

**DRAFT**

# **Greenhouse Gas Emissions Technical Report**

## **Los Coches Plaza Project**

**PDS2020-MUP-20-006; PDS2021-TPM-21293**

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Appendix A. CalEEMod Output

## ***Acronyms and Abbreviations***

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2017 Scoping Plan	California’s 2017 Climate Change Scoping Plan
2022 Scoping Plan	2022 Scoping Plan for Achieving Carbon Neutrality
AB	Assembly Bill
CalEEMod	California Emissions Estimator Model
CAP	Climate Action Plan
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CCAT	California Climate Action Team
CEQA	California Environmental Quality Act
CH <sub>4</sub>	methane
CO <sub>2</sub>	carbon dioxide
CO <sub>2</sub> e	carbon dioxide equivalent
County	County of San Diego
EMFAC	Emission Factor
EO	Executive Order
EV	electric vehicle
First Update	First Update to the Climate Change Scoping Plan
GHG	greenhouse gas
LMA	Local Mobility Analysis
MMTCO <sub>2</sub> e	million metric tons of carbon dioxide equivalent
MPO	Metropolitan Planning Organization
MT	metric ton
MTCO <sub>2</sub> e	metric tons of carbon dioxide equivalent
N <sub>2</sub> O	nitrous oxide
OPR	Governor’s Office of Planning and Research
project	Los Coches Plaza Project
RTP	Regional Transportation Plan
SAFE Rule	Safer Affordable Fuel-Efficient Vehicles Part One: National Program
SANDAG	San Diego Association of Governments
SB	Senate Bill
SCS	Sustainable Communities Strategy
SMAQMD	Sacramento Metropolitan Air Quality Management District
TSG	Transportation Study Guidelines
USEPA	U.S. Environmental Protection Agency
VMT	vehicle miles traveled
ZEV	zero-emission vehicle

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## ***Executive Summary***

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The following analysis evaluates the potential for the proposed Los Coches Plaza Project (project) to result in potentially significant impacts related to greenhouse gas (GHG) emissions. GHG emissions that would result from construction and operation of the project are estimated for informational purposes. Project impact significance is determined by comparing project design and sustainability features to priority GHG reduction strategies outlined in the 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan), adopted for achieving statewide emissions reduction goals outlined in Assembly Bill (AB) 1279, and local plans to achieve GHG targets. Specifically, the project is compared 2022 Scoping Plan Appendix D, Local Actions, and County of San Diego vehicle miles traveled (VMT) goals. Implementation of the proposed project would be consistent with the 2022 Scoping Plan and with state and local VMT goals, would implement sustainability features, and would not conflict with local plans to reduce GHG emissions. Therefore, the proposed project would not result in cumulatively considerable GHG emissions.

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## Section 1 Introduction

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### 1.1 Purpose of the Report

This Greenhouse Gas (GHG) Emissions Technical Report provides information on existing conditions in the County of San Diego (County), the regulatory setting, and potential impacts associated with implementation of the proposed Los Coches Plaza Project (project). This report takes into account GHG emissions that would be associated with implementation of the proposed project compared to existing conditions.

This report is prepared in accordance with the California Environmental Quality Act (CEQA), which requires public agencies to review the environmental impacts of proposed projects and to consider feasible alternatives and mitigation measures to reduce significant adverse environmental effects. GHG emissions have the potential to adversely affect the environment because such emissions contribute, on a cumulative basis, to the significant cumulative impact of global climate change. Cumulative impacts are those that result from the combination of past, present, and probable future projects, producing related effects. As part of CEQA analysis, agencies must consider potential adverse effects that may result from a proposed project's GHG emissions. The California Natural Resources Agency adopted amendments to the CEQA Guidelines to address GHG emissions, consistent with the California Legislature's directive in California Public Resources Code, Section 21083.05 (enacted as part of Senate Bill [SB] 97 [Chapter 185, Statutes 2007]). These amendments took effect in 2010.

The County prepared a comprehensive Climate Action Plan (CAP) to demonstrate how the County may meet the state's legislative GHG emissions reduction targets established in Assembly Bill (AB) 32 and SB 32 and to show progress toward the state's 2050 GHG emissions reduction goal (Executive Order [EO] S-3-05). The County CAP has been set aside as a qualified CAP meeting the requirements of the CEQA Guidelines and is not available to provide an appropriate threshold for project compliance.

Pursuant to CEQA Guidelines, Sections 15064(h)(3) and 15183.5(b), a project's incremental contribution to a cumulative GHG emissions effect may be determined not to be cumulative if it complies with state emissions reduction goals. The analysis in this report addresses the project's potential impacts related to GHG emissions in the context of cumulative rather than direct impacts because, although it is unlikely that a single project would contribute significantly to climate change, cumulative emissions from many projects could impact global GHG concentrations and the global climate system. The intent of this report is to determine whether the proposed project would have a considerable cumulative incremental contribution to the significant impact of global climate change.

## 1.2 Project Location and Description

The project site is approximately 3 acres in the northeastern quadrant of the Interstate 8/Los Coches Road interchange in the County (Figure 1, Regional Location). The project includes development of a 2,660-square-foot fast-food restaurant with drive-through, a 7,385-square-foot auto parts store, and a car wash. Access to the project site is proposed opposite of the Los Coches Road and Ora Belle Lane intersection. The existing four-pump, eight-fueling-space gas station and solar panels would remain as is on site. In addition to the existing solar panels, the project would implement the following sustainability features:

- Exceed mandatory California Green Building Standards electric vehicle (EV) charging station requirements by installing two EV charging stations in addition to required EV charging station-capable parking spaces.
- Provide iCommute information regarding alternative transportation options in all employee breakrooms.
- Install only low-water-use landscape in outdoor areas consistent with the County's Water Conservation in Landscaping Ordinance.
- Install new bicycle racks.
- Install electric outlets in key areas of the carwash and restaurant, including at kitchen appliance and water heater locations, designed to accommodate future electric appliances without major building retrofits.
- Install new bus stops and associated crosswalks within the vicinity of the project site, pending coordination with the San Diego Metropolitan Transit System. The proposed location for the bus stops is north of the project driveway and Ora Belle Lane on both sides of Los Coches Road.
- Relocate and consolidate existing Helix Water District/Padre Dam Municipal Water District emergency backup system equipment. Because the new equipment would reduce and replace older, existing equipment, it would improve energy efficiency thus decreasing GHG emissions associated with electricity consumption.

## Figure 1. Regional Location

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## Section 2 Existing Conditions

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### 2.1 Existing Setting

#### 2.1.1 Characteristics of the Project Site

The project site is partially developed with an existing gas station in the southwestern portion of the site (Figure 2, Project Site). The majority of the site was previously disturbed and used for storage and parking of vehicles and other equipment associated with the existing gas station. The project site is relatively flat, with a gently sloping hill down to the northern and eastern edges of the project site. Vegetation on the project site is dominated by Diegan coastal sage scrub, disturbed Diegan coastal sage scrub, eucalyptus woodland, disturbed land, and developed land.

The project site is in an area primarily developed with residential land uses. Multi-family residential development is across Los Coches Road west of the project site, and single-family residences are northwest, northeast, and east of the project site. Interstate 8 is south of the project site and separates the site from commercial development.

#### 2.1.2 Greenhouse Gases

The primary GHG emitted by human activities is carbon dioxide (CO<sub>2</sub>). CO<sub>2</sub> enters the atmosphere through the burning of fossil fuels, solid waste, trees, and wood products and as a result of other chemical reactions, such as those produced through the manufacturing of cement. Globally, the largest source of CO<sub>2</sub> emissions is the combustion of fossil fuels in power plants, automobiles, industrial facilities, and other similar sources (USEPA 2020). Methane (CH<sub>4</sub>) is emitted from natural and human-related sources, including fossil fuel production, animal husbandry, rice cultivation, biomass burning, and waste management (USEPA 2020). Nitrous oxide (N<sub>2</sub>O) is emitted during agricultural and industrial activities and combustion of fossil fuels and solid waste (USEPA 2020). Hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride are synthetic, powerful GHGs that are emitted from a variety of industrial processes and the production of chlorodifluoromethane. Construction or operation of the proposed project would not include any industrial processes, and chlorodifluoromethane has been mostly phased out of use in the United States, with the exception of feedstock production (USEPA 2020); therefore, these GHGs are not discussed further in this report.

Individual GHGs have varying heat-trapping properties and atmospheric lifetimes. Table 1 identifies the carbon dioxide equivalent (CO<sub>2</sub>e) and atmospheric lifetimes of basic GHGs. The metric CO<sub>2</sub>e is a consistent method for comparing GHG emissions because it normalizes various GHG emissions to a consistent measure. Each GHG is compared to CO<sub>2</sub> with respect to its ability to trap infrared radiation, its atmospheric lifetime, and its chemical structure. For example, CH<sub>4</sub> is a GHG that is 25 times more potent than CO<sub>2</sub>; therefore, 1 metric ton (MT) of CH<sub>4</sub> is equal to 25 metric tons of carbon dioxide equivalent (MTCO<sub>2</sub>e).

