

AMP tasks identified as runway, taxiway, or ramp improvements are assumed to be pavement maintenance treatments in accordance with the *Pavement Maintenance Management Plan* (C&S 2019). All pavement improvements are assumed to require re-application of runway and taxiway markings following paving activities. Pavement maintenance and improvements are broken into four categories:

- **Preventative Maintenance and Rehabilitation**: Pavement preventative maintenance or rehabilitation would involve a combination of any of the following operations: crack sealing; shallow patching; deep patching; and/or surface treatment. To be conservative, preventative maintenance is assumed to require the same level of treatment as rehabilitation. Three inches of material is assumed to be removed during shallow patching, and six inches of material is assumed to be removed during deep patching. Surface treatment is assumed to be a spray application of a bituminous slurry (also known as a seal coat) without added aggregate. It is assumed that the rehabilitated areas would require new pavement marking. Approximately 854,200 SF of pavement is assumed to require rehabilitative maintenance. The rehabilitation work rate is assumed to be 10,000 SF per day. The percentage of each rehabilitation area affected by repair operations is assumed to be:
    - Crack Sealing – 100%
    - Shallow Patching – 5%
    - Deep Patching – 2%
    - Surface Treatment – 20%
    - Marking – 10%
- **Reconstruction**: Pavement reconstruction is assumed to require removing up to 6 inches of asphalt concrete using a pavement milling machine and exporting the ground asphalt from the project site. A new layer of asphalt concrete would be placed by a paving machine, followed by a roller. It is assumed that the rehabilitated areas would require new pavement marking. Approximately 249,000 SF of pavement is assumed to require reconstruction. The reconstruction work rate is assumed to be approximately 25,000 SF per day.
- **New Surface**: The construction of new surfaces for runways, taxiways, aprons, and hangar/tie-down areas is assumed to require excavating to a depth of approximately 18 inches using a

combination of rubber-tired dozers and graders and rubber-tired loaders and exporting the material from the site. New surfaces are assumed to be typically 12 inches of compacted with a steel drum vibratory roller, followed by 6 inches of asphalt concrete laid by a paving machine and compacted with a steel drum vibratory roller. Approximately 1,782,100 SF of pavement is assumed to require new surfacing. The new surface work rate is assumed to be 12,000 SF per day.

- **Pavement Demolition**: Pavement demolition is assumed to require the removal of the asphalt concrete layer (leaving any aggregate subgrade), grinding the removed asphalt, and exporting the material from the site. Approximately 166,600 SF of pavement is assumed to be demolished. Pavement demolition work rate is assumed to be approximately 10,000 SF per day.

4.1.1.4 Pavement Marking

For new or repaired runway or taxiway surfaces, 10 percent of the surface is assumed to require new marking. It is assumed that the area to be marked would be cleaned of rubber and old paint prior to marking using a self-propelled high-pressure blasting truck, followed by a self-propelled automated pavement marking machine with an assumed total of 712 hp (2 engines). For new or repaired runway or taxiway surfaces, 243,000 SF is assumed to require new marking. Marking work rate is assumed to be 35,000 SF per day.

4.1.1.5 Hangar Construction Assumptions

Hangars are assumed to be pre-fabricated and pre-painted panels assembled onto a welded frame with a crane and/or a forklift on a concrete slab foundation. For a typical 50-foot by 50-foot hangar, the foundation is assumed to require five workdays, and assembly of the building to require five days. For a series of hangars, the work rate is assumed to be approximately 500 SF per day.

4.1.1.6 Construction Equipment Assumptions

The construction equipment to be used for each improvement task in the proposed AMP has not been determined at the time of this programmatic analysis. A conservative (high) estimate of the maximum anticipated required equipment is shown in Table 5, *Construction Equipment Assumptions*.

Table 5
CONSTRUCTION EQUIPMENT ASSUMPTIONS

Activity Type	Equipment	Quantity	Hours per Day
Pavement Maintenance/Rehabilitation	Crack Sealing Truck	1	5
	Concrete Saw	1	2
	Tractors/Loaders/Backhoes	1	7
	Paving Equipment	1	2
	Roller	1	2
Pavement Reconstruction	Pavement Milling Machine	1	6
	Paving Machine	1	6
	Paving Equipment	1	6
	Roller	1	7
Pavement New Surface	Rubber Tired Dozer	1	4

Activity Type	Equipment	Quantity	Hours per Day
	Rubber Tired Loader	1	4
	Grader	1	4
	Paving Machine	1	5
	Paving Equipment	1	5
	Roller	1	5
Pavement Demolition	Concrete Saw	1	2
	Rubber Tired Dozer	1	7
	Rubber Tired Loader	1	4
	Excavator	1	7
	Grinding/Crushing Machine	1	4
Pavement Marking	Blasting Truck	1	4
	Marking Machine	1	4
Runway Grooving	Grooving Machine	1	7
	Tank Truck	1	7
	Sweeper/Scrubber	1	1
Hangar Construction	Tractors/Loaders/Backhoes	1	4
	Crane	1	3
	Forklift	1	3
	Aerial Lift	1	3
	Welder	1	2
	Generator	1	6
Terminal Expansion	Crane	1	7
	Forklift	3	8
	Generator Set	1	8
	Tractors/Loaders/Backhoes	3	7
	Welders	1	8

Source: CalEEMod (output data, including equipment horsepower, is provided in Appendix A)

4.1.2 Operation Emissions

For long-term operation, emissions resulting from the 6,400 SF terminal building expansion and the 92 new hangars were modeled.

4.1.2.1 Mobile (Transportation) Sources

Operational emissions from mobile source emissions are associated with project-related vehicle miles traveled (VMT) (calculated in the model from trip generation and trip lengths). Project trip generation was analyzed in the *Montgomery-Gibbs Executive Airport Transportation Impact Analysis and Local Mobility Analysis*. Project trip generation was based on vehicle counts for airport driveways during one week in February 2025, and on airport flight operations during the same week. Trips and employees per flight operation were calculated and used to estimate 151 new daily airport trips in 2037 (CR Associates 2025). The calculated net new project trips were used in the emissions modeling with CalEEMod default distances, purposes, and fleet mix.

4.1.2.2 Area Sources

Area sources include emissions from landscaping equipment, the use of consumer products, and the reapplication of architectural coatings for maintenance. Emissions associated with area sources were estimated using the CalEEMod default values.

4.1.2.3 Energy Sources

Development within the project site would use electricity for lighting, heating, cooling, and appliances. Electricity generation typically entails the combustion of fossil fuels, including natural gas and coal, which is then transmitted to end users. A building's electricity use is thus associated with the off-site or indirect emission of GHGs at the source of electricity generation (power plant).

Energy use for the terminal building was modeled using CalEEMod defaults. Hangers were assumed to use only CalEEMod default electricity, not subject to Title 24 (lighting, plug-in appliances, and tools). Although new project buildings would be required to comply with the current Title 24 Part 6 building energy efficiency regulations, including potential requirements for on-site photovoltaic electricity generation (e.g., solar panels) and energy storage (e.g., batteries), because of uncertainties about the amount of conditioned space (i.e., with heating and air conditioning) in new project buildings, no reduction in project building energy use due to the installation of solar panels was assumed in the modeling.

For the mitigated scenario with all-electric buildings, the default CalEEMod natural gas use for the terminal building was converted to the equivalent energy in electricity (1,000 British Thermal Units is equal to 0.293 kilowatts of electricity) and added to the CalEEMod default electricity use. New hangars were assumed to not use any natural gas.

4.1.2.4 Water and Wastewater Sources

Water-related GHG emissions are from the conveyance and treatment of water and wastewater. Indoor water use (and wastewater generation) and outdoor water use (i.e., landscape irrigation). The project would not install new irrigated landscaping and would not result in an increase in water use for irrigation on the project site. Indoor water use (and the resulting wastewater generation) for the terminal building and maintenance building was modeled using CalEEMod defaults. New hangars were assumed to not use any water.

4.1.2.5 Solid Waste Sources

Solid waste generation for the terminal building and the maintenance building was modeled using CalEEMod defaults. Solid waste generation for the new hangars would generate minimal solid waste, conservatively assumed to be 0.1 ton per year per 1,000 SF of hangar space.

4.1.2.6 Refrigerants

CalEEMod calculates GHG emissions associated with refrigerants (typically HFCs or blends of gases containing HFCs) that are emitted through leakage or maintenance from project refrigeration systems, freezers, and air conditioning systems. Refrigerant emissions from the terminal building and maintenance building HVAC systems, refrigerators, and freezers was calculated using CalEEMod

defaults. Refrigerant leakage from the terminal building HVAC systems, refrigerators, and freezers were modeled using CalEEMod defaults. New hangars were assumed to not have any HVAC or refrigeration systems.

4.2 GUIDELINES FOR THE DETERMINATION OF SIGNIFICANCE

Given the relatively small levels of 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 with respect 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. Thus, the potential for a significant GHG impact is limited to cumulative impacts.

The City (2022b) has approved guidelines for determining significance based on Appendix G.VII of the State CEQA Guidelines, which provide guidance that a project would have a significant environmental impact if it would:

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

2. Conflict with the City's CAP or another applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.

Proposed new development projects that are consistent with the CAP, as determined through compliance with the CAP Consistency Regulations, or as determined from City consistency guidance for program- and plan level documents and infrastructure projects, may rely on the CAP for the cumulative impact analysis of GHG emissions pursuant to CEQA Guidelines Section 15183.5(b)(1)(D). The environmental analysis for public infrastructure projects should include a discussion of overall consistency with each of the strategies of the 2022 CAP: Strategy 1: Decarbonization of the Built Environment; Strategy 2: Access to Clean and Renewable Energy; Strategy 3: Mobility and Land Use; Strategy 4: Circular Economy and Clean Communities; Strategy 5: Resilient Infrastructure and Healthy Ecosystems; and Strategy 6: Emerging Climate Action (City 2022b).

5.0 PROJECT IMPACTS

This section evaluates potential related to the generation of GHG emissions resulting from implementation of the project.

5.1 GENERATION OF GREENHOUSE GAS EMISSIONS

5.1.1 Impacts

5.1.1.1 Construction Emissions

Construction activities associated with implementation of the proposed AMP would result in emissions of GHGs from the use of construction equipment, from worker and vendor vehicles, and from haul trucks. For the purposes of determining the increase in GHG emissions that would occur as a result of

implementation of the proposed AMP, an inventory of construction emissions was developed using CalEEMod, as described in Section 4.1. Table 6, *Maximum Annual Construction GHG Emissions*, shows the estimated maximum annual construction GHG emissions through the horizon of the proposed AMP. These maximum annual emissions estimates assume that construction of each improvement task listed in Table 4 would occur sequentially without gaps for each construction period, starting in 2026. Actual annual emissions would be lower if construction of improvement tasks would be spread throughout each construction period.