**Table 1. Global Warming Potentials and Atmospheric Lifetimes of Common Greenhouse Gases**

GHG	Formula	100-Year Global Warming Potential <sup>1</sup>	Atmospheric Lifetime
Carbon dioxide	CO <sub>2</sub>	1	~100
Methane	CH <sub>4</sub>	25	12
Nitrous oxide	N <sub>2</sub> O	298	121

**Source:** CAPCOA 2021. Consistent with CalEEMod, Version 2020.4.0.

**Notes:** CH<sub>4</sub> = methane; CO<sub>2</sub> = carbon dioxide; GHG = greenhouse gas; N<sub>2</sub>O = nitrous oxide

<sup>1</sup> The warming effects over a 100-year time frame relative to other GHGs.

## 2.2 Global, National, Statewide, and Local Greenhouse Gas Inventories

To evaluate and reduce the potential adverse impact of climate change, global, national, state, and local organizations have conducted GHG inventories to estimate levels of and trends in GHG emissions and removals. The following summarizes these GHG inventories.

### 2.2.1 Global

Worldwide anthropogenic GHG emissions in 2010 were approximately 49,000 million metric tons of CO<sub>2</sub>e (MMTCO<sub>2</sub>e), including ongoing emissions from industrial and agricultural sources and emissions from land use changes (e.g., deforestation, biomass decay). CO<sub>2</sub> emissions from fossil fuel use and industrial processes account for 65 percent of the total emissions of 49,000 MMTCO<sub>2</sub>e (which include land use changes), and CO<sub>2</sub> emissions are 77 percent of the total GHG emissions. CH<sub>4</sub> emissions account for 16 percent of total GHG emissions, and N<sub>2</sub>O emissions account for 6 percent of total GHG emissions (IPCC 2014).

### 2.2.2 United States

The U.S. Environmental Protection Agency’s (USEPA’s) Draft Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2018 provides a comprehensive emissions inventory of the nation’s primary anthropogenic sources and sinks of GHGs. Total U.S. GHG emissions in 2018 were 6,677.8 MMTCO<sub>2</sub>e, an increase from 2017 of 2.9 percent. Emissions from total transportation activities accounted for the largest portion (27.9 percent) of total U.S. GHG emissions in 2018. Electric power generation accounted for the second largest portion (26.9 percent), while emissions from industry accounted for the third largest portion (22.2 percent) of total U.S. GHG emissions in 2018. In general, emissions from industry have declined over the past decade due to a number of factors, including structural changes in the U.S. economy (i.e., shifts from a manufacturing-based to a service-based economy), fuel switching, and energy efficiency improvements. The remaining contributors to U.S. GHG emissions are, in order of magnitude, the agricultural, commercial, and residential sectors (USEPA 2020).

Figure 2. Project Site

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### **2.2.3 California**

According to the California Greenhouse Gas Emissions Inventory for 2000 to 2020, which tracks the emissions of seven GHGs for the years 2000 through 2020, the total California GHG emissions in 2020 were 369.2 MMTCO<sub>2e</sub>. During the 2000 to 2020 period, per capita GHG emissions in California have continued to drop from a peak in 2001 of 14 tons per person to 9.3 tons per person in 2020 (33 percent decrease). The transportation sector remains the largest source of GHG emissions in the state, accounting for 37 percent of the inventory. Emissions from the electricity sector (16 percent in 2020) continue to decline due to growing zero-GHG energy generation sources. Emissions from the industrial sector contributed 20 percent of total GHG emissions in 2020, emissions from the residential and commercial sector contributed 10.5 percent, and emissions from the agricultural sector contributed 9 percent. The 2019 to 2020 decrease in emissions is likely due in large part to the impacts of the COVID-19 pandemic. Economic recovery from the pandemic may result in emissions increases over the next few years (CARB 2022a).

### **2.2.4 County of San Diego**

In February 2018, in conjunction with the County's CAP, the County published a GHG inventory for County operations and the activities occurring in the unincorporated communities of the County. The GHG inventory includes a discussion of the primary sources and annual levels of GHG emissions for 2014 (baseline year) and describes likely trends if emissions are not reduced for 2020, 2030, and 2050. In 2014, total GHG emissions in the County were estimated to be 3.2 MMTCO<sub>2e</sub> from the following sectors: transportation (on- and off-road), electricity, solid waste, natural gas, agriculture, water, wastewater, and propane (County of San Diego 2018). On-road transportation is the largest emissions sector, accounting for approximately 1.5 MMTCO<sub>2e</sub>, or 45 percent, of total emissions. Energy consumption, including electricity and natural gas use, is the next largest source of emissions, accounting for approximately 1.1 MMTCO<sub>2e</sub>, or 35 percent, of total emissions.

### **2.2.5 Summary of Climate Change Effects**

The County's CAP includes a summary of the potential effects of climate change on the San Diego region, including the project site. The main effects of concern for the unincorporated County, including the project site, are changes to average temperature, increased wildfire risk, and changes in precipitation and hydrology. These risks are summarized below based on information provided in the County's CAP (County of San Diego 2018). The unincorporated area, including the project site, does not contain coastline. As such, sea-level rise impacts to the unincorporated County would be substantially less compared to the region, and this effect of climate change is not included below.

#### **2.2.5.1 Changes in Average Temperature**

Annual temperatures are projected to climb steadily in the San Diego region. The annual average maximum and minimum temperatures are projected to increase between approximately 5 and 10

degrees by the end of the century. Additionally, the number of extreme heat days, as well as the number of consecutive extreme heat days, is projected to increase from an average of approximately 4 days annually to approximately 33 to 63 days annually by the end of the century (County of San Diego 2018). These increasing temperatures can exacerbate air quality issues, such as increasing levels of ozone and particulate matter in certain areas, leading to public health issues, including increased rates of cardiovascular and respiratory diseases, cancer, allergies, and cataracts.

### **2.2.5.2 Increased Wildfire Risk**

The County's topography consists of a semi-arid coastal plain and rolling highlands, which, when fueled by shrub overgrowth, occasional Santa Ana winds, and high temperatures, creates an ever-present threat of wildland fire. Extreme weather conditions, such as high temperature, low humidity, or winds of extraordinary force, may cause an ordinary fire to expand into a less controllable, more intense fire. Increased temperatures and associated changes in precipitation patterns are expected to increase the risk of wildfire in the County.

### **2.2.5.3 Changes in Precipitation and Hydrology**

Changes in the amount and intensity of precipitation have the potential to affect water supply and flooding events in the region. Changes in weather patterns resulting from increases in global average temperatures could result in a decreased volume of precipitation falling as snow in California and in an overall reduction in snowpack in the Sierra Nevada, which provides a notable amount of water to the region. Additionally, a large portion of water supply comes from imports from the Colorado River, which also depends on snowfall in the Rocky Mountains. Changes in the frequency, intensity, and duration of extreme events, such as sustained periods of heavy precipitation and increased rainfall intensity during precipitation events, can lead to increased flood magnitude and frequency.

## **2.3 Regulatory Setting**

### **2.3.1 Federal**

The following section describes the federal regulation relevant to the proposed project's GHG analysis, the federal Clean Air Act.

#### **2.3.1.1 Federal Clean Air Act**

On April 2, 2007, the U.S. Supreme Court ruled in *Massachusetts v. USEPA* that CO<sub>2</sub> is an air pollutant, as defined under the federal Clean Air Act, and that the USEPA has the authority to regulate emissions of GHGs. The USEPA announced that GHGs (including CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride) 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 U.S. Department of Transportation's National Highway Traffic Safety Administration. The standards require compliance with progressively more stringent GHG emissions standards for the 2012 through 2025 vehicle model years.

### **2.3.2 State**

The following section summarizes statewide GHG emissions targets relevant to the proposed project's GHG analysis.

#### **2.3.2.1 Assembly Bill 32: Global Warming Solutions Act of 2006**

In September 2006, the California Legislature adopted AB 32, the California Global Warming Solutions Act of 2006. AB 32 focuses on reducing GHG emissions in California. GHGs, as defined under AB 32, include CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, chlorofluorocarbons, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Under AB 32, the California Air Resources Board (CARB) has the primary responsibility for reducing GHG emissions and continues the California Climate Action Team (CCAT) to coordinate statewide efforts and promote strategies that can be undertaken by many other California agencies. AB 32 required CARB to adopt rules and regulations that would achieve GHG emissions equal to statewide levels in 1990 by 2020.

In general, AB 32 directed CARB to perform the following:

- Prepare and approve a Scoping Plan for achieving the maximum technologically feasible and cost-effective reductions in GHG emissions from sources or categories of sources of GHGs by 2020, and update the Scoping Plan every 5 years.
- Maintain and continue reductions in emissions of GHG beyond 2020.
- Identify the statewide level of GHG emissions in 1990 to serve as the emissions limit to be achieved by 2020.
- Identify and adopt regulations for discrete early actions that could be enforceable on or before January 1, 2010.
- Adopt a regulation that establishes a system of market-based declining annual aggregate emissions limits for sources or categories of sources that emit GHG emissions.
- Convene an Environmental Justice Advisory Committee to advise CARB in developing and updating the Scoping Plan and any other pertinent matter in implementing AB 32.
- Appoint an Economic and Technology Advancement Advisory Committee to provide recommendations for technologies, research, and GHG emissions reduction measures.

Regarding the first bullet, the First Update to the Climate Change Scoping Plan (First Update) was adopted in May 2014. The First Update identifies opportunities for GHG reductions using existing and new funding sources, defines CARB's climate change priorities for the next 5 years, and establishes the plan for meeting the long-term goals of EO S-3-05. The First Update highlights

California’s progress toward meeting the 2020 GHG emissions reduction goals defined in the initial Scoping Plan and evaluates how GHG reduction strategies may be aligned with other state priorities for water, waste, natural resources, clean energy, transportation, and land use. According to the First Update, California is on track to meet the 2020 GHG emissions reduction goal. While the First Update discusses setting a mid-term target, the plan does not set a quantifiable target toward meeting the 2050 goal (CARB 2014).

California’s 2017 Climate Change Scoping Plan (2017 Scoping Plan) was adopted in December 2017. This plan outlines the framework for achieving the 2030 reductions as established in EO B-30-15 and SB 32. The 2017 Scoping Plan identifies GHG reductions by emissions sector to achieve a statewide emissions level that is 40 percent below 1990 levels by 2030. Most recently, the 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan) was adopted in December 2022. The 2022 Scoping Plan Update assesses progress toward the statutory 2030 target and identifies a path to achieving carbon neutrality by 2045 (CARB 2022b). The 2022 Scoping Plan also includes recommendations for the role of local governments in achieving statewide GHG reduction targets. Specifically, CARB recommends that local governments prioritize transportation electrification, vehicle miles traveled (VMT) reduction, and building decarbonization (CARB 2022b).

### **2.3.2.2 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. 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 2022c). In November 2022, CARB approved the Advanced Clean Cars II regulations for model years 2026 through 2035, which requires all new passenger cars, trucks, and sports utility vehicles sold in California be zero emissions by 2035 (CARB 2023).

### **2.3.2.3 California Code of Regulations, Title 24, Part 6**

California Code of Regulations, Title 24, Part 6, California’s Energy Efficiency Standards for Residential and Nonresidential Buildings, was 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 periodically to allow the consideration and possible incorporation of new energy-efficient technologies and methods. The latest update to the Title 24 standards occurred in 2022 and went into effect on January 1, 2023. The 2022 update to the Building Energy Efficiency Standards focuses on moving closer to zero net energy residences by increasing energy efficiency by establishing electric-ready requirements for new homes and requiring solar photovoltaic systems for new residences. The 2022 Title 24 standards build on California's technology innovations, encouraging energy-efficient approaches to encourage building decarbonization, emphasizing in particular heat pumps for space heating and water heating. These standards also extend the benefits of photovoltaic and battery storage systems and other demand flexible technology to work in combination with heat pumps to enable California buildings to be responsive to climate change. They strengthen ventilation standards to improve indoor air quality and provide crucial steps in the state's progress toward 100 percent clean carbon neutrality by midcentury (CEC 2022).

#### **2.3.2.4 California Green Building Standards Code**

The California Green Building Standards Code (24 CCR Part 11) is a code with mandatory requirements for new residential and nonresidential buildings throughout California. The code is Part 11 of the California Building Standards Code in Title 24 of the California Code of Regulations (CBSC 2023). The current 2022 standards for new construction of and additions and alterations to residential and nonresidential buildings went into effect on January 1, 2023.

The development of the California Green Building Standards Code was 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 was established to reduce construction waste, make buildings more efficient in the use of materials and energy, and reduce environmental impact during and after construction.

The California Green Building Standards Code contains requirements for stormwater control during construction, construction waste reduction, indoor water use reduction, material selection, natural resource conservation, site irrigation conservation, and more. The code provides for design options that allow 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, such as heating and cooling equipment and lighting systems, are functioning at their maximum efficiency.

#### **2.3.2.5 Executive Order S-01-07**

EO S-01-07 was enacted by Governor Arnold Schwarzenegger on January 18, 2007, and mandates that (1) a statewide goal be established to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020 and (2) a Low Carbon Fuel Standard for transportation fuels

be established for California. According to the San Diego County Updated Greenhouse Gas Inventory (EPIC 2013), the effects of the Low Carbon Fuel Standard would be a 10 percent reduction in GHG emissions from fuel use by 2020. On April 23, 2009, CARB adopted regulations to implement the Low Carbon Fuel Standard.

### **2.3.2.6 Executive Order S-3-05**

On June 1, 2005, California Governor Arnold Schwarzenegger announced, through EO S-3-05, the following statewide GHG emissions reduction targets:

- By 2010, California shall reduce GHG emissions to 2000 levels.
- By 2020, California shall reduce GHG emissions to 1990 levels.
- By 2050, California shall reduce GHG emissions to 80 percent below 1990 levels.

The first CCAT Report to the Governor in 2006 contained recommendations and strategies to help ensure the targets in EO S-3-05 are met (CalEPA 2006). The latest CCAT Biennial Report was released in 2010. It expands on the policy-oriented 2006 assessment and provides updated information and scientific findings. The details in the CCAT Biennial Report include development of updated climate and sea-level projections using the latest information and tools available and evaluation of climate change in the context of broader social changes, such as land use changes and demographic shifts (CalEPA 2010).

### **2.3.2.7 Senate Bill 32**

Effective January 1, 2017, SB 32 added Section 38566 to the California Health and Safety Code. SB 32 provides that “in adopting rules and regulations to achieve the maximum technologically feasible and cost-effective greenhouse gas emissions reductions authorized by [Division 25.5 of the California Health and Safety Code], [CARB] shall ensure that statewide greenhouse gas emissions are reduced to at least 40 percent below the statewide greenhouse gas emissions limit no later than December 31, 2030.” In other words, SB 32 requires California to reduce its statewide GHG emissions by the year 2030 so that emissions are 40 percent below those that occurred in 1990.

### **2.3.2.8 Senate Bill 350**

California’s Renewable Portfolio Standard was established in 2002 under SB 1078 and accelerated in 2006 under SB 107 by requiring that 20 percent of electricity retail sales be served by renewable energy sources by 2010. Subsequent recommendations in California energy policy reports advocated a goal of 33 percent by 2020, and on November 17, 2008, Governor Arnold Schwarzenegger signed EO S-14-08, requiring retail sellers of electricity to serve 33 percent of their load with renewable energy by 2020. In April 2011, SB X1-2 codified EO S-14-08, setting the new Renewable Portfolio Standard targets at 20 percent by the end of 2013, 25 percent by the end of 2016, and 33 percent by the end of 2020 for electricity retailers. Most recently, Governor Edmund G. Brown Jr. signed SB 350 in October 2015, which extended the Renewable Portfolio

Standard target by requiring retail sellers to procure 50 percent of their electricity from renewable energy resources by 2030.

### **2.3.2.9 Senate Bill 743**

On September 27, 2013, Governor Jerry Brown signed SB 743. SB 743 created a process to change how transportation impacts analysis under CEQA is conducted. The Governor's Office of Planning and Research (OPR) was tasked with amending the CEQA Guidelines to provide an alternative to the traditional metric of automobile delay, which would promote three statutory goals: (1) the reduction of GHG emissions, (2) the development of multimodal transportation networks, and (3) the diversity of land uses. The OPR concluded that the use of VMT, with thresholds linked to GHG reduction targets, would adequately analyze a project's transportation impacts while supporting all three statutory goals. The OPR's guidance for evaluating transportation impacts was adopted by the California Natural Resources Agency in December 2018, thereby formally implementing VMT as the metric for transportation analysis under CEQA. According to the OPR, a detailed transportation VMT analysis is required for all land development projects except those that meet one of the screening criteria. A project that meets at least one of the screening criteria would have a less than significant VMT impact due to the project characteristics and/or location (LLG 2022).

### **2.3.2.10 Assembly Bill 1279**

AB 1279, the California Climate Crisis Act, enacted in September 2022, updates the goals of AB 32. The bill establishes a statewide goal to achieve net-zero GHG emissions by 2045 and to achieve and maintain net-negative GHG emissions thereafter. Additionally, the bill established a specific target for statewide anthropogenic GHG emissions to be reduced to at least 85 percent below the 1990 levels by 2045. The bill requires CARB to work with relevant state agencies to ensure that updates to the Scoping Plan identify and recommend measures to achieve these policy goals and to identify and implement a variety of policies and strategies that enable CO<sub>2</sub> removal solutions and carbon capture, utilization, and storage technologies in California, as specified. The bill also requires CARB to submit an annual progress report. As described above, an updated 2022 Scoping Plan has been adopted that outlines policies and strategies to achieve net-zero GHG emissions.

## **2.3.3 Regional**

The following section summarizes the region's plans and guidance relevant to the proposed project's GHG analysis.