Table 6
MAXIMUM ANNUAL CONSTRUCTION GHG EMISSIONS

Construction Period	Maximum Annual Emissions (MT CO_2e/year)
Near-Term (maximum in 2026)	456.2
Mid-Term (maximum in 2028)	480.5
Long-Term (maximum in 2030)	541.9
Maximum Annual	**541.9**

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

5.1.1.2 Operational Emissions

Existing sources of non-aircraft related GHG emissions associated with operation of the Airport include: mobile sources, such as exhaust from visitor, pilot, employee, and vendor vehicles; area sources, such as the use of landscape maintenance and aviation support equipment; the use of consumer products and paint for cleaning and maintenance; indirect emissions from off-site generation of electric used by Airport buildings; the treatment and transport of water and wastewater; and the disposal of solid waste. The proposed increase of 6,400 SF for the terminal building could result in an increase in building energy use. The installation of hangars and aircraft tie-downs could result in additional trips for users of the Airport. The potential increase in non-aircraft operational emissions resulting from implementation of the project is shown in Table 7, *Unmitigated Annual Operation GHG Emissions (Non-Aircraft)*.

Table 7
UNMITIGATED ANNUAL OPERATION GHG EMISSIONS (NON-AIRCRAFT)

Source	Annual Emissions (MT CO_2e/year)
Mobile	178.5
Area	7.1
Energy	72.9
Water and Wastewater	2.2
Solid Waste	16.7
Refrigerants	<0.1
Total Annual	**277.3**

Source: CalEEMod version 2016.3.2. Model output data is provided in Appendix A.
MT = metric tons; CO_2e = carbon dioxide equivalent
Note: Total may not sum due to rounding.

5.1.1.3 CAP Consistency Checklist

To determine the significance of GHG emissions attributable to the implementation of the proposed AMP, the project was evaluated for consistency with the City's CAP utilizing the City's Implementation Strategies and guidance memo for Plan- and Policy-Level Environmental Documents and Public Infrastructure Projects (City 2022b). These Strategies outline how the City will achieve GHG reductions through the following:

Strategy 1: Decarbonization of the Built Environment

As discussed in Section 2.3.3.3, the City has adopted a goal to achieve zero emissions municipal buildings and operations by 2035 (City 2022a). If any new Project building or renovation of existing buildings were to utilize natural gas, the project would be inconsistent with the City's 2022 CAP, resulting in a potentially significant impact.

Strategy 2: Access to Clean & Renewable Energy

Similar to Strategy 1, above, if any new Project building or renovation of existing buildings were to utilize natural gas, the project would be inconsistent with State goals and City 2022 CAP goals for 100 percent renewable energy, resulting in a potentially significant impact.

Strategy 3: Mobility & Land Use

The Airport is not within a TPA designated by the City. The project would not conflict with City plans for bicycle, pedestrian, or transit infrastructure improvement projects, or conflict with Strategy 3 of the City's 2022 CAP.

Strategy 4: Circular Economy & Clean Facilities

The City ordinance Article 6, Division 6, Construction and Demolition Debris Diversion Deposit Program, requires all applicants for a Building Permit or a Demolition/Removal Permit to submit a Waste Management Form and divert 75 percent by weight of the total construction and demolition debris to a certified recycling facility. Because some construction and demolition activities associated with implementation of the AMP may not be subject to the City's Construction and Demolition Debris Diversion Deposit Program ordinance, if a minimum of 75 percent of all project construction and demolition debris (including pavement) would not be diverted to a certified recycling facility, the project would be inconsistent with Strategy 4 of the City's 2022 CAP, resulting in a potentially significant impact.

Strategy 5: Resilient Infrastructure and Healthy Ecosystems

The project does not include removal of existing trees or planting of new trees on streets within the public right-of-way of streets. The project would not conflict with Strategy 5 of the City's 2022 CAP.

Strategy 6: Emerging Climate Action

The project would not conflict with or obstruct implementation of any State of City emerging climate action plan, goal, or strategy (e.g., carbon capture). The project would not conflict with Strategy 6 of the City's 2022 CAP. Significance of Impacts

Without requiring all new or renovated project buildings to be all electric and requiring a 75 percent construction and demolition debris diversion rate, the project would be inconsistent with the City's 2022 CAP requirements for infrastructure projects. Therefore, the impact would be potentially significant.

5.1.2 Mitigation Measures

The following mitigation measures would ensure consistency with the City's 2022 CAP:

GHG-1 Prohibition of Natural Gas Use in City Facilities. To facilitate the City's goal of achieving zero emissions for municipal buildings and operations by 2035, the City shall require and verify the specification on the applicable plans that no natural gas appliances or natural gas plumbing are included in new City-owned and operated buildings prior to project design approval. Further, for existing City-owned buildings, the City shall replace existing fossil-fuel energy sources with electric or renewable energy sources as those buildings are scheduled for upgrades. For facilities identified as historically significant, such upgrades would need to comply with the U.S. Secretary of the Interior's Standards for the Treatment of Historic Properties.

GHG-2 Construction and Demolition Waste Diversion. Prior to issuing building or demolition permits, or approving construction contracts which include building or pavement demolition for any AMP implementation project, the City shall require completion of a Waste Management Form Part I, and all debris diversion and verification requirements specified in the City of San Diego Municipal Article 6, *Collection, Transportation and Disposal of Refuse and Solid Waste*; Division 6, *Construction and Demolition Debris Diversion Deposit Program.*

Designing new and renovated project buildings to be all-electric would replace natural gas energy use with electric energy use. The effect of mitigation Measure GHG-1 is shown in Table 8, *Mitigated Annual Operation GHG Emissions (Non-Aircraft)*.

Table 8
MITIGATED ANNUAL OPERATION EMISSIONS (NON-AIRCRAFT)

Source	Annual Emissions (MT CO_2e/year)
Mobile	178.5
Area	7.1
Energy	66.7
Water and Wastewater	2.2
Solid Waste	16.7
Refrigerants	<0.1
Total Annual	**271.1**

Source: CalEEMod. Model output data is provided in Appendix A.
MT = metric tons; CO2e = carbon dioxide equivalent

As shown in Table 8, the calculated mitigated GHG emissions would result in 271.1 MT CO_2e per year, a decrease of 6.8 MT CO_2e per year. The mitigated modeling replaced the natural gas energy use with the equivalent quantity of electrical energy, and the modeling does not account for the increased energy efficiency of electric appliances (e.g., hot water heaters and furnaces/heat pumps) compared to natural gas appliances. In addition, the calculated GHG emissions are for the year 2032. Beyond 2032, the indirect GHG emissions from electricity use would decrease and eventually approach zero GHG emissions as the state's electricity supply is decarbonized.

5.1.3 Significance After Mitigation

With the implementation of mitigation measures GHG-1 and GHG-2, the project be consistent with the City's 2022 CAP and would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. The impact would be less than significant with mitigation incorporated.

5.2 CONSISTENCY WITH GHG REDUCTION PLANS

5.2.1 Impacts

The project was analyzed for conflicts with the City's 2022 CAP, the Regional Plan; and the CARB 2022 Scoping Plan.

5.2.1.1 City of San Diego 2022 Climate Action Plan

As discussed in Section 5.1, above, without requiring all new or renovated project buildings to be all electric and requiring a 75 percent construction and demolition debris diversion rate, the project would be inconsistent with the City's 2022 CAP, resulting in a potentially significant impact.

5.2.1.2 San Diego Association of Governments Regional Plan

As discussed in Section 2.3, the underlying purpose of the Regional Plan is to provide direction and guidance on future regional growth (i.e., the location of new residential and nonresidential land uses) and transportation patterns throughout San Diego County as stipulated under SB 375. Implementation of the project would not result in regional residential growth, and the Airport is not within a TPA identified in the Regional Plan. Therefore, the proposed Project would not conflict with the goals and measures of the Regional Plan for the reduction of transportation-related GHGs.

5.2.1.3 California Air Resources Board 2022 Scoping Plan

There are numerous State plans, policies, and regulations adopted for the purpose of reducing GHG emissions. The principal overall State plan and policy is AB 32, the California Global Warming Solutions Act of 2006. The quantitative goal of AB 32 is to reduce GHG emissions to 1990 levels by 2020. SB 32 requires further reductions of 40 percent below 1990 levels by 2030. Beyond 2030, AB 1279 aims to achieve carbon neutrality in the state by 2045. As discussed in Section 2.3.2, the 2022 Scoping Plan lays out a path for achieving the regulatory requirements of AB 32, SB 32, and AB 1279. Statewide plans and regulations, such as GHG emissions standards for vehicles (AB 1493), the LCFS, and regulations requiring an increasing proportion 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. Therefore, the proposed Project does not conflict with State GHG reduction plans and regulations.

5.2.2 Significance of Impacts

Without requiring all new or renovated project buildings to be all electric, and requiring a 75 percent construction and demolition debris diversion rate, the project would be inconsistent with the City's 2022 CAP. Therefore, the project could conflict with the City's CAP, and the impact would be potentially significant.

5.2.3 Mitigation Framework

Implementation of mitigation measures GHG-1 and GHG-2, described above in Section 5.1, would ensure consistency with the City's 2022 CAP.

5.2.4 Significance After Mitigation

With the implementation of mitigation measures GHG-1 and GHG-2, the project would not conflict with the City's CAP or another applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. The impact would be less than significant with mitigation incorporated.

6.0 LIST OF PREPARERS

Martin Rolph	Senior Air Quality Specialist
Victor Ortiz	Principal Air Quality Specialist
Hunter Stapp	Assistant Project Manager
Joanne M. Dramko, AICP	Project Manager, Principal Technical Specialist, QA/QC

7.0 REFERENCES

C&S Companies. 2024. Montgomery-Gibbs Executive Airport Layout Plan Update. September.

2019. Montgomery-Gibbs Executive Airport Master Plan Appendix H – Pavement Maintenance Management Plan (PMMP).

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

California Air Resources Board (CARB). 2025a. Clean Car Standards – Pavley, Assembly Bill 1493. Accessed December. Available at: http://www.arb.ca.gov/cc/ccms/ccms.htm. Accessed May 5.

2024b. Current California GHG Emission Inventory Data. 2000-2020 GHG Inventory (2023 Edition). Available at: https://ww2.arb.ca.gov/ghg-inventory-data. Accessed May 5.

2022. 2022 Scoping Plan for Achieving Carbon Neutrality. November 16. Available at: https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2022-scoping-plan-documents.

2007. California Greenhouse Gas Inventory – By Sector and Activity. November 19. Available at: https://ww3.arb.ca.gov/cc/inventory/archive/tables/ghg_inventory_sector_sum_90-04_ar4.pdf.

California Building Standards Commission. 2022. CALGreen (CCR Title 24, Part 11). Available at: https://www.dgs.ca.gov/BSC/CALGreen.

California Energy Commission (CEC). 2025. 2025 Energy Code Summary. Available at: https://www.energy.ca.gov/sites/default/files/2024-12/2025_Energy_Code_Summary_ADA.pdf.

2022. CCR Title 24 Part 6, 2022 Building Energy Efficiency Standards. Available at: https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2022-building-energy-efficiency.

County of San Diego. 2014. Greenhouse Gas Inventory and Projections. Prepared by the University of San Diego School of Law, Energy Policy Initiative Center (EPIC). Available at: https://www.sandiegocounty.gov/content/dam/sdc/pds/advance/cap/publicreviewdocuments/PostBOSDocs/CAP%20Appendix%20A%20%20-%202014%20Inventory%20and%20Projections.pdf.