### **2.3.3.1 San Diego Association of Governments Regional Transportation Plan/ Sustainable Communities Strategy**

In accordance with SB 375, the San Diego Association of Governments (SANDAG) adopted its 2021 update to its Regional Plan on December 10, 2021. The 2021 Regional Plan combines two existing documents: the (1) Regional Comprehensive Plan, and (2) the Regional Transportation

Plan and Sustainable Communities Strategy (RTP/SCS). SB 375 requires Metropolitan Planning Organizations (MPOs) to adopt an SCS or Alternative Planning Strategy, showing prescribed land use allocation in each MPO's RTP. CARB, in consultation with the MPOs, provides each affected region with reduction targets for GHGs emitted by passenger cars and light trucks in their respective regions for 2020 and 2035. The SCS for San Diego County details how the region will reduce GHG emissions to state-mandated levels. SANDAG was tasked by CARB to achieve a 15 percent reduction in per capita GHGs from passenger cars and light trucks by 2020 and a 19 percent reduction by 2035, relative to emission levels in 2005. The region would achieve or exceed both reduction targets by implementing its 2021 RTP/SCS (SANDAG 2021). CARB completed an evaluation of SANDAG's 2021 SCS and accepted SANDAG's determination that its 2021 SCS would meet the target of a 19 percent reduction by 2035, compared to 2005 levels, when fully implemented. However, CARB continues to have concerns about whether SANDAG has put in place the necessary actions to fully implement the SCS strategies by 2035 and included recommendations to prioritize funding of transportation projects that advance the SCS implementation and goals as well as accelerate infill in the San Diego region (CARB 2022d).

A 2019 Federal RTP was adopted in February 2019 that complies with federal requirements for the development of regional transportation plans, retains air quality conformity approval from the U.S. Department of Transportation, and preserves funding for the region's transportation investments. The 2019 Federal RTP builds on the original 2015 RTP with updated project costs and revenues and a new regional growth forecast. The 2019 Federal RTP is consistent with the Final Environmental Impact Report for the 2015 Regional Plan.

### **2.3.4 Local**

The following section summarizes the local plans and guidance relevant to the proposed project's GHG analysis.

#### **2.3.4.1 County of San Diego General Plan**

The County's General Plan, adopted in 2011, provides guiding principles designed to balance future growth, conservation, and sustainability. The General Plan aims to balance the need for infrastructure, housing, and economic vitality while maintaining and preserving unique community, agricultural areas, and extensive open space (County of San Diego 2011). The General Plan contains goals and policies specific to reducing GHG emissions, including efficient and compact growth and development, increased energy efficiency and use of renewable energy sources, increased recycling, and improved access to sustainable transportation (County of San Diego 2018).

The General Plan addresses AB 32 and climate change and provides an extensive list of policies designed to reduce GHG emissions and adapt to current climate change related impacts. Strategies listed to mitigate and reduce GHG emissions include reducing vehicle trips, gasoline, and energy consumption; improving energy efficiency by decreasing non-renewable energy consumption and



generation; increasing generation and use of renewable energy sources; reducing water consumption and waste generation; improving solid waste reuse and recycling and composting programs; promoting landscapes designed to sequester CO<sub>2</sub>; and preserving open space and agricultural lands. Adaptive strategies designed to prevent and mitigate current climate change impacts include the following: reducing wildfire and flood risk, conserving water during water shortages, promoting agricultural lands to support local food production, and providing education and leadership (County of San Diego 2018).

#### **2.3.4.2 Transportation Study Guidelines**

In accordance with SB 743, the County adopted the Transportation Study Guidelines (TSG) for VMT that establish a VMT threshold using the regional average, which includes the entire Countywide area, including the incorporated cities, as well as Infill Areas and other screening criteria outlined in the TSG. In addition to VMT analysis in accordance with CEQA, the TSG also provide guidance and identify methodology to analyze traffic operations and safety, referred to as a Local Mobility Analysis (LMA), as part of the County's discretionary planning process (County of San Diego 2022).

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## Section 3 Significance Criteria and Analysis Methodologies

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### 3.1 Guideline for Determining Significance

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

- **Guideline 1:** Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.
- **Guideline 2:** Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

The determination of significance is governed by CEQA Guidelines, Section 15064.4, which states that “the determination of the significance of greenhouse gas emissions calls for a careful judgment by the lead agency consistent with the provisions in section 15064. A lead agency shall make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project.” In turn, CEQA Guidelines, Section 15064.4(b), clarifies that a lead agency should consider “whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.” Therefore, consistent with CEQA Guidelines, Section 15064.4, the GHG analysis for the project appropriately relies on a threshold based on the exercise of careful judgment and is believed to be appropriate in the context of this particular project.

The County’s adopted GHG threshold is no longer applicable due to the rescinding of the CAP, and the San Diego County Air Pollution Control District has not adopted a numeric GHG threshold. Until a revised CAP is adopted, the County is evaluating appropriate GHG thresholds for determining the significance of individual projects.

The 2022 Scoping Plan outlines a path to achieve the statewide carbon neutrality goal. Because future CAP planning or San Diego County Air Pollution Control District threshold development would be prepared in accordance with this goal and applicable Scoping Plan guidance, in the absence of an adopted local plan, the 2022 Scoping Plan has been determined to be the appropriate tool for determining the significance of project GHG emissions. The project would result in a potentially significant impact related to GHG emissions if it conflicted with implementation of the 2022 Scoping Plan. The project would additionally be considered to result in a significant impact related to GHG planning if it resulted in a conflict with the County’s General Plan or SANDAG RTP/SCS, which include regional strategies for reducing GHG emissions. Because impacts under Guideline 1 and Guideline 2 are based on plan consistency, impacts are evaluated as one issue in Section 5, Recommended Project Design Features, Impacts, and Mitigation Measures.

## **3.2 Methodology and Assumptions**

The project's GHG emissions were calculated using the California Emissions Estimator Model (CalEEMod), Version 2020.4.0, for informational purposes. The emissions sources include construction (off-road vehicles), mobile (on-road vehicles), area (landscape maintenance equipment), energy, water and wastewater, and solid waste sources. GHG emissions are estimated in terms of total MTCO<sub>2e</sub>. CalEEMod uses the inventory from Emissions Factor (EMFAC) 2017 to estimate vehicle emissions and includes the option to take into account implementation of the federal Safer Affordable Fuel-Efficient Vehicles (SAFE) Rule. This option was applied to the proposed project but is conservative because California's ability to implement its own fuel economy standards has been restored since modeling was completed.

### **3.2.1 Construction Emissions**

Emissions from the construction phase of the project are assessed using CalEEMod. Construction of the proposed project would last for approximately 10 months. A starting year of 2021 is assumed, which is conservative because default construction emission assumptions decrease over time. The analysis assessed annual emissions from individual construction activities, including site preparation (1 month), grading (2.5 months), building construction (5.5 months), paving (2 weeks), and architectural coating (2 weeks). It is assumed that no overlap would occur between construction phases. The CalEEMod default construction equipment and vehicle trips are assumed for each construction phase. Export of 11,000 cubic yards is anticipated. A complete list of the assumptions used in the analysis and model output is provided in Appendix A, CalEEMod Output, of this report. Construction emissions were amortized over 30 years and added to operational emissions (SCAQMD 2008).

### **3.2.2 Operation Emissions**

Operational emissions were also estimated using CalEEMod. Only proposed new uses were included in the model to calculate the net change in emissions. Operation of the existing gas station would remain the same with project implementation. CalEEMod defaults for energy demand and area sources are assumed for all land uses. The CalEEMod energy emissions intensities for San Diego Gas & Electric were modified to reflect approximately 43 percent of energy from renewable sources provided to customers by San Diego Gas & Electric (SDG&E 2022).

Trip generation rates were obtained from LLG (2022). To represent the project's net increase in vehicle trips on area roadways, only primary trips were modeled. Vehicle miles from pass-by and diverted trips would generally occur without project implementation. As described in Section 5, the project would be a locally serving retail project (LLG 2022). The project proposes uses similar to those that already exist in the area, and it is likely that customers in the area are currently using similar services and would select the project site due to its convenience. This would generally reduce trip lengths from diverted trips compared to existing trips to similar uses because it is assumed that customers would generally select the project site if it provided similar services closer to the customer.

If the project were to provide new uses where they do not currently exist, it is assumed that customers from a wider area would drive to the site to access these services, increasing trip lengths. Primary trips were provided by LLG (2021) based on the SANDAG (Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region (SANDAG 2002). It is likely that these rates are conservative because, as noted, similar uses currently exist in the area. The proposed project would not create a new area destination that would generate new primary trips. For example, an existing car wash on the same site as a gas station is 0.3 mile south of the project site on the opposite side of Interstate 8. Therefore, the proposed project would not introduce a new service that is not currently available in the project vicinity that would generate new trips specific to the proposed uses.

Average trip length for the car wash and auto parts store have been modified from CalEEMod default assumptions for primary trips to reflect the proximity of similar uses. It is assumed that the project site would primarily be selected when it would provide a more convenient option compared to nearby similar uses. Average distance from the site to the closest similar uses is assumed for car wash and auto parts store trips. The closest existing drive-through automatic car washes to the project site are approximately 0.3 mile south, 2.5 miles northwest, and 4.3 miles west of the project site, or an average driving distance of 2.4 miles. The closest existing auto parts stores to the project site are 1.6 miles southwest, 1.8 miles southwest, and 2.6 miles north, or an average driving distance of 2 miles. Because the fast-food tenant is currently unknown, the nearest restaurant with similar menu options could not be determined, and the SANDAG recommended trip length was assumed.

CalEEMod does not include a default land use input for a car wash. The car wash was included in the convenience mart with gas station land use in CalEEMod. Water use was estimated based on information provided by industry publications and added to the default water use calculated for the entire convenience mart and gas station in CalEEMod. Automated car washes use was estimated at an average of approximately 30 gallons of water per car (International Carwash Association 2002). SANDAG estimates approximately 600 trips per day per acre for standalone automatic carwash facilities. Based on the acreage for the parcel, including the carwash, the carwash would serve approximately 195 customers per day, resulting in a water use of 1.21 million gallons per year. Based on an industry report, approximately 75 percent of water used in each car wash may be recycled water (Auto Laundry News 2013). This analysis conservatively assumes that only 60 percent of water in each wash would be recycled to account for water that is lost and not recycled. As such, total potable water use required for the car wash would be approximately 0.5 million gallons per year. This estimate is also conservative because it assumed that the car wash would be in operation every day of the year. Modeling conservatively does not account for use of transit and existing sidewalks to access the site. The proposed project would be within walking distance of existing residences.

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## Section 4 Greenhouse Gas Emissions Quantification

This section provides the estimated generation of GHG emissions from implementation of the proposed project for informational purposes.

### 4.1 Construction Greenhouse Gas Emissions

GHG emissions would be associated with the construction phases of the project through use of heavy equipment, truck trips, and vehicle trips by the construction crew commuting to the project site. Emissions of GHGs related to the construction of the project would be temporary. Estimated construction emissions by phase are provided in Table 2. As shown, total GHG emissions associated with construction would be approximately 271 MTCO<sub>2e</sub> for the duration of construction. Amortized construction activities would contribute 9 MTCO<sub>2e</sub> emissions per year for 30 years as recommended by SCAQMD.

**Table 2. Estimated Construction Emissions**

Construction Phase	CO <sub>2e</sub> Emissions (metric tons)
Site Preparation	23
Grading	94
Building Construction	145
Paving	8
Architectural Coating	1
<b>Total Construction Emissions</b>	<b>271</b>
<i>Amortized Construction Emissions</i>	<i>9</i>

**Source:** CAPCOA 2021. CalEEMod, Version 2020.4.0.

**Notes:** CO<sub>2e</sub> = carbon dioxide equivalent

### 4.2 Operational Greenhouse Gas Emissions

Table 3 summarizes the estimated annual emissions from operation of the project. These include GHG emissions associated with vehicles, buildings (natural gas, purchased electricity), water consumption (energy embodied in potable water), solid waste management (including transport and landfill gas generation), and area sources (landscape equipment). As shown in Table 3, the total annual CO<sub>2e</sub> emissions from the project would be approximately 821 MT.

**Table 3. Estimated Annual Operational Emissions**

Emissions Source	CO <sub>2</sub> e Emissions (metric tons)
Vehicle Emissions	661
Electricity	56
Natural Gas	26
Solid Waste	59
Water Use	11
Area Sources	<1
Amortized Construction Emissions	9
<b>Total Annual Emissions</b>	<b>821</b>

**Source:** CAPCOA 2021. CalEEMod, Version 20120.4.0.

**Notes:** CAPCOA = California Air Pollution Control Officers Association; CO<sub>2</sub>e = carbon dioxide equivalent



## Section 5 Recommended Project Design Features, Impacts, and Mitigation Measures

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This section evaluates potential impacts of the project related to the generation of GHG emissions and consistency with the 2022 Scoping Plan, County's General Plan, and SANDAG RTP/SCS. Without a qualified CAP or local adopted thresholds, the significance of the proposed project's GHG emissions is based on consistency with these plans for reducing GHG emissions. As shown in Table 3, implementation of the proposed project would result in a net increase in GHG emissions of 821 MTCO<sub>2e</sub>. The estimated GHG emissions are conservative and do account for proposed sustainability features. While the existing solar panels on site would be retained, the electricity would not be directed to the project; however, the solar panel would provide renewable energy to the existing land uses on the project site. Additionally, the project would comply with California Green Building Standards requirements and would also implement the following sustainability features:

- Exceed mandatory California Green Building Standards EV charging station requirements by installing two EV charging stations in addition to required EV charging station-capable parking spaces.
- Provide iCommute information regarding alternative transportation options in all employee breakrooms.
- Install only low-water use landscape in outdoor areas consistent with the County's Water Conservation in Landscaping Ordinance.
- Install new bicycle racks.
- Install electric outlets in key areas of the carwash and restaurant, including at kitchen appliance and water heater locations, designed to accommodate future electric appliances without major building retrofits.
- Install new bus stops and associated crosswalks within the vicinity of the project site, pending coordination with the San Diego Metropolitan Transit System. The proposed location for the bus stops is north of the project driveway and Ora Belle Lane on both sides of Los Coches Road.
- Relocated and consolidate existing Helix Water District/Padre Dam Municipal Water District emergency backup system equipment. Because the new equipment would reduce and replace older, existing equipment, it would improve energy efficiency thus reducing GHG emissions associated with electricity demand.

The primary plan for determining the significance of project emissions is the 2022 Scoping Plan, which outlines a path for achieving carbon neutrality in accordance with AB 1279. The 2022 Scoping Plan recommends that local governments prioritize transportation electrification, VMT reduction, and building decarbonization (CARB 2022b). These overall goals are discussed below,

followed by a detailed comparison of the project to key local action strategies identified in the 2022 Scoping Plan for achieving carbon neutrality statewide.

The proposed project would support transportation electrification by providing new EV charging stations per Table 5.106.5.3.1 of the California Green Building Standards. In addition to providing EV-capable parking spaces, the project would include two charging stations that would be operational at project opening which exceeds the mandatory requirements of the CalGreen Code for this land use type. As a high-turnover retail and restaurant project, it is anticipated that two charging stations would regularly be available to serve multiple cars throughout the day, which would enhance the availability of EV charging in the area surrounding the project site. Additionally, the project would support the use of alternative transportation through providing iCommute information, bicycle racks, and a new bus stop. The project's contribution to regional VMT was evaluated in an LMA prepared for the project that compares the project to the OPR's VMT guidelines (LLG 2022). At the time the LMA was prepared, the County had not adopted its TSG. However, the TSG adopted in September 2022 follow the guidance from the OPR for VMT analysis screening criteria. The LMA determined that the project meets the VMT screening criteria for local serving retail/service projects. These projects tend to shorten trips and reduce VMT by adding retail opportunities to the urban fabric, thereby improving retail destination proximity. Additionally, the project is below the local serving retail/service project screening size of 50,000 square feet. Following guidance provided by the OPR, locally serving retail/service projects less than 50,000 square feet may be presumed to have a less than significant impact absent substantial evidence to the contrary. As such, the project would have a less than significant VMT impact due to the project characteristics under both the OPR guidance and the County's TSG. The project would not conflict with 2022 Scoping Plan goals to electrify transportation or reduce VMT.

The 2022 Scoping Plan recognizes that a statewide transition to electrification will be a phased process over the 25-year Scoping Plan horizon. The electricity grid requires time to grow to ensure reliability, affordability, and resilience to meet increased demand, and technology and supply are not yet available to meet all energy needs currently served by natural gas. Additionally, existing natural gas infrastructure requires strategic decommissioning over time for safety considerations. The relevant target for the proposed project is to install electric-only appliances for new commercial projects by 2029. The project site is currently served by natural gas, and it is anticipated that new commercial kitchen appliances and water heaters may use natural gas. However, the project would be operational prior to the 2029 commercial appliance target. As new technologies become available and local natural gas infrastructure is decommissioned, future replacement appliances would likely be electric appliances. The project would include installation of outlets in the carwash and commercial kitchen to accommodate future electric appliances without major building retrofits. This would also allow project tenants to consider installation of electric appliances instead of natural gas at project opening or if the applicant elects to transition to electric appliances in the future. The 2022 Scoping Plan identifies the year 2029 as the target year for

electrification of commercial land uses; thus, designing the project to have readily available electrical infrastructure at key areas would facilitate this transition. Therefore, the proposed project would not conflict with 2022 Scoping Plan goals for building electrification.

As outlined in Chapter 4 of the 2022 Scoping Plan, Key Sectors, achieving carbon neutrality by 2045 would require a combination of accelerated rates of development and deployment of emerging technologies, new regulations or changes to existing ones, state incentive programs, and local action. The project operation would comply with state regulations as applicable and cannot anticipate how new technologies, regulations, or incentives will develop or be applied. Additionally, the 2022 Scoping Plan does not include any specific requirements for individual development projects. As mentioned above, the 2022 Scoping Plan identifies building decarbonization as a key sector for local governments to do their “fair share” in assisting the state to meet its progressive targets, and the project has been designed to include electrical outlets to facilitate the transition to a fully electric building at the discretion of the applicant in the future. Appendix D, Local Actions, of the 2022 Scoping Plan also outlines priority GHG reduction strategies to be implemented through local CAP processes. These strategies are not mandates for new development; however, these strategies represent the most applicable tool for evaluating project consistency with the 2022 Scoping Plan, and project consistency with these strategies is evaluated in Table 4. Recognizing that action beyond current requirements is needed to achieve the state’s emissions reduction goals, Table 4 also evaluates project efforts to exceed current requirements. As shown in Table 4, the project would be consistent with priority GHG reduction strategies and actions.