CR Associates. 2025. City of San Diego Airport Master Plan - Montgomery-Gibbs Executive Airport Transportation Impact Analysis and Local Mobility Analysis. May 6.

Intergovernmental Panel on Climate Change. 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/.

Intergovernmental Panel on Climate Change(cont.).
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/.

National Aeronautics and Space Administration, Goddard Institute for Space Studies (NASA).2024. NASA Analysis Confirms 2023 as Warmest Year on Record. January 12. Available at: https://www.nasa.gov/news-release/nasa-analysis-confirms-2023-as-warmest-year-on-record/.

National Highway Traffic Safety Administration. 2022. Final Rule: CAFE Standards for MYs 2024-2026. Available at: https://www.nhtsa.gov/corporate-average-fuel-economy/final-rule-cafe-standards-mys-2024-2026.

National Oceanic and Atmospheric Administration (NOAA). 2024. Earth System Research Laboratory. Available at: http://www.esrl.noaa.gov/gmd/ccgg/trends/global.html. Accessed May 5.

PBL Netherlands Environmental Assessment Agency. 2022. Trends in Global CO_2 and Total Greenhouse Gas Emissions, 2021 Summary Report. Available at: https://www.pbl.nl/sites/default/files/downloads/pbl-2022-trends-in-global-co2-and_total-greenhouse-gas-emissions-2021-summary-report_4758.pdf.

San Diego Association of Governments (SANDAG). 2022. San Diego Forward – The Regional Plan. October. Available at: https://www.sandag.org/regional-plan/2021-regional-plan.

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

2022b. Memorandum: Climate Action Plan Consistency for Plan- and Policy-Level Environmental Documents and Public Infrastructure Projects. June 17.

2020. City of San Diego Climate Action Plan Annual Report 2020 https://www.sandiego.gov/2020cap/.

2008. City of San Diego General Plan. March 10.

U.S. Environmental Protection Agency (USEPA).2022. Inventory of U.S. Greenhouse Gas Emissions and Sinks 1990–2020. EPA 430-R-22-003. Available at: https://www.epa.gov/system/files/documents/2022-04/us-ghg-inventory-2022-main-text.pdf.

Appendix A

CalEEMod Output

MYF AMP Near-Term Construction Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	MYF AMP Near-Term Construction
Construction Start Date	1/2/2026
Lead Agency	City of San Diego
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50
Precipitation (days)	19.8
Location	32.814332086156156, -117.13892910180705
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	2022.1.1.29

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
Other Asphalt Surfaces	1,202	1000sqft	27.6	0.00	0.00	—	—	—

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.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	25.2	17.8	12.1	0.07	0.45	2.02	2.47	0.38	0.55	0.93	10,363
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.82	22.1	15.5	0.09	0.60	6.14	6.75	0.53	1.58	1.97	14,038
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.25	5.41	5.14	0.02	0.16	0.66	0.81	0.14	0.19	0.33	2,756
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.41	0.99	0.94	< 0.005	0.03	0.12	0.15	0.03	0.04	0.06	456

2.2. 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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
2026	25.2	17.8	12.1	0.07	0.45	2.02	2.47	0.38	0.55	0.93	10,363
2027	0.09	0.87	1.78	< 0.005	0.03	0.02	0.05	0.02	< 0.005	0.03	278
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—

2026	2.82	22.1	15.5	0.09	0.60	6.14	6.75	0.53	1.58	1.97	14,038
2027	0.55	4.68	7.65	0.01	0.17	0.18	0.35	0.15	0.04	0.20	1,534
Average Daily	—	—	—	—	—	—	—	—	—	—	—
2026	2.25	5.41	5.14	0.02	0.16	0.66	0.81	0.14	0.19	0.33	2,756
2027	0.10	0.85	1.40	< 0.005	0.03	0.03	0.06	0.03	0.01	0.04	278
Annual	—	—	—	—	—	—	—	—	—	—	—
2026	0.41	0.99	0.94	< 0.005	0.03	0.12	0.15	0.03	0.04	0.06	456
2027	0.02	0.15	0.25	< 0.005	0.01	0.01	0.01	0.01	< 0.005	0.01	46.0

3. Construction Emissions Details

3.1. Pavement Demolition (2026) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.24	11.2	12.1	0.02	0.50	—	0.50	0.46	—	0.46	2,103
Demolition	—	—	—	—	—	4.51	4.51	—	0.68	0.68	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.12	0.13	< 0.005	0.01	—	0.01	0.01	—	0.01	23.0
Demolition	—	—	—	—	—	0.05	0.05	—	0.01	0.01	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	3.82
Demolition	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.57	0.00	0.00	0.13	0.13	0.00	0.03	0.03	133
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.12	7.66	2.86	0.04	0.11	1.51	1.62	0.07	0.41	0.49	6,017
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	1.48
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.08	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	66.0
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.24
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	10.9

3.3. New Surface Grading (2026) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.62	5.52	5.35	0.01	0.26	—	0.26	0.24	—	0.24	977
Dust From Material Movement	—	—	—	—	—	1.41	1.41	—	0.67	0.67	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.44	0.42	< 0.005	0.02	—	0.02	0.02	—	0.02	77.6
Dust From Material Movement	—	—	—	—	—	0.11	0.11	—	0.05	0.05	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.08	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	12.8
Dust From Material Movement	—	—	—	—	—	0.02	0.02	—	0.01	0.01	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.19	0.00	0.00	0.04	0.04	0.00	0.01	0.01	44.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.26	16.6	6.20	0.08	0.23	3.27	3.50	0.16	0.89	1.05	13,016
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	3.57
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.02	1.31	0.49	0.01	0.02	0.26	0.28	0.01	0.07	0.08	1,035

Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.59
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.24	0.09	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	171

3.5. Hangar Construction (2026) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.49	4.81	6.91	0.01	0.19	—	0.19	0.17	—	0.17	1,309
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.49	4.81	6.91	0.01	0.19	—	0.19	0.17	—	0.17	1,309
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	1.15	1.65	< 0.005	0.05	—	0.05	0.04	—	0.04	313
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.21	0.30	< 0.005	0.01	—	0.01	0.01	—	0.01	51.7
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.86	0.00	0.00	0.17	0.17	0.00	0.04	0.04	189

Vendor	< 0.005	0.06	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	51.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.76	0.00	0.00	0.17	0.17	0.00	0.04	0.04	178
Vendor	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	51.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.18	0.00	0.00	0.04	0.04	0.00	0.01	0.01	42.9
Vendor	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	12.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	7.10
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	2.03
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Hangar Construction (2027) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.48	4.56	6.90	0.01	0.17	—	0.17	0.15	—	0.15	1,309
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.80	1.22	< 0.005	0.03	—	0.03	0.03	—	0.03	231

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.15	0.22	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	38.2
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.72	0.00	0.00	0.17	0.17	0.00	0.04	0.04	175
Vendor	< 0.005	0.06	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	50.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.13	0.00	0.00	0.03	0.03	0.00	0.01	0.01	31.1
Vendor	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	8.84
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	5.15
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	1.46
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.9. New Surface Paving (2026) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.24	2.22	3.11	< 0.005	0.10	—	0.10	0.09	—	0.09	474

Paving	2.49	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.24	2.22	3.11	< 0.005	0.10	—	0.10	0.09	—	0.09	474
Paving	2.49	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.18	0.25	< 0.005	0.01	—	0.01	0.01	—	0.01	37.6
Paving	0.20	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.03	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	6.23
Paving	0.04	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.32	0.00	0.00	0.06	0.06	0.00	0.01	0.01	70.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.06	3.64	1.40	0.02	0.05	0.74	0.80	0.04	0.20	0.24	2,968
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.29	0.00	0.00	0.06	0.06	0.00	0.01	0.01	66.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.06	3.77	1.41	0.02	0.05	0.74	0.80	0.04	0.20	0.24	2,963
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	5.36

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.30	0.11	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	236
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.89
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	39.0

3.11. Pavement Marking (2026) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.63	5.16	4.44	0.02	0.18	—	0.18	0.16	—	0.16	2,069
Architectural Coatings	24.5	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.34	0.29	< 0.005	0.01	—	0.01	0.01	—	0.01	136
Architectural Coatings	1.61	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	22.5
Architectural Coatings	0.29	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.43	0.00	0.00	0.08	0.08	0.00	0.02	0.02	94.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	5.91
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.98
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Pavement Rehabilitation (2026) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.47	3.38	4.71	0.01	0.12	—	0.12	0.11	—	0.11	1,263
Dust From Material Movement	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.46	0.65	< 0.005	0.02	—	0.02	0.01	—	0.01	173
Dust From Material Movement	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.08	0.12	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	28.6
Dust From Material Movement	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.03	0.54	0.00	0.00	0.11	0.11	0.00	0.02	0.02	118
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.16	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	133
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.07	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	15.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	18.2
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	2.55
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	3.02

3.15. Pavement Reconstruction (2026) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.89	8.31	8.06	0.02	0.31	—	0.31	0.29	—	0.29	2,577
Dust From Material Movement	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.34	0.33	< 0.005	0.01	—	0.01	0.01	—	0.01	106
Dust From Material Movement	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.06	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	17.5
Dust From Material Movement	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.43	0.00	0.00	0.08	0.08	0.00	0.02	0.02	94.4

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.16	9.42	3.62	0.05	0.14	1.93	2.07	0.09	0.53	0.62	7,691
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	3.69
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	0.40	0.15	< 0.005	0.01	0.08	0.08	< 0.005	0.02	0.03	316
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.61
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	52.3

3.17. Fencing, Seg. Circle & Windsock (2027) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.87	1.67	< 0.005	0.03	—	0.03	0.02	—	0.02	255
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	6.98
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.16
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.10	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	23.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.60
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.10
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.19. Runway Grooving (2026) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.59	3.91	4.72	0.02	0.14	—	0.14	0.13	—	0.13	2,173

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.23	0.27	< 0.005	0.01	—	0.01	0.01	—	0.01	125
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.04	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	20.7
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.29	0.00	0.00	0.06	0.06	0.00	0.01	0.01	66.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	3.88
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.64
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	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
Pavement Demolition	Demolition	1/31/2026	2/5/2026	5.00	4.00	—
New Surface Grading	Grading	2/6/2026	3/18/2026	5.00	29.0	—
Hangar Construction	Building Construction	9/1/2026	3/31/2027	5.00	152	—
New Surface Paving	Paving	3/19/2026	4/28/2026	5.00	29.0	—
Pavement Marking	Architectural Coating	7/29/2026	8/31/2026	5.00	24.0	—
Pavement Rehabilitation	Trenching	4/29/2026	7/7/2026	5.00	50.0	—
Pavement Reconstruction	Trenching	7/8/2026	7/28/2026	5.00	15.0	—
Fencing, Seg. Circle & Windsock	Trenching	4/1/2027	4/14/2027	5.00	10.0	—
Runway Grooving	Trenching	1/2/2026	1/30/2026	5.00	21.0	—