**Table 4. Project Consistency with Priority GHG Reduction Strategies and Actions**

Priority Area	Priority GHG Reduction Strategies	Project Consistency
Transportation Electrification	Convert local government fleets to ZEVs and provide EV charging at public sites	The project would not include any fleet vehicle operations. EV charging stations would be provided on the project site in accordance with Table 5.106.5.3.1 of the California Green Building Standards, including two stations that would be operational at project opening. The project would be consistent with this strategy.
	Create a jurisdiction-specific ZEV ecosystem to support deployment of ZEVs statewide (such as building standards that exceed state building codes, permit streamlining, infrastructure siting, consumer education, preferential parking policies, and ZEV readiness plans)	The project would include new EV infrastructure to support local EV use and would not include any components that interfere with development of a local ZEV ecosystem. The project would be consistent with this strategy.

**Table 4. Project Consistency with Priority GHG Reduction Strategies and Actions**

Priority Area	Priority GHG Reduction Strategies	Project Consistency
	Make 100 percent of light-duty vehicle sales ZEVs by 2035	The project would not include any vehicle sales or manufacturing component, thus the project would not inhibit the sale of ZEVs within the state. Notably, the project would include new EV charging equipment to support deployment of EV infrastructure which would indirectly support the goals of electrifying the mobile source sector through ZEV sales. The project would be consistent with this strategy.
VMT Reduction	Reduce or eliminate minimum parking standards	The project would reduce new parking spaces provided compared to a typical project with the same uses because it would implement a Collective Parking Agreement consistent with Section 6788 of the County Zoning Code. The Collective Parking Agreement allows for existing parking spaces to be counted toward project parking requirements and reduces new parking spaces. The project would be consistent with this strategy.
	Implement Complete Streets policies and investments, consistent with General Plan Circulation Element requirements	The project would not include any components that conflict with General Plan circulation requirements and would provide new bicycle and transit infrastructure to support Complete Streets. The project would be consistent with this strategy.
	Increase access to public transit by increasing density of development near transit, improving transit service by increasing service frequency, creating bus priority lanes, reducing or eliminating fares, micro-transit, etc.	The project would include installation of a new bus stop. The project would be consistent with this strategy.
	Increase public access to clean mobility options by planning for and investing in electric shuttles, bike share, car share, and walking	The project would include installation of new bicycle racks and a new bus stop. The project would be consistent with this strategy.
	Implement parking pricing or transportation demand management pricing strategies	As described above, the project would include a Collective Parking Agreement that minimizes new parking spaces provided for the project. Additionally, the project includes a new bus stop that would provide non-motorized access to the site and reduce vehicle trips. The project would be consistent with this strategy.

**Table 4. Project Consistency with Priority GHG Reduction Strategies and Actions**

Priority Area	Priority GHG Reduction Strategies	Project Consistency
	Amend zoning or development codes to enable mixed-use, walkable, transit-oriented, and compact infill development (such as increasing the allowable density of a neighborhood)	The project would not interfere with future zoning amendments to enable mixed-use and infill development. The project proposes additional related development on a site that is currently used for commercial operations. The project would be consistent with this strategy.
	Preserve natural and working lands by implementing land use policies that guide development toward infill areas and do not convert “greenfield” land to urban uses (e.g., green belts, strategic conservation easements)	The project proposes additional related development on a site that is currently used for commercial operations. It would not result in the conversion of greenfield land to urban uses. The project would be consistent with this strategy.
	Reduce VMT per capita by 25 percent below 2019 levels by 2030 and 30 percent below 2019 levels by 2045	The LMA for the project determined that the project would meet the VMT screening criteria for local serving retail/service projects (LLG 2022). Although the LMA did not establish a specific percentage of VMT reduction compared to 2019 levels achieved by the project, it did determine that the project would reduce VMT consistent with local goals by adding retail opportunities to the urban fabric and thereby improving retail destination proximity. The project would be consistent with this strategy.
Building Decarbonization	Adopt all-electric new construction reach codes for residential and commercial uses	The project would include installation of electrical outlets to accommodate future electric appliances without major retrofits or accommodate electrical appliances at project opening if selected by tenants. The project would be consistent with this strategy.
	Adopt policies and incentive programs to implement energy efficiency retrofits for existing buildings, such as weatherization and lighting upgrades, and replacing energy-intensive appliances and equipment with more efficient systems (such as Energy Star-rated equipment and equipment controllers)	The project site does not include any existing uses to be retrofitted. While the existing gas station would continue to operate, retrofit of this land use is outside of the purview of the project applicant. The proposed buildings would be designed to reduce the need for major retrofits in the future to accommodate all-electric or higher efficiency appliances. The project would be consistent with this strategy.

**Table 4. Project Consistency with Priority GHG Reduction Strategies and Actions**

Priority Area	Priority GHG Reduction Strategies	Project Consistency
	Adopt policies and incentive programs to electrify all appliances and equipment in existing buildings such as appliance rebates, existing building reach codes, or time of sale electrification ordinances	The project would not interfere with implementation of policies or incentive programs. The project would include installation of electrical outlets that may accommodate implementation of a future electrification program. The project would be consistent with this strategy.
	Facilitate deployment of renewable energy production and distribution and energy storage on privately owned land uses (e.g., permit streamlining, information sharing)	The project would preserve the existing solar panels on the project site. The project would be consistent with this strategy.
	Deploy renewable energy production and energy storage directly in new public projects and on existing public facilities (e.g., solar photovoltaic systems on rooftops of municipal buildings and on canopies in public parking lots, battery storage systems in municipal buildings)	The project is not a public project or located on public land but would preserve the existing solar panels on the project site. The project would be consistent with this strategy.
	Place all-electric appliances in new construction beginning in 2026 (residential) and 2029 (commercial) For existing residential buildings, make 80 percent of appliance sales electric by 2030 and 100 percent of appliance sales electric by 2035 (appliances replaced at end of life) For existing commercial buildings, make 80 percent of appliance sales electric by 2030 and 100 percent of appliance sales electric by 2045 (appliances replaced at end of life)	The project would be operational prior to 2029 but would include installation of outlets to support future appliance electrification, which would facilitate the transition to all electric appliances by 2029 if elected by a future tenant. The project would be consistent with this strategy.

**Source:** CARB 2022b.

**Notes:** EV = electric vehicle; GHG = greenhouse gas; LMA = Local Mobility Analysis; VMT = vehicle miles traveled; ZEV = zero-emission vehicle

Finally, although the County’s General Plan and SANDAG RTP/SCS were not prepared to address the statewide emissions reduction goals of AB 1279, they are applicable local plans adopted for the purpose of reducing GHG emissions. The County’s General Plan addresses AB 32 and climate change and provides an extensive list of policies designed to reduce GHG emissions and adapt to current climate change-related impacts. The project would be consistent with policies that require new development to implement green building practices and conserve resources (COS-14.3, COS-15.1, COS-15.4, COS-19.1) through required compliance with the California Green Building Standards Code and the County’s Water Conservation in Landscaping regulations. In addition, the project would be consistent with Policy COS-14.1 to reduce VMT through compact development

patterns and Policy COS-14.12 related to heat island affect by utilizing a previously developed gas station site. The project is consistent with policies related to alternative energy (COS 14.6) because it would preserve the existing solar panels on the project site. Therefore, the project would implement the relevant General Plan policies related to GHG emissions reduction. Additionally, the project is consistent with existing land use designations for the project site. Therefore, the project is consistent with the County's General Plan.

The SANDAG RTP/SCS is based on land use projections consistent with County planning documents. The goal of the SCS is to establish a forecasted development pattern for the region that, after considering transportation measures and policies, will achieve, if feasible, the 2020 and 2035 GHG reduction targets set by CARB under SB 375. The proposed project is consistent with the existing land use designations for the project site and would not induce growth. Therefore, the project would not result in emissions beyond those planned for based on existing land use designations. The project does not include any components that would conflict with future development of alternative transportation networks such as pedestrian and bicycle facilities. Additionally, the project proposes uses similar to those that already exist in the area, and it is likely that customers in the area are currently using similar services and would select the project site due to its convenience, which would generally reduce trip lengths from diverted trips compared to existing trips to similar uses. Therefore, the project would not conflict with the SANDAG RTP/SCS.

The proposed project would not conflict with any applicable plan for reducing GHG emissions. Therefore, this impact would be less than significant. No mitigation measures are required.

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## Section 7 **List of Preparers and Persons and Organizations Contacted**

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### **7.1 Preparers**

#### **Harris & Associates**

Ryan Binns, PMP, ENV SP, Project Manager

Sharon Toland, County-Approved Greenhouse Gas Consultant

Kelsey Hawkins, Technical Analyst

Lindsey Messner, Technical Editor

Eija Blocker, Technical Editor

Randy Deodat, GIS Analyst

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## **Appendix A. CalEEMod Output**

Los Coches 2021 - San Diego Air Basin, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Los Coches 2021  
San Diego Air Basin, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	73.45	1000sqft	2.00	73,450.00	0
Fast Food Restaurant with Drive Thru	2.66	1000sqft	0.20	2,660.00	0
Hardware/Paint Store	7.39	1000sqft	0.50	7,385.00	0
Strip Mall	4.11	1000sqft	0.30	4,110.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.6	<b>Precipitation Freq (Days)</b>	40
<b>Climate Zone</b>	13			<b>Operational Year</b>	2022
<b>Utility Company</b>	San Diego Gas & Electric				
<b>CO2 Intensity (lb/MWhr)</b>	458.86	<b>CH4 Intensity (lb/MWhr)</b>	0.018	<b>N2O Intensity (lb/MWhr)</b>	0.004

**1.3 User Entered Comments & Non-Default Data**

- Project Characteristics - Updated to 43% renewable
- Land Use - Updated to match lot acreage of 3
- Construction Phase - Revised to 5 month schedule
- Grading - Information from applicant
- Vehicle Trips - REvised with primary trip info from LLG
- Mobile Land Use Mitigation -
- Water And Wastewater - Revised to reflect car wash

Los Coches 2021 - San Diego Air Basin, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	220.00	110.00
tblConstructionPhase	NumDays	6.00	50.00
tblConstructionPhase	NumDays	3.00	20.00
tblConstructionPhase	PhaseEndDate	6/10/2022	3/7/2022
tblConstructionPhase	PhaseEndDate	5/13/2022	2/7/2022
tblConstructionPhase	PhaseEndDate	7/9/2021	9/6/2021
tblConstructionPhase	PhaseEndDate	5/27/2022	2/21/2022
tblConstructionPhase	PhaseEndDate	7/1/2021	6/28/2021
tblConstructionPhase	PhaseStartDate	5/28/2022	2/22/2022
tblConstructionPhase	PhaseStartDate	7/10/2021	9/7/2021
tblConstructionPhase	PhaseStartDate	7/2/2021	6/29/2021
tblConstructionPhase	PhaseStartDate	5/14/2022	2/8/2022
tblConstructionPhase	PhaseStartDate	6/29/2021	6/1/2021
tblGrading	AcresOfGrading	50.00	3.00
tblGrading	AcresOfGrading	30.00	3.00
tblGrading	MaterialImported	0.00	11,000.00
tblLandUse	LotAcreage	1.69	2.00
tblLandUse	LotAcreage	0.06	0.20
tblLandUse	LotAcreage	0.17	0.50
tblLandUse	LotAcreage	0.09	0.30
tblProjectCharacteristics	CH4IntensityFactor	0.033	0.018
tblProjectCharacteristics	CO2IntensityFactor	588.98	458.86
tblVehicleTrips	CC_TL	7.30	4.70
tblVehicleTrips	CC_TL	7.30	2.00
tblVehicleTrips	CC_TL	7.30	2.40
tblVehicleTrips	CNW_TL	7.30	4.70
tblVehicleTrips	CNW_TL	7.30	2.00
tblVehicleTrips	CNW_TL	7.30	2.40

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

tblVehicleTrips	CW_TL	9.50	4.70
tblVehicleTrips	CW_TL	9.50	2.00
tblVehicleTrips	CW_TL	9.50	2.40
tblVehicleTrips	DV_TP	21.00	0.00
tblVehicleTrips	DV_TP	29.00	0.00
tblVehicleTrips	DV_TP	40.00	0.00
tblVehicleTrips	PB_TP	50.00	0.00
tblVehicleTrips	PB_TP	26.00	0.00
tblVehicleTrips	PB_TP	15.00	0.00
tblVehicleTrips	PR_TP	29.00	100.00
tblVehicleTrips	PR_TP	45.00	100.00
tblVehicleTrips	PR_TP	45.00	100.00
tblVehicleTrips	ST_TR	616.12	331.58
tblVehicleTrips	ST_TR	9.14	26.95
tblVehicleTrips	ST_TR	42.04	46.10
tblVehicleTrips	SU_TR	472.58	331.58
tblVehicleTrips	SU_TR	9.14	26.95
tblVehicleTrips	SU_TR	20.43	46.10
tblVehicleTrips	WD_TR	470.95	331.58
tblVehicleTrips	WD_TR	9.14	26.95
tblVehicleTrips	WD_TR	44.32	46.10
tblWater	IndoorWaterUseRate	304,438.06	987,983.15

**2.0 Emissions Summary**

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**2.1 Overall Construction**

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1598	1.5417	1.0565	2.5200e-003	0.1850	0.0670	0.2519	0.0915	0.0630	0.1545	0.0000	223.3877	223.3877	0.0417	9.2500e-003	227.1841
2022	0.2241	0.2548	0.2716	5.1000e-004	5.8400e-003	0.0121	0.0180	1.5800e-003	0.0115	0.0131	0.0000	43.6374	43.6374	7.9800e-003	6.6000e-004	44.0341
<b>Maximum</b>	<b>0.2241</b>	<b>1.5417</b>	<b>1.0565</b>	<b>2.5200e-003</b>	<b>0.1850</b>	<b>0.0670</b>	<b>0.2519</b>	<b>0.0915</b>	<b>0.0630</b>	<b>0.1545</b>	<b>0.0000</b>	<b>223.3877</b>	<b>223.3877</b>	<b>0.0417</b>	<b>9.2500e-003</b>	<b>227.1841</b>

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1598	1.5417	1.0565	2.5200e-003	0.1850	0.0670	0.2519	0.0915	0.0630	0.1545	0.0000	223.3875	223.3875	0.0417	9.2500e-003	227.1839
2022	0.2241	0.2548	0.2716	5.1000e-004	5.8400e-003	0.0121	0.0180	1.5800e-003	0.0115	0.0131	0.0000	43.6373	43.6373	7.9800e-003	6.6000e-004	44.0340
<b>Maximum</b>	<b>0.2241</b>	<b>1.5417</b>	<b>1.0565</b>	<b>2.5200e-003</b>	<b>0.1850</b>	<b>0.0670</b>	<b>0.2519</b>	<b>0.0915</b>	<b>0.0630</b>	<b>0.1545</b>	<b>0.0000</b>	<b>223.3875</b>	<b>223.3875</b>	<b>0.0417</b>	<b>9.2500e-003</b>	<b>227.1839</b>

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	6-1-2021	8-31-2021	0.8290	0.8290
2	9-1-2021	11-30-2021	0.6435	0.6435
3	12-1-2021	2-28-2022	0.6035	0.6035
4	3-1-2022	5-31-2022	0.0989	0.0989
		Highest	0.8290	0.8290

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0791	1.0000e-005	8.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5700e-003	1.5700e-003	0.0000	0.0000	1.6700e-003
Energy	2.6300e-003	0.0239	0.0201	1.4000e-004		1.8200e-003	1.8200e-003		1.8200e-003	1.8200e-003	0.0000	81.5894	81.5894	2.6800e-003	9.6000e-004	81.9430
Mobile	0.5241	0.5132	3.9738	6.9800e-003	0.6807	6.5600e-003	0.6872	0.1817	6.1300e-003	0.1878	0.0000	648.5966	648.5966	0.0603	0.0360	660.8175
Waste						0.0000	0.0000		0.0000	0.0000	23.7093	0.0000	23.7093	1.4012	0.0000	58.7389
Water						0.0000	0.0000		0.0000	0.0000	0.7430	7.6726	8.4157	0.0766	1.8700e-003	10.8880
<b>Total</b>	<b>0.6058</b>	<b>0.5372</b>	<b>3.9948</b>	<b>7.1200e-003</b>	<b>0.6807</b>	<b>8.3800e-003</b>	<b>0.6890</b>	<b>0.1817</b>	<b>7.9500e-003</b>	<b>0.1896</b>	<b>24.4524</b>	<b>737.8602</b>	<b>762.3126</b>	<b>1.5407</b>	<b>0.0388</b>	<b>812.3890</b>