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
Pavement Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	2.00	33.0	0.73
Pavement Demolition	Other Construction Equipment	Diesel	Average	1.00	4.00	85.0	0.78
Pavement Demolition	Excavators	Diesel	Average	1.00	7.00	36.0	0.38
Pavement Demolition	Rubber Tired Dozers	Diesel	Average	1.00	7.00	367	0.40
Pavement Demolition	Rubber Tired Loaders	Diesel	Average	1.00	4.00	150	0.36
Pavement Demolition	Tractors/Loaders/Backhoes	Diesel	Average	1.00	4.00	84.0	0.37
New Surface Grading	Graders	Diesel	Average	1.00	4.00	148	0.41
New Surface Grading	Rubber Tired Dozers	Diesel	Average	1.00	4.00	367	0.40
Hangar Construction	Cranes	Diesel	Average	1.00	4.00	367	0.29
Hangar Construction	Forklifts	Diesel	Average	2.00	6.00	82.0	0.20

Hangar Construction	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
New Surface Paving	Pavers	Diesel	Average	1.00	5.00	81.0	0.42
New Surface Paving	Paving Equipment	Diesel	Average	1.00	5.00	89.0	0.36
New Surface Paving	Rollers	Diesel	Average	1.00	5.00	36.0	0.38
Pavement Marking	Other Construction Equipment	Diesel	Average	1.00	4.00	712	0.42
Pavement Marking	Off-Highway Trucks	Diesel	Average	1.00	4.00	376	0.38
Pavement Rehabilitation	Concrete/Industrial Saws	Diesel	Average	1.00	2.00	33.0	0.73
Pavement Rehabilitation	Off-Highway Trucks	Diesel	Average	1.00	5.00	376	0.38
Pavement Rehabilitation	Paving Equipment	Diesel	Average	1.00	2.00	89.0	0.36
Pavement Rehabilitation	Rollers	Diesel	Average	1.00	2.00	36.0	0.38
Pavement Rehabilitation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	7.00	84.0	0.37
Pavement Reconstruction	Other Construction Equipment	Diesel	Average	1.00	6.00	675	0.42
Pavement Reconstruction	Pavers	Diesel	Average	1.00	6.00	81.0	0.42
Pavement Reconstruction	Paving Equipment	Diesel	Average	1.00	6.00	89.0	0.36
Pavement Reconstruction	Rollers	Diesel	Average	1.00	7.00	36.0	0.38
Fencing, Seg. Circle & Windsock	Tractors/Loaders/Backhoes	Diesel	Average	1.00	7.00	84.0	0.37
Runway Grooving	Off-Highway Trucks	Diesel	Average	1.00	7.00	376	0.38
Runway Grooving	Surfacing Equipment	Diesel	Average	1.00	7.00	400	0.30
Runway Grooving	Sweepers/Scrubbers	Diesel	Average	1.00	1.00	36.0	0.46

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Pavement Demolition	—	—	—	—
Pavement Demolition	Worker	15.0	12.0	LDA,LDT1,LDT2
Pavement Demolition	Vendor	—	7.63	HHDT,MHDT
Pavement Demolition	Hauling	81.5	20.0	HHDT
Pavement Demolition	Onsite truck	—	—	HHDT
New Surface Grading	—	—	—	—
New Surface Grading	Worker	5.00	12.0	LDA,LDT1,LDT2
New Surface Grading	Vendor	—	7.63	HHDT,MHDT
New Surface Grading	Hauling	176	20.0	HHDT
New Surface Grading	Onsite truck	—	—	HHDT
New Surface Paving	—	—	—	—
New Surface Paving	Worker	7.50	12.0	LDA,LDT1,LDT2
New Surface Paving	Vendor	—	7.63	HHDT,MHDT
New Surface Paving	Hauling	40.1	20.0	HHDT
New Surface Paving	Onsite truck	—	—	HHDT
Pavement Marking	—	—	—	—
Pavement Marking	Worker	10.0	12.0	LDA,LDT1,LDT2
Pavement Marking	Vendor	—	7.63	HHDT,MHDT
Pavement Marking	Hauling	0.00	20.0	HHDT
Pavement Marking	Onsite truck	—	—	HHDT
Pavement Rehabilitation	—	—	—	—
Pavement Rehabilitation	Worker	12.5	12.0	LDA,LDT1,LDT2
Pavement Rehabilitation	Vendor	—	7.63	HHDT,MHDT
Pavement Rehabilitation	Hauling	1.80	20.0	HHDT

Pavement Rehabilitation	Onsite truck	—	—	HHDT
Pavement Reconstruction	—	—	—	—
Pavement Reconstruction	Worker	10.0	12.0	LDA,LDT1,LDT2
Pavement Reconstruction	Vendor	—	7.63	HHDT,MHDT
Pavement Reconstruction	Hauling	104	20.0	HHDT
Pavement Reconstruction	Onsite truck	—	—	HHDT
Fencing, Seg. Circle & Windsock	—	—	—	—
Fencing, Seg. Circle & Windsock	Worker	2.50	12.0	LDA,LDT1,LDT2
Fencing, Seg. Circle & Windsock	Vendor	—	7.63	HHDT,MHDT
Fencing, Seg. Circle & Windsock	Hauling	0.00	20.0	HHDT
Fencing, Seg. Circle & Windsock	Onsite truck	—	—	HHDT
Hangar Construction	—	—	—	—
Hangar Construction	Worker	20.0	12.0	LDA,LDT1,LDT2
Hangar Construction	Vendor	2.00	7.63	HHDT,MHDT
Hangar Construction	Hauling	0.00	20.0	HHDT
Hangar Construction	Onsite truck	—	—	HHDT
Runway Grooving	—	—	—	—
Runway Grooving	Worker	7.50	12.0	LDA,LDT1,LDT2
Runway Grooving	Vendor	—	7.63	HHDT,MHDT
Runway Grooving	Hauling	0.00	20.0	HHDT
Runway Grooving	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Pavement Marking	0.00	0.00	0.00	0.00	126,953

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 (Ton of Debris)	Acres Paved (acres)
Pavement Demolition	0.00	0.00	0.00	1,304	—
New Surface Grading	20,452	20,452	1.31	0.00	—
New Surface Paving	0.00	0.00	0.00	0.00	27.6
Pavement Rehabilitation	288	288	0.00	0.00	—
Pavement Reconstruction	3,755	3,755	0.00	0.00	—

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

Land Use	Area Paved (acres)	% Asphalt
Other Asphalt Surfaces	27.6	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	589	0.03	< 0.005

2027	0.00	589	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

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

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	8.91	annual days of extreme heat
Extreme Precipitation	2.80	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	8.11	annual hectares burned

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

6.2. Initial Climate Risk Scores

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

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

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2

Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

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

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	42.6
AQ-PM	33.5
AQ-DPM	90.0
Drinking Water	29.0
Lead Risk Housing	8.29
Pesticides	32.4
Toxic Releases	33.2
Traffic	78.7
Effect Indicators	—
CleanUp Sites	95.4
Groundwater	90.7

Haz Waste Facilities/Generators	98.9
Impaired Water Bodies	0.00
Solid Waste	99.3
Sensitive Population	—
Asthma	48.3
Cardio-vascular	20.6
Low Birth Weights	61.7
Socioeconomic Factor Indicators	—
Education	26.9
Housing	67.7
Linguistic	48.7
Poverty	18.9
Unemployment	13.2

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)	53.0
Healthy Places Index Score for Project Location (b)	70.0
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

Screen	Justification
Construction: Construction Phases	Schedule estimated from AMP task list and Pavement Maintenance Management Plan.
Construction: Off-Road Equipment	Equipment estimated based on the ALP and activities described in the Pavement Maintenance Plan. Off-Highway Truck for grooving = tank truck. Other Construction Equipment for pavement demolition = asphalt and concrete debris crusher. Off-Highway Truck for pavement marking = automated runway striping machine. Other Construction Equipment for pavement marking = pavement paint blasting machine. Off-Highway Truck for pavement rehabilitation = crack sealing truck. Other Construction Equipment for pavement rehabilitation = pavement milling machine.
Construction: Trips and VMT	Pavement Marking and building painting crew size estimated at 5 per day (10 worker trips/day). Pavement haul trips are 1 way (2 trips per load) and assume 16 CY per tandem trailer load (6 inches uncompressed asphalt). Hangar Construction crew size estimate at 10 per day (20 worker trips/day), vendor trips estimated at 2 per day.

Construction: Architectural Coatings	Marking assumed to be 10% of new or repaired pavement.
Construction: Dust From Material Movement	Grading assumes 18 inches soil removed and replaced with 18 inches of uncompressed aggregate.

MYF AMP Mid-Term Construction Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	MYF AMP Mid-Term Construction
Construction Start Date	1/2/2028
Lead Agency	City of San Diego
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50
Precipitation (days)	19.8
Location	32.814332086156156, -117.13892910180705
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	2022.1.1.29

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
Other Asphalt Surfaces	1,201	1000sqft	27.6	0.00	0.00	—	—	—

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.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	47.1	17.1	11.9	0.07	0.44	2.02	2.46	0.37	0.55	0.92	9,972
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.27	23.8	12.7	0.11	0.52	5.45	5.97	0.41	1.77	2.18	16,117
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.11	5.30	5.45	0.02	0.14	0.75	0.89	0.12	0.23	0.35	2,902
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.20	0.97	0.99	< 0.005	0.03	0.14	0.16	0.02	0.04	0.06	480

2.2. 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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
2028	47.1	17.1	11.9	0.07	0.44	2.02	2.46	0.37	0.55	0.92	9,972
2029	0.52	4.21	7.65	0.01	0.14	0.18	0.32	0.13	0.04	0.17	1,535
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—

2028	2.27	23.8	12.7	0.11	0.52	5.45	5.97	0.41	1.77	2.18	16,117
2029	0.51	4.22	7.56	0.01	0.14	0.18	0.32	0.13	0.04	0.17	1,525
Average Daily	—	—	—	—	—	—	—	—	—	—	—
2028	1.11	5.30	5.45	0.02	0.14	0.75	0.89	0.12	0.23	0.35	2,902
2029	0.14	1.15	2.06	< 0.005	0.04	0.05	0.09	0.03	0.01	0.05	414
Annual	—	—	—	—	—	—	—	—	—	—	—
2028	0.20	0.97	0.99	< 0.005	0.03	0.14	0.16	0.02	0.04	0.06	480
2029	0.03	0.21	0.38	< 0.005	0.01	0.01	0.02	0.01	< 0.005	0.01	68.5

3. Construction Emissions Details

3.1. New Surface Grading (2028) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.59	5.05	5.28	0.01	0.23	—	0.23	0.22	—	0.22	977
Dust From Material Movement	—	—	—	—	—	1.42	1.42	—	0.67	0.67	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.51	0.53	< 0.005	0.02	—	0.02	0.02	—	0.02	99.1
Dust From Material Movement	—	—	—	—	—	0.14	0.14	—	0.07	0.07	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.09	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	16.4
Dust From Material Movement	—	—	—	—	—	0.03	0.03	—	0.01	0.01	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.17	0.00	0.00	0.04	0.04	0.00	0.01	0.01	42.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.32	18.7	7.28	0.10	0.28	3.99	4.27	0.19	1.09	1.28	15,097
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	4.39
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.03	1.89	0.73	0.01	0.03	0.40	0.43	0.02	0.11	0.13	1,531
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.73
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	0.34	0.13	< 0.005	0.01	0.07	0.08	< 0.005	0.02	0.02	253

3.3. Hangar Construction (2028) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	4.30	6.91	0.01	0.15	—	0.15	0.14	—	0.14	1,309
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	4.30	6.91	0.01	0.15	—	0.15	0.14	—	0.14	1,309
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	1.69	2.72	< 0.005	0.06	—	0.06	0.05	—	0.05	515
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.31	0.50	< 0.005	0.01	—	0.01	0.01	—	0.01	85.2
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.05	0.78	0.00	0.00	0.17	0.17	0.00	0.04	0.04	182
Vendor	< 0.005	0.06	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	49.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.68	0.00	0.00	0.17	0.17	0.00	0.04	0.04	172
Vendor	< 0.005	0.06	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	49.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.27	0.00	0.00	0.07	0.07	0.00	0.02	0.02	68.2

Vendor	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	19.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	11.3
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	3.19
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Hangar Construction (2029) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.45	4.11	6.89	0.01	0.14	—	0.14	0.13	—	0.13	1,309
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.45	4.11	6.89	0.01	0.14	—	0.14	0.13	—	0.13	1,309
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	1.09	1.83	< 0.005	0.04	—	0.04	0.03	—	0.03	348
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.20	0.33	< 0.005	0.01	—	0.01	0.01	—	0.01	57.7
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.04	0.73	0.00	0.00	0.17	0.17	0.00	0.04	0.04	179
Vendor	< 0.005	0.05	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	47.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.64	0.00	0.00	0.17	0.17	0.00	0.04	0.04	169
Vendor	< 0.005	0.06	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	47.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.17	0.00	0.00	0.04	0.04	0.00	0.01	0.01	45.3
Vendor	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	12.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	7.51
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	2.09
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.7. New Surface Paving (2028) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	2.07	3.10	< 0.005	0.08	—	0.08	0.07	—	0.07	474
Paving	1.95	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	2.07	3.10	< 0.005	0.08	—	0.08	0.07	—	0.07	474
Paving	1.95	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.21	0.31	< 0.005	0.01	—	0.01	0.01	—	0.01	48.0
Paving	0.20	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	7.95
Paving	0.04	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.29	0.00	0.00	0.06	0.06	0.00	0.01	0.01	68.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.08	4.49	1.79	0.02	0.07	0.99	1.06	0.05	0.27	0.32	3,756
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.25	0.00	0.00	0.06	0.06	0.00	0.01	0.01	64.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.08	4.65	1.81	0.02	0.07	0.99	1.06	0.05	0.27	0.32	3,751
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	6.59
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	0.47	0.18	< 0.005	0.01	0.10	0.11	< 0.005	0.03	0.03	380

Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	1.09
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.09	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	63.0

3.9. Pavement Marking (2028) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.65	5.15	4.43	0.02	0.18	—	0.18	0.17	—	0.17	2,063
Architectural Coatings	46.5	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	22.6
Architectural Coatings	0.51	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	3.74
Architectural Coatings	0.09	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.39	0.00	0.00	0.08	0.08	0.00	0.02	0.02	91.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.95
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.16
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Pavement Rehabilitation (2028) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.45	3.07	4.70	0.01	0.09	—	0.09	0.09	—	0.09	1,263
Dust From Material Movement	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.05	0.31	0.48	< 0.005	0.01	—	0.01	0.01	—	0.01	128
Dust From Material Movement	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.06	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	21.2
Dust From Material Movement	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.48	0.00	0.00	0.11	0.11	0.00	0.02	0.02	114
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.15	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	127
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	11.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	12.8
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	1.82
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	2.12

3.13. Pavement Reconstruction (2028) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.89	8.32	8.05	0.02	0.30	—	0.30	0.28	—	0.28	2,569
Dust From Material Movement	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.05	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	14.1
Dust From Material Movement	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	2.33
Dust From Material Movement	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.39	0.00	0.00	0.08	0.08	0.00	0.02	0.02	91.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.16	8.74	3.49	0.05	0.14	1.93	2.07	0.09	0.53	0.62	7,312

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.47
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	40.0
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.08
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	6.63

3.15. Airfield Lighting & Perimeter Fencing (2029) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.82	1.68	< 0.005	0.02	—	0.02	0.02	—	0.02	255
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	6.98
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.16
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	22.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.58
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.10
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	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
New Surface Grading	Grading	1/2/2028	2/22/2028	5.00	37.0	—
Hangar Construction	Building Construction	6/14/2028	5/16/2029	5.00	241	—
New Surface Paving	Paving	2/23/2028	4/13/2028	5.00	37.0	—
Pavement Marking	Architectural Coating	6/8/2028	6/13/2028	5.00	4.00	—
Pavement Rehabilitation	Trenching	4/14/2028	6/5/2028	5.00	37.0	—
Pavement Reconstruction	Trenching	6/6/2028	6/7/2028	5.00	2.00	—
Airfield Lighting & Perimeter Fencing	Trenching	5/17/2029	5/30/2029	5.00	10.0	—

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
New Surface Grading	Graders	Diesel	Average	1.00	4.00	148	0.41
New Surface Grading	Rubber Tired Dozers	Diesel	Average	1.00	4.00	367	0.40
Hangar Construction	Cranes	Diesel	Average	1.00	4.00	367	0.29
Hangar Construction	Forklifts	Diesel	Average	2.00	6.00	82.0	0.20
Hangar Construction	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
New Surface Paving	Pavers	Diesel	Average	1.00	5.00	81.0	0.42
New Surface Paving	Paving Equipment	Diesel	Average	1.00	5.00	89.0	0.36
New Surface Paving	Rollers	Diesel	Average	1.00	5.00	36.0	0.38
Pavement Marking	Other Construction Equipment	Diesel	Average	1.00	4.00	712	0.42
Pavement Marking	Off-Highway Trucks	Diesel	Average	1.00	4.00	376	0.38
Pavement Rehabilitation	Concrete/Industrial Saws	Diesel	Average	1.00	2.00	33.0	0.73
Pavement Rehabilitation	Off-Highway Trucks	Diesel	Average	1.00	5.00	376	0.38
Pavement Rehabilitation	Paving Equipment	Diesel	Average	1.00	2.00	89.0	0.36
Pavement Rehabilitation	Rollers	Diesel	Average	1.00	2.00	36.0	0.38
Pavement Rehabilitation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	7.00	84.0	0.37
Pavement Reconstruction	Other Construction Equipment	Diesel	Average	1.00	6.00	675	0.42
Pavement Reconstruction	Pavers	Diesel	Average	1.00	6.00	81.0	0.42
Pavement Reconstruction	Paving Equipment	Diesel	Average	1.00	6.00	89.0	0.36

Pavement Reconstruction	Rollers	Diesel	Average	1.00	7.00	36.0	0.38
Airfield Lighting & Perimeter Fencing	Tractors/Loaders/Backhoes	Diesel	Average	1.00	7.00	84.0	0.37

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
New Surface Grading	—	—	—	—
New Surface Grading	Worker	5.00	12.0	LDA,LDT1,LDT2
New Surface Grading	Vendor	—	7.63	HHDT,MHDT
New Surface Grading	Hauling	215	20.0	HHDT
New Surface Grading	Onsite truck	—	—	HHDT
New Surface Paving	—	—	—	—
New Surface Paving	Worker	7.50	12.0	LDA,LDT1,LDT2
New Surface Paving	Vendor	—	7.63	HHDT,MHDT
New Surface Paving	Hauling	53.4	20.0	HHDT
New Surface Paving	Onsite truck	—	—	HHDT
Pavement Marking	—	—	—	—
Pavement Marking	Worker	10.0	12.0	LDA,LDT1,LDT2
Pavement Marking	Vendor	—	7.63	HHDT,MHDT
Pavement Marking	Hauling	0.00	20.0	HHDT
Pavement Marking	Onsite truck	—	—	HHDT
Pavement Rehabilitation	—	—	—	—
Pavement Rehabilitation	Worker	12.5	12.0	LDA,LDT1,LDT2
Pavement Rehabilitation	Vendor	—	7.63	HHDT,MHDT
Pavement Rehabilitation	Hauling	1.80	20.0	HHDT
Pavement Rehabilitation	Onsite truck	—	—	HHDT

Pavement Reconstruction	—	—	—	—
Pavement Reconstruction	Worker	10.0	12.0	LDA,LDT1,LDT2
Pavement Reconstruction	Vendor	—	7.63	HHDT,MHDT
Pavement Reconstruction	Hauling	104	20.0	HHDT
Pavement Reconstruction	Onsite truck	—	—	HHDT
Airfield Lighting & Perimeter Fencing	—	—	—	—
Airfield Lighting & Perimeter Fencing	Worker	2.50	12.0	LDA,LDT1,LDT2
Airfield Lighting & Perimeter Fencing	Vendor	—	7.63	HHDT,MHDT
Airfield Lighting & Perimeter Fencing	Hauling	0.00	20.0	HHDT
Airfield Lighting & Perimeter Fencing	Onsite truck	—	—	HHDT
Hangar Construction	—	—	—	—
Hangar Construction	Worker	20.0	12.0	LDA,LDT1,LDT2
Hangar Construction	Vendor	2.00	7.63	HHDT,MHDT
Hangar Construction	Hauling	0.00	20.0	HHDT
Hangar Construction	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Pavement Marking	0.00	0.00	0.00	0.00	40,084

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 (sq. ft.)	Acres Paved (acres)
New Surface Grading	31,826	31,826	1.31	0.00	—
New Surface Paving	0.00	0.00	0.00	0.00	27.6
Pavement Rehabilitation	308	308	0.00	0.00	—
Pavement Reconstruction	573	573	0.00	0.00	—

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

Land Use	Area Paved (acres)	% Asphalt
Other Asphalt Surfaces	27.6	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2028	0.00	589	0.03	< 0.005
2029	0.00	589	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

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

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	8.91	annual days of extreme heat
Extreme Precipitation	2.80	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	8.11	annual hectares burned

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

6.2. Initial Climate Risk Scores

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

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

6.3. Adjusted Climate Risk Scores

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

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

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

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	42.6
AQ-PM	33.5
AQ-DPM	90.0
Drinking Water	29.0
Lead Risk Housing	8.29
Pesticides	32.4
Toxic Releases	33.2
Traffic	78.7
Effect Indicators	—
CleanUp Sites	95.4
Groundwater	90.7
Haz Waste Facilities/Generators	98.9
Impaired Water Bodies	0.00
Solid Waste	99.3
Sensitive Population	—
Asthma	48.3
Cardio-vascular	20.6
Low Birth Weights	61.7

Socioeconomic Factor Indicators	—
Education	26.9
Housing	67.7
Linguistic	48.7
Poverty	18.9
Unemployment	13.2

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)	53.0
Healthy Places Index Score for Project Location (b)	70.0
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

Screen	Justification
Construction: Construction Phases	Schedule estimated from AMP task list and Pavement Maintenance Management Plan.
Construction: Off-Road Equipment	Equipment estimated based on the ALP and activities described in the Pavement Maintenance Plan. Off-Highway Truck for pavement marking = automated runway striping machine. Other Construction Equipment for pavement marking = pavement paint blasting machine. Off-Highway Truck for pavement rehabilitation = crack sealing truck. Other Construction Equipment for pavement rehabilitation = pavement milling machine.
Construction: Trips and VMT	Pavement Marking and building painting crew size estimated at 5 per day (10 worker trips/day). Pavement haul trips are 1 way (2 trips per load) and assume 16 CY per tandem trailer load (6 inches uncompressed asphalt). Hangar Construction crew size estimate at 10 per day (20 worker trips/day), vendor trips estimated at 2 per day.
Construction: Architectural Coatings	Marking assumed to be 10% of new or repaired pavement.
Construction: Dust From Material Movement	Grading assumes 18 inches soil removed and replaced with 18 inches of uncompressed aggregate.

MYF AMP Long-Term Construction Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	MYF AMP Long-Term Construction
Construction Start Date	1/2/2030
Lead Agency	City of San Diego
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50
Precipitation (days)	19.8
Location	32.814332086156156, -117.13892910180705
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	2022.1.1.29

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
Other Asphalt Surfaces	1,043	1000sqft	23.9	0.00	0.00	—	—	—

General Office Building	6.40	1000sqft	0.15	6,400	0.00	—	—	—

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.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	86.4	25.0	22.0	0.07	0.80	6.66	7.46	0.74	1.22	1.96	9,435
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.89	21.4	13.0	0.11	0.40	5.34	5.74	0.38	1.75	2.13	14,870
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.90	6.85	7.60	0.03	0.18	0.88	1.05	0.16	0.25	0.42	3,273
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.35	1.25	1.39	< 0.005	0.03	0.16	0.19	0.03	0.05	0.08	542

2.2. 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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
2030	86.4	25.0	22.0	0.07	0.80	6.66	7.46	0.74	1.22	1.96	9,435

2031	0.49	3.94	7.54	0.01	0.12	0.18	0.30	0.11	0.04	0.15	1,526
2032	0.47	3.80	7.47	0.01	0.11	0.18	0.29	0.10	0.04	0.14	1,520
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
2030	1.89	21.4	13.0	0.11	0.40	5.34	5.74	0.38	1.75	2.13	14,870
2031	0.48	3.95	7.46	0.01	0.12	0.18	0.30	0.11	0.04	0.15	1,516
2032	0.47	3.80	7.39	0.01	0.11	0.18	0.29	0.10	0.04	0.14	1,512
Average Daily	—	—	—	—	—	—	—	—	—	—	—
2030	1.90	6.85	7.60	0.03	0.18	0.88	1.05	0.16	0.25	0.42	3,273
2031	0.34	2.82	5.33	0.01	0.09	0.13	0.21	0.08	0.03	0.11	1,084
2032	0.12	0.99	1.93	< 0.005	0.03	0.05	0.08	0.03	0.01	0.04	394
Annual	—	—	—	—	—	—	—	—	—	—	—
2030	0.35	1.25	1.39	< 0.005	0.03	0.16	0.19	0.03	0.05	0.08	542
2031	0.06	0.51	0.97	< 0.005	0.02	0.02	0.04	0.01	0.01	0.02	179
2032	0.02	0.18	0.35	< 0.005	0.01	0.01	0.01	< 0.005	< 0.005	0.01	65.2

3. Construction Emissions Details

3.1. Pavement Demolition (2030) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.09	18.1	18.7	0.03	0.72	—	0.72	0.66	—	0.66	3,438
Demolition	—	—	—	—	—	4.89	4.89	—	0.74	0.74	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.45	0.46	< 0.005	0.02	—	0.02	0.02	—	0.02	84.8
Demolition	—	—	—	—	—	0.12	0.12	—	0.02	0.02	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.08	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	14.0
Demolition	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.03	0.52	0.00	0.00	0.13	0.13	0.00	0.03	0.03	132
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.10	6.86	2.85	0.04	0.08	1.64	1.72	0.08	0.45	0.53	5,865
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	3.10
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.18	0.07	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	145
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.51
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	23.9

3.3. New Surface Grading (2030) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.56	4.53	5.29	0.01	0.22	—	0.22	0.20	—	0.20	977
Dust From Material Movement	—	—	—	—	—	1.42	1.42	—	0.67	0.67	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.48	0.57	< 0.005	0.02	—	0.02	0.02	—	0.02	104
Dust From Material Movement	—	—	—	—	—	0.15	0.15	—	0.07	0.07	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.09	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	17.3
Dust From Material Movement	—	—	—	—	—	0.03	0.03	—	0.01	0.01	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.15	0.00	0.00	0.04	0.04	0.00	0.01	0.01	41.5

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.22	16.8	6.82	0.10	0.18	3.88	4.07	0.18	1.06	1.25	13,852
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	4.48
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.02	1.80	0.72	0.01	0.02	0.41	0.43	0.02	0.11	0.13	1,481
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.74
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.33	0.13	< 0.005	< 0.005	0.07	0.08	< 0.005	0.02	0.02	245

3.5. Hangar Construction (2030) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.44	4.01	6.89	0.01	0.13	—	0.13	0.12	—	0.12	1,309
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.60	1.04	< 0.005	0.02	—	0.02	0.02	—	0.02	197
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.11	0.19	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	32.6
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.60	0.00	0.00	0.17	0.17	0.00	0.04	0.04	166
Vendor	< 0.005	0.05	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	46.1
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.09	0.00	0.00	0.03	0.03	0.00	0.01	0.01	25.2
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	6.95
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	4.18
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	1.15
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Hangar Construction (2031) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.43	3.85	6.87	0.01	0.12	—	0.12	0.11	—	0.11	1,309
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.43	3.85	6.87	0.01	0.12	—	0.12	0.11	—	0.11	1,309

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.30	2.75	4.91	0.01	0.09	—	0.09	0.08	—	0.08	935
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.50	0.90	< 0.005	0.02	—	0.02	0.01	—	0.01	155
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.04	0.64	0.00	0.00	0.17	0.17	0.00	0.04	0.04	173
Vendor	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	44.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.56	0.00	0.00	0.17	0.17	0.00	0.04	0.04	163
Vendor	< 0.005	0.05	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	44.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.41	0.00	0.00	0.12	0.12	0.00	0.03	0.03	117
Vendor	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	31.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.07	0.00	0.00	0.02	0.02	0.00	0.01	0.01	19.4
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	5.26
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Hangar Construction (2032) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.42	3.71	6.84	0.01	0.11	—	0.11	0.10	—	0.10	1,309
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.42	3.71	6.84	0.01	0.11	—	0.11	0.10	—	0.10	1,309
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.96	1.77	< 0.005	0.03	—	0.03	0.03	—	0.03	338
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.18	0.32	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	56.0
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.61	0.00	0.00	0.17	0.17	0.00	0.04	0.04	169
Vendor	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	42.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.53	0.00	0.00	0.17	0.17	0.00	0.04	0.04	160

Vendor	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	42.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.14	0.00	0.00	0.04	0.04	0.00	0.01	0.01	41.9
Vendor	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	11.1
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	6.93
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	1.83
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Terminal Expansion (2030) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.94	8.39	12.9	0.02	0.26	—	0.26	0.24	—	0.24	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.94	8.39	12.9	0.02	0.26	—	0.26	0.24	—	0.24	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.29	2.60	3.99	0.01	0.08	—	0.08	0.07	—	0.07	745
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.05	0.47	0.73	< 0.005	0.01	—	0.01	0.01	—	0.01	123
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	18.0
Vendor	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	24.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.06	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	17.0
Vendor	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	24.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	5.31
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	7.48
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.88
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	1.24
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.13. New Surface Paving (2030) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.20	1.96	3.09	< 0.005	0.07	—	0.07	0.06	—	0.06	474
Paving	1.61	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.20	1.96	3.09	< 0.005	0.07	—	0.07	0.06	—	0.06	474
Paving	1.61	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.21	0.33	< 0.005	0.01	—	0.01	0.01	—	0.01	50.6
Paving	0.17	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	8.38
Paving	0.03	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.26	0.00	0.00	0.06	0.06	0.00	0.01	0.01	66.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.06	4.14	1.72	0.02	0.05	0.99	1.04	0.05	0.27	0.32	3,539
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.23	0.00	0.00	0.06	0.06	0.00	0.01	0.01	62.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.06	4.30	1.74	0.02	0.05	0.99	1.04	0.05	0.27	0.32	3,536

Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	6.71
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	0.46	0.18	< 0.005	0.01	0.10	0.11	0.01	0.03	0.03	378
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	1.11
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.08	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	62.6

3.15. Pavement Marking (2030) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.55	3.36	4.34	0.02	0.13	—	0.13	0.12	—	0.12	2,063
Architectural Coatings	85.9	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.05	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	28.3
Architectural Coatings	1.18	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	4.68

Architectural Coatings	0.21	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.34	0.00	0.00	0.08	0.08	0.00	0.02	0.02	88.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	1.15
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.19
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.17. 28R Lighting/Navaids (2032) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.77	1.68	< 0.005	0.02	—	0.02	0.02	—	0.02	255
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	2.79
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.46
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	21.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.22
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.04
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	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
Pavement Demolition	Demolition	4/20/2030	5/2/2030	5.00	9.00	—
New Surface Grading	Grading	1/2/2030	2/25/2030	5.00	39.0	—
Hangar Construction	Building Construction	10/16/2030	5/11/2032	5.00	410	—
Terminal Expansion	Building Construction	5/10/2030	10/15/2030	5.00	113	—
New Surface Paving	Paving	2/26/2030	4/19/2030	5.00	39.0	—
Pavement Marking	Architectural Coating	5/3/2030	5/9/2030	5.00	5.00	—
28R Lighting/Navaids	Trenching	5/12/2032	5/17/2032	5.00	4.00	—

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
Pavement Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Pavement Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Pavement Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
New Surface Grading	Graders	Diesel	Average	1.00	4.00	148	0.41
New Surface Grading	Rubber Tired Dozers	Diesel	Average	1.00	4.00	367	0.40
Hangar Construction	Cranes	Diesel	Average	1.00	4.00	367	0.29
Hangar Construction	Forklifts	Diesel	Average	2.00	6.00	82.0	0.20
Hangar Construction	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Terminal Expansion	Cranes	Diesel	Average	1.00	7.00	367	0.29
Terminal Expansion	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Terminal Expansion	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Terminal Expansion	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Terminal Expansion	Welders	Diesel	Average	1.00	8.00	46.0	0.45

New Surface Paving	Pavers	Diesel	Average	1.00	5.00	81.0	0.42
New Surface Paving	Paving Equipment	Diesel	Average	1.00	5.00	89.0	0.36
New Surface Paving	Rollers	Diesel	Average	1.00	5.00	36.0	0.38
Pavement Marking	Other Construction Equipment	Diesel	Average	1.00	4.00	712	0.42
Pavement Marking	Off-Highway Trucks	Diesel	Average	1.00	4.00	376	0.38
28R Lighting/Navaids	Tractors/Loaders/Backhoes	Diesel	Average	1.00	7.00	84.0	0.37

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
New Surface Grading	—	—	—	—
New Surface Grading	Worker	5.00	12.0	LDA,LDT1,LDT2
New Surface Grading	Vendor	—	7.63	HHDT,MHDT
New Surface Grading	Hauling	209	20.0	HHDT
New Surface Grading	Onsite truck	—	—	HHDT
New Surface Paving	—	—	—	—
New Surface Paving	Worker	7.50	12.0	LDA,LDT1,LDT2
New Surface Paving	Vendor	—	7.63	HHDT,MHDT
New Surface Paving	Hauling	53.4	20.0	HHDT
New Surface Paving	Onsite truck	—	—	HHDT
Pavement Marking	—	—	—	—
Pavement Marking	Worker	10.0	12.0	LDA,LDT1,LDT2
Pavement Marking	Vendor	—	7.63	HHDT,MHDT
Pavement Marking	Hauling	0.00	20.0	HHDT
Pavement Marking	Onsite truck	—	—	HHDT
28R Lighting/Navaids	—	—	—	—

28R Lighting/Navaids	Worker	2.50	12.0	LDA,LDT1,LDT2
28R Lighting/Navaids	Vendor	—	7.63	HHDT,MHDT
28R Lighting/Navaids	Hauling	0.00	20.0	HHDT
28R Lighting/Navaids	Onsite truck	—	—	HHDT
Hangar Construction	—	—	—	—
Hangar Construction	Worker	20.0	12.0	LDA,LDT1,LDT2
Hangar Construction	Vendor	2.00	7.63	HHDT,MHDT
Hangar Construction	Hauling	0.00	20.0	HHDT
Hangar Construction	Onsite truck	—	—	HHDT
Pavement Demolition	—	—	—	—
Pavement Demolition	Worker	15.0	12.0	LDA,LDT1,LDT2
Pavement Demolition	Vendor	—	7.63	HHDT,MHDT
Pavement Demolition	Hauling	88.6	20.0	HHDT
Pavement Demolition	Onsite truck	—	—	HHDT
Terminal Expansion	—	—	—	—
Terminal Expansion	Worker	2.05	12.0	LDA,LDT1,LDT2
Terminal Expansion	Vendor	1.05	7.63	HHDT,MHDT
Terminal Expansion	Hauling	0.00	20.0	HHDT
Terminal Expansion	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Pavement Marking	0.00	0.00	0.00	0.00	92,600

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 (Ton of Debris)	Acres Paved (acres)
Pavement Demolition	0.00	0.00	0.00	3,186	—
New Surface Grading	32,660	32,660	1.31	0.00	—
New Surface Paving	0.00	0.00	0.00	0.00	23.9

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

Land Use	Area Paved (acres)	% Asphalt
Other Asphalt Surfaces	23.9	100%
General Office Building	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2030	0.00	589	0.03	< 0.005
2031	0.00	589	0.03	< 0.005
2032	0.00	589	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

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

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	8.91	annual days of extreme heat
Extreme Precipitation	2.80	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	8.11	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

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

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

6.3. Adjusted Climate Risk Scores

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

Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

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

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	42.6
AQ-PM	33.5
AQ-DPM	90.0
Drinking Water	29.0
Lead Risk Housing	8.29
Pesticides	32.4
Toxic Releases	33.2
Traffic	78.7
Effect Indicators	—
CleanUp Sites	95.4
Groundwater	90.7
Haz Waste Facilities/Generators	98.9
Impaired Water Bodies	0.00
Solid Waste	99.3

Sensitive Population	—
Asthma	48.3
Cardio-vascular	20.6
Low Birth Weights	61.7
Socioeconomic Factor Indicators	—
Education	26.9
Housing	67.7
Linguistic	48.7
Poverty	18.9
Unemployment	13.2

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)	53.0

Healthy Places Index Score for Project Location (b)	70.0
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

Screen	Justification
Construction: Construction Phases	Schedule estimated from AMP task list and Pavement Maintenance Management Plan.
Construction: Off-Road Equipment	Equipment estimated based on the ALP and activities described in the Pavement Maintenance Plan. Off-Highway Truck for pavement marking = automated runway striping machine. Other Construction Equipment for pavement marking = pavement paint blasting machine. Off-Highway Truck for pavement rehabilitation = crack sealing truck. Other Construction Equipment for pavement rehabilitation = pavement milling machine.
Construction: Trips and VMT	Pavement Marking and building painting crew size estimated at 5 per day (10 worker trips/day). Pavement haul trips are 1 way (2 trips per load) and assume 16 CY per tandem trailer load (6 inches uncompressed asphalt). Hangar Construction and terminal expansion crew size estimate at 10 per day (20 worker trips/day), vendor trips estimated at 2 per day.
Construction: Architectural Coatings	Marking assumed to be 10% of new or repaired pavement.
Construction: Dust From Material Movement	Grading assumes 18 inches soil removed and replaced with 18 inches of uncompressed aggregate.

MYF AMP Operation Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	MYF AMP Operation
Operational Year	2032
Lead Agency	City of San Diego
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50
Precipitation (days)	19.8
Location	32.816075617216484, -117.14144817567308
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	2022.1.1.29

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
Unrefrigerated Warehouse-No Rail	476	1000sqft	10.9	475,530	0.00	—	—	—

General Office Building	6.40	1000sqft	0.15	6,400	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. 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.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	14.9	0.56	25.0	0.01	0.05	1.06	1.11	0.04	0.27	0.31	1,761
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	11.4	0.42	3.72	0.01	0.01	1.06	1.07	0.01	0.27	0.28	1,624
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	13.1	0.50	14.1	0.01	0.03	1.05	1.08	0.02	0.27	0.29	1,675
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.39	0.09	2.57	< 0.005	0.01	0.19	0.20	< 0.005	0.05	0.05	277

2.5. 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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.49	0.33	3.95	0.01	0.01	1.06	1.07	0.01	0.27	0.28	1,121
Area	14.4	0.18	21.0	< 0.005	0.04	—	0.04	0.03	—	0.03	86.5

Energy	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	440
Water	—	—	—	—	—	—	—	—	—	—	13.0
Waste	—	—	—	—	—	—	—	—	—	—	101
Refrig.	—	—	—	—	—	—	—	—	—	—	0.02
Total	14.9	0.56	25.0	0.01	0.05	1.06	1.11	0.04	0.27	0.31	1,761
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.48	0.36	3.67	0.01	0.01	1.06	1.07	0.01	0.27	0.28	1,070
Area	10.9	—	—	—	—	—	—	—	—	—	—
Energy	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	440
Water	—	—	—	—	—	—	—	—	—	—	13.0
Waste	—	—	—	—	—	—	—	—	—	—	101
Refrig.	—	—	—	—	—	—	—	—	—	—	0.02
Total	11.4	0.42	3.72	0.01	0.01	1.06	1.07	0.01	0.27	0.28	1,624
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.48	0.36	3.68	0.01	0.01	1.05	1.06	0.01	0.27	0.27	1,078
Area	12.6	0.09	10.3	< 0.005	0.02	—	0.02	0.01	—	0.01	42.7
Energy	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	440
Water	—	—	—	—	—	—	—	—	—	—	13.0
Waste	—	—	—	—	—	—	—	—	—	—	101
Refrig.	—	—	—	—	—	—	—	—	—	—	0.02
Total	13.1	0.50	14.1	0.01	0.03	1.05	1.08	0.02	0.27	0.29	1,675
Annual	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.09	0.06	0.67	< 0.005	< 0.005	0.19	0.19	< 0.005	0.05	0.05	179
Area	2.30	0.02	1.89	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	7.06
Energy	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	72.9
Water	—	—	—	—	—	—	—	—	—	—	2.15
Waste	—	—	—	—	—	—	—	—	—	—	16.7
Refrig.	—	—	—	—	—	—	—	—	—	—	< 0.005

Total	2.39	0.09	2.57	< 0.005	0.01	0.19	0.20	< 0.005	0.05	0.05	277

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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.49	0.33	3.95	0.01	0.01	1.06	1.07	0.01	0.27	0.28	1,121
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.49	0.33	3.95	0.01	0.01	1.06	1.07	0.01	0.27	0.28	1,121
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.48	0.36	3.67	0.01	0.01	1.06	1.07	0.01	0.27	0.28	1,070
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.48	0.36	3.67	0.01	0.01	1.06	1.07	0.01	0.27	0.28	1,070
Annual	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.09	0.06	0.67	< 0.005	< 0.005	0.19	0.19	< 0.005	0.05	0.05	179
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.09	0.06	0.67	< 0.005	< 0.005	0.19	0.19	< 0.005	0.05	0.05	179

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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	325
General Office Building	—	—	—	—	—	—	—	—	—	—	49.9
Total	—	—	—	—	—	—	—	—	—	—	374
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	325
General Office Building	—	—	—	—	—	—	—	—	—	—	49.9
Total	—	—	—	—	—	—	—	—	—	—	374
Annual	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	53.7
General Office Building	—	—	—	—	—	—	—	—	—	—	8.27
Total	—	—	—	—	—	—	—	—	—	—	62.0

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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
General Office Building	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	65.9
Total	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	65.9
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
General Office Building	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	65.9
Total	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	65.9
Annual	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
General Office Building	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	10.9
Total	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	10.9

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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	10.3	—	—	—	—	—	—	—	—	—	—

Architectural Coatings	0.61	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	3.44	0.18	21.0	< 0.005	0.04	—	0.04	0.03	—	0.03	86.5
Total	14.4	0.18	21.0	< 0.005	0.04	—	0.04	0.03	—	0.03	86.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	10.3	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.61	—	—	—	—	—	—	—	—	—	—
Total	10.9	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	1.88	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.11	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.31	0.02	1.89	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	7.06
Total	2.30	0.02	1.89	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	7.06

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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	0.00
General Office Building	—	—	—	—	—	—	—	—	—	—	13.0

Total	—	—	—	—	—	—	—	—	—	—	13.0
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	0.00
General Office Building	—	—	—	—	—	—	—	—	—	—	13.0
Total	—	—	—	—	—	—	—	—	—	—	13.0
Annual	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	0.00
General Office Building	—	—	—	—	—	—	—	—	—	—	2.15
Total	—	—	—	—	—	—	—	—	—	—	2.15

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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	89.7
General Office Building	—	—	—	—	—	—	—	—	—	—	11.2
Total	—	—	—	—	—	—	—	—	—	—	101
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	89.7
General Office Building	—	—	—	—	—	—	—	—	—	—	11.2
Total	—	—	—	—	—	—	—	—	—	—	101
Annual	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	14.8
General Office Building	—	—	—	—	—	—	—	—	—	—	1.86
Total	—	—	—	—	—	—	—	—	—	—	16.7

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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	0.02
Total	—	—	—	—	—	—	—	—	—	—	0.02
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	0.02
Total	—	—	—	—	—	—	—	—	—	—	0.02
Annual	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	< 0.005

Total	—	—	—	—	—	—	—	—	—	—	< 0.005

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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—

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

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Unrefrigerated Warehouse-No Rail	151	151	151	55,195	1,505	1,505	1,505	549,372
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

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	0.00	722,895	240,965	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

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)
Unrefrigerated Warehouse-No Rail	690,082	170	0.0330	0.0040	0.00
General Office Building	106,205	170	0.0330	0.0040	204,947

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Unrefrigerated Warehouse-No Rail	0.00	0.00
General Office Building	1,137,496	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Unrefrigerated Warehouse-No Rail	47.6	—
General Office Building	5.95	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

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

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	8.91	annual days of extreme heat
Extreme Precipitation	2.80	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	8.11	annual hectares burned

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

6.2. Initial Climate Risk Scores

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

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

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2

Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

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

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	42.6
AQ-PM	33.5
AQ-DPM	90.0
Drinking Water	29.0
Lead Risk Housing	8.29
Pesticides	32.4
Toxic Releases	33.2
Traffic	78.7
Effect Indicators	—
CleanUp Sites	95.4
Groundwater	90.7

Haz Waste Facilities/Generators	98.9
Impaired Water Bodies	0.00
Solid Waste	99.3
Sensitive Population	—
Asthma	48.3
Cardio-vascular	20.6
Low Birth Weights	61.7
Socioeconomic Factor Indicators	—
Education	26.9
Housing	67.7
Linguistic	48.7
Poverty	18.9
Unemployment	13.2

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)	53.0
Healthy Places Index Score for Project Location (b)	70.0
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

Screen	Justification
Construction: Construction Phases	Schedule estimated from AMP task list and Pavement Maintenance Management Plan.
Construction: Off-Road Equipment	Equipment estimated based on the ALP and modeling for Near- and Mid-Term components.
Construction: Trips and VMT	Pavement haul trips are 1 way (2 trips per load) and assume 16 CY per tandem trailer load. Import and export is not phased. Building Construction crew size estimate at 10 per day (20 worker trips/day), vendor trips estimated at 2 per day.
Construction: Architectural Coatings	Marking assumed to be 10% of new or repaired pavement.
Construction: Dust From Material Movement	Grading assumes 18 inches soil removed and replaced with 18 inches of uncompressed aggregate.

Operations: Vehicle Data	Project net increased trip generation over existing trips (151 ADT) per AMP Transportation Impact Analysis and Local Mobility Analysis (CR Associates 2025).
Operations: Energy Use	No natural gas use and Non-Title 24 electricity use only for hangars.
Operations: Water and Waste Water	No water use for hangars.
Operations: Solid Waste	Minimal solid waste generation for hangars, assumed at 0.1 ton per year per 1,000 SF.

MYF AMP Operation Mitigated Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	MYF AMP Operation Mitigated
Operational Year	2032
Lead Agency	City of San Diego
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50
Precipitation (days)	19.8
Location	32.816075617216484, -117.14144817567308
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	2022.1.1.29

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
Unrefrigerated Warehouse-No Rail	476	1000sqft	10.9	475,530	0.00	—	—	—

General Office Building	6.40	1000sqft	0.15	6,400	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. 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.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	14.9	0.50	24.9	0.01	0.04	1.06	1.11	0.03	0.27	0.30	1,724
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	11.4	0.36	3.67	0.01	0.01	1.06	1.07	0.01	0.27	0.28	1,587
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	13.1	0.44	14.0	0.01	0.02	1.05	1.07	0.02	0.27	0.29	1,637
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.39	0.08	2.56	< 0.005	< 0.005	0.19	0.20	< 0.005	0.05	0.05	271

2.5. 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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.49	0.33	3.95	0.01	0.01	1.06	1.07	0.01	0.27	0.28	1,121
Area	14.4	0.18	21.0	< 0.005	0.04	—	0.04	0.03	—	0.03	86.5

Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	403
Water	—	—	—	—	—	—	—	—	—	—	13.0
Waste	—	—	—	—	—	—	—	—	—	—	101
Refrig.	—	—	—	—	—	—	—	—	—	—	0.02
Total	14.9	0.50	24.9	0.01	0.04	1.06	1.11	0.03	0.27	0.30	1,724
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.48	0.36	3.67	0.01	0.01	1.06	1.07	0.01	0.27	0.28	1,070
Area	10.9	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	403
Water	—	—	—	—	—	—	—	—	—	—	13.0
Waste	—	—	—	—	—	—	—	—	—	—	101
Refrig.	—	—	—	—	—	—	—	—	—	—	0.02
Total	11.4	0.36	3.67	0.01	0.01	1.06	1.07	0.01	0.27	0.28	1,587
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.48	0.36	3.68	0.01	0.01	1.05	1.06	0.01	0.27	0.27	1,078
Area	12.6	0.09	10.3	< 0.005	0.02	—	0.02	0.01	—	0.01	42.7
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	403
Water	—	—	—	—	—	—	—	—	—	—	13.0
Waste	—	—	—	—	—	—	—	—	—	—	101
Refrig.	—	—	—	—	—	—	—	—	—	—	0.02
Total	13.1	0.44	14.0	0.01	0.02	1.05	1.07	0.02	0.27	0.29	1,637
Annual	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.09	0.06	0.67	< 0.005	< 0.005	0.19	0.19	< 0.005	0.05	0.05	179
Area	2.30	0.02	1.89	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	7.06
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	66.7
Water	—	—	—	—	—	—	—	—	—	—	2.15
Waste	—	—	—	—	—	—	—	—	—	—	16.7
Refrig.	—	—	—	—	—	—	—	—	—	—	< 0.005

Total	2.39	0.08	2.56	< 0.005	< 0.005	0.19	0.20	< 0.005	0.05	0.05	271

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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.49	0.33	3.95	0.01	0.01	1.06	1.07	0.01	0.27	0.28	1,121
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.49	0.33	3.95	0.01	0.01	1.06	1.07	0.01	0.27	0.28	1,121
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.48	0.36	3.67	0.01	0.01	1.06	1.07	0.01	0.27	0.28	1,070
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.48	0.36	3.67	0.01	0.01	1.06	1.07	0.01	0.27	0.28	1,070
Annual	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.09	0.06	0.67	< 0.005	< 0.005	0.19	0.19	< 0.005	0.05	0.05	179
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.09	0.06	0.67	< 0.005	< 0.005	0.19	0.19	< 0.005	0.05	0.05	179

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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	325
General Office Building	—	—	—	—	—	—	—	—	—	—	78.2
Total	—	—	—	—	—	—	—	—	—	—	403
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	325
General Office Building	—	—	—	—	—	—	—	—	—	—	78.2
Total	—	—	—	—	—	—	—	—	—	—	403
Annual	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	53.7
General Office Building	—	—	—	—	—	—	—	—	—	—	12.9
Total	—	—	—	—	—	—	—	—	—	—	66.7

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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
General Office Building	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
General Office Building	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
General Office Building	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00

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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	10.3	—	—	—	—	—	—	—	—	—	—

Architectural Coatings	0.61	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	3.44	0.18	21.0	< 0.005	0.04	—	0.04	0.03	—	0.03	86.5
Total	14.4	0.18	21.0	< 0.005	0.04	—	0.04	0.03	—	0.03	86.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	10.3	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.61	—	—	—	—	—	—	—	—	—	—
Total	10.9	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	1.88	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.11	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.31	0.02	1.89	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	7.06
Total	2.30	0.02	1.89	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	7.06

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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	0.00
General Office Building	—	—	—	—	—	—	—	—	—	—	13.0

Total	—	—	—	—	—	—	—	—	—	—	13.0
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	0.00
General Office Building	—	—	—	—	—	—	—	—	—	—	13.0
Total	—	—	—	—	—	—	—	—	—	—	13.0
Annual	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	0.00
General Office Building	—	—	—	—	—	—	—	—	—	—	2.15
Total	—	—	—	—	—	—	—	—	—	—	2.15

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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	89.7
General Office Building	—	—	—	—	—	—	—	—	—	—	11.2
Total	—	—	—	—	—	—	—	—	—	—	101
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	89.7
General Office Building	—	—	—	—	—	—	—	—	—	—	11.2
Total	—	—	—	—	—	—	—	—	—	—	101
Annual	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	14.8
General Office Building	—	—	—	—	—	—	—	—	—	—	1.86
Total	—	—	—	—	—	—	—	—	—	—	16.7

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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	0.02
Total	—	—	—	—	—	—	—	—	—	—	0.02
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	0.02
Total	—	—	—	—	—	—	—	—	—	—	0.02
Annual	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	< 0.005

Total	—	—	—	—	—	—	—	—	—	—	< 0.005

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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—

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

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Unrefrigerated Warehouse-No Rail	151	151	151	55,195	1,505	1,505	1,505	549,372
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

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	0.00	722,895	240,965	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

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)
Unrefrigerated Warehouse-No Rail	690,082	170	0.0330	0.0040	0.00
General Office Building	166,255	170	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Unrefrigerated Warehouse-No Rail	0.00	0.00
General Office Building	1,137,496	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Unrefrigerated Warehouse-No Rail	47.6	—
General Office Building	5.95	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

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

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	8.91	annual days of extreme heat
Extreme Precipitation	2.80	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	8.11	annual hectares burned

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

6.2. Initial Climate Risk Scores

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

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

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2

Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

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

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	42.6
AQ-PM	33.5
AQ-DPM	90.0
Drinking Water	29.0
Lead Risk Housing	8.29
Pesticides	32.4
Toxic Releases	33.2
Traffic	78.7
Effect Indicators	—
CleanUp Sites	95.4
Groundwater	90.7

Haz Waste Facilities/Generators	98.9
Impaired Water Bodies	0.00
Solid Waste	99.3
Sensitive Population	—
Asthma	48.3
Cardio-vascular	20.6
Low Birth Weights	61.7
Socioeconomic Factor Indicators	—
Education	26.9
Housing	67.7
Linguistic	48.7
Poverty	18.9
Unemployment	13.2

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)	53.0
Healthy Places Index Score for Project Location (b)	70.0
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

Screen	Justification
Construction: Construction Phases	Schedule estimated from AMP task list and Pavement Maintenance Management Plan.
Construction: Off-Road Equipment	Equipment estimated based on the ALP and modeling for Near- and Mid-Term components.
Construction: Trips and VMT	Pavement haul trips are 1 way (2 trips per load) and assume 16 CY per tandem trailer load. Import and export is not phased. Building Construction crew size estimate at 10 per day (20 worker trips/day), vendor trips estimated at 2 per day.
Construction: Architectural Coatings	Marking assumed to be 10% of new or repaired pavement.
Construction: Dust From Material Movement	Grading assumes 18 inches soil removed and replaced with 18 inches of uncompressed aggregate.

Operations: Vehicle Data	Project net increased trip generation over existing trips (151 ADT) per AMP Transportation Impact Analysis and Local Mobility Analysis (CR Associates 2025).
Operations: Energy Use	No natural gas use and Non-Title 24 electricity use only for hangars. Terminal expansion natural gas converted to kWh (1 kBtU = 0.293 kWh) and added to default electricity use.
Operations: Water and Waste Water	No water use for hangars.
Operations: Solid Waste	Minimal solid waste generation for hangars, assumed at 0.1 ton per year per 1,000 SF.