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**2.2 Overall Operational**

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0791	1.0000e-005	8.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5700e-003	1.5700e-003	0.0000	0.0000	1.6700e-003
Energy	2.6300e-003	0.0239	0.0201	1.4000e-004		1.8200e-003	1.8200e-003		1.8200e-003	1.8200e-003	0.0000	81.5894	81.5894	2.6800e-003	9.6000e-004	81.9430
Mobile	0.5241	0.5132	3.9738	6.9800e-003	0.6807	6.5600e-003	0.6872	0.1817	6.1300e-003	0.1878	0.0000	648.5966	648.5966	0.0603	0.0360	660.8175
Waste						0.0000	0.0000		0.0000	0.0000	23.7093	0.0000	23.7093	1.4012	0.0000	58.7389
Water						0.0000	0.0000		0.0000	0.0000	0.7430	7.6726	8.4157	0.0766	1.8700e-003	10.8880
<b>Total</b>	<b>0.6058</b>	<b>0.5372</b>	<b>3.9948</b>	<b>7.1200e-003</b>	<b>0.6807</b>	<b>8.3800e-003</b>	<b>0.6890</b>	<b>0.1817</b>	<b>7.9500e-003</b>	<b>0.1896</b>	<b>24.4524</b>	<b>737.8602</b>	<b>762.3126</b>	<b>1.5407</b>	<b>0.0388</b>	<b>812.3890</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	6/1/2021	6/28/2021	5	20	
2	Grading	Grading	6/29/2021	9/6/2021	5	50	
3	Building Construction	Building Construction	9/7/2021	2/7/2022	5	110	

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

4	Paving	Paving	2/8/2022	2/21/2022	5	10
5	Architectural Coating	Architectural Coating	2/22/2022	3/7/2022	5	10

**Acres of Grading (Site Preparation Phase): 3**

**Acres of Grading (Grading Phase): 3**

**Acres of Paving: 2**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 21,233; Non-Residential Outdoor: 7,078; Striped Parking Area: 4,407 (Architectural Coating – sqft)**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Graders	1	8.00	187	0.41
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Scrapers	1	8.00	367	0.48
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	1,375.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	36.00	14.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	7.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

**3.2 Site Preparation - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.5900e-003	0.0000	1.5900e-003	1.7000e-004	0.0000	1.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0155	0.1829	0.1075	2.5000e-004		7.0200e-003	7.0200e-003		6.4600e-003	6.4600e-003	0.0000	21.5264	21.5264	6.9600e-003	0.0000	21.7005
<b>Total</b>	<b>0.0155</b>	<b>0.1829</b>	<b>0.1075</b>	<b>2.5000e-004</b>	<b>1.5900e-003</b>	<b>7.0200e-003</b>	<b>8.6100e-003</b>	<b>1.7000e-004</b>	<b>6.4600e-003</b>	<b>6.6300e-003</b>	<b>0.0000</b>	<b>21.5264</b>	<b>21.5264</b>	<b>6.9600e-003</b>	<b>0.0000</b>	<b>21.7005</b>

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.2 Site Preparation - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.5000e-004	1.9000e-004	2.1300e-003	1.0000e-005	6.4000e-004	0.0000	6.5000e-004	1.7000e-004	0.0000	1.7000e-004	0.0000	0.5418	0.5418	2.0000e-005	2.0000e-005	0.5472
<b>Total</b>	<b>2.5000e-004</b>	<b>1.9000e-004</b>	<b>2.1300e-003</b>	<b>1.0000e-005</b>	<b>6.4000e-004</b>	<b>0.0000</b>	<b>6.5000e-004</b>	<b>1.7000e-004</b>	<b>0.0000</b>	<b>1.7000e-004</b>	<b>0.0000</b>	<b>0.5418</b>	<b>0.5418</b>	<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>0.5472</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.5900e-003	0.0000	1.5900e-003	1.7000e-004	0.0000	1.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0155	0.1829	0.1075	2.5000e-004		7.0200e-003	7.0200e-003		6.4600e-003	6.4600e-003	0.0000	21.5264	21.5264	6.9600e-003	0.0000	21.7005
<b>Total</b>	<b>0.0155</b>	<b>0.1829</b>	<b>0.1075</b>	<b>2.5000e-004</b>	<b>1.5900e-003</b>	<b>7.0200e-003</b>	<b>8.6100e-003</b>	<b>1.7000e-004</b>	<b>6.4600e-003</b>	<b>6.6300e-003</b>	<b>0.0000</b>	<b>21.5264</b>	<b>21.5264</b>	<b>6.9600e-003</b>	<b>0.0000</b>	<b>21.7005</b>

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.2 Site Preparation - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.5000e-004	1.9000e-004	2.1300e-003	1.0000e-005	6.4000e-004	0.0000	6.5000e-004	1.7000e-004	0.0000	1.7000e-004	0.0000	0.5418	0.5418	2.0000e-005	2.0000e-005	0.5472
<b>Total</b>	<b>2.5000e-004</b>	<b>1.9000e-004</b>	<b>2.1300e-003</b>	<b>1.0000e-005</b>	<b>6.4000e-004</b>	<b>0.0000</b>	<b>6.5000e-004</b>	<b>1.7000e-004</b>	<b>0.0000</b>	<b>1.7000e-004</b>	<b>0.0000</b>	<b>0.5418</b>	<b>0.5418</b>	<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>0.5472</b>

**3.3 Grading - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1529	0.0000	0.1529	0.0830	0.0000	0.0830	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0457	0.5053	0.2440	5.1000e-004		0.0229	0.0229		0.0211	0.0211	0.0000	45.2597	45.2597	0.0146	0.0000	45.6257
<b>Total</b>	<b>0.0457</b>	<b>0.5053</b>	<b>0.2440</b>	<b>5.1000e-004</b>	<b>0.1529</b>	<b>0.0229</b>	<b>0.1758</b>	<b>0.0830</b>	<b>0.0211</b>	<b>0.1041</b>	<b>0.0000</b>	<b>45.2597</b>	<b>45.2597</b>	<b>0.0146</b>	<b>0.0000</b>	<b>45.6257</b>

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**3.3 Grading - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.0000e-003	0.1368	0.0318	4.5000e-004	0.0118	1.9700e-003	0.0137	3.2300e-003	1.8800e-003	5.1200e-003	0.0000	44.3186	44.3186	2.0800e-003	7.0300e-003	46.4668
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.7000e-004	5.9000e-004	6.6400e-003	2.0000e-005	2.0000e-003	1.0000e-005	2.0200e-003	5.3000e-004	1.0000e-005	5.4000e-004	0.0000	1.6932	1.6932	6.0000e-005	5.0000e-005	1.7099
<b>Total</b>	<b>5.7700e-003</b>	<b>0.1374</b>	<b>0.0384</b>	<b>4.7000e-004</b>	<b>0.0138</b>	<b>1.9800e-003</b>	<b>0.0158</b>	<b>3.7600e-003</b>	<b>1.8900e-003</b>	<b>5.6600e-003</b>	<b>0.0000</b>	<b>46.0118</b>	<b>46.0118</b>	<b>2.1400e-003</b>	<b>7.0800e-003</b>	<b>48.1767</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1529	0.0000	0.1529	0.0830	0.0000	0.0830	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0457	0.5053	0.2440	5.1000e-004		0.0229	0.0229		0.0211	0.0211	0.0000	45.2597	45.2597	0.0146	0.0000	45.6256
<b>Total</b>	<b>0.0457</b>	<b>0.5053</b>	<b>0.2440</b>	<b>5.1000e-004</b>	<b>0.1529</b>	<b>0.0229</b>	<b>0.1758</b>	<b>0.0830</b>	<b>0.0211</b>	<b>0.1041</b>	<b>0.0000</b>	<b>45.2597</b>	<b>45.2597</b>	<b>0.0146</b>	<b>0.0000</b>	<b>45.6256</b>



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**3.3 Grading - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.0000e-003	0.1368	0.0318	4.5000e-004	0.0118	1.9700e-003	0.0137	3.2300e-003	1.8800e-003	5.1200e-003	0.0000	44.3186	44.3186	2.0800e-003	7.0300e-003	46.4668
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.7000e-004	5.9000e-004	6.6400e-003	2.0000e-005	2.0000e-003	1.0000e-005	2.0200e-003	5.3000e-004	1.0000e-005	5.4000e-004	0.0000	1.6932	1.6932	6.0000e-005	5.0000e-005	1.7099
<b>Total</b>	<b>5.7700e-003</b>	<b>0.1374</b>	<b>0.0384</b>	<b>4.7000e-004</b>	<b>0.0138</b>	<b>1.9800e-003</b>	<b>0.0158</b>	<b>3.7600e-003</b>	<b>1.8900e-003</b>	<b>5.6600e-003</b>	<b>0.0000</b>	<b>46.0118</b>	<b>46.0118</b>	<b>2.1400e-003</b>	<b>7.0800e-003</b>	<b>48.1767</b>

**3.4 Building Construction - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0859	0.6732	0.6116	1.0500e-003		0.0343	0.0343		0.0329	0.0329	0.0000	87.2125	87.2125	0.0172	0.0000	87.6414
<b>Total</b>	<b>0.0859</b>	<b>0.6732</b>	<b>0.6116</b>	<b>1.0500e-003</b>		<b>0.0343</b>	<b>0.0343</b>		<b>0.0329</b>	<b>0.0329</b>	<b>0.0000</b>	<b>87.2125</b>	<b>87.2125</b>	<b>0.0172</b>	<b>0.0000</b>	<b>87.6414</b>

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**3.4 Building Construction - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.0900e-003	0.0393	0.0126	1.3000e-004	3.9000e-003	6.6000e-004	4.5700e-003	1.1300e-003	6.3000e-004	1.7600e-003	0.0000	12.5952	12.5952	4.0000e-004	1.8300e-003	13.1512
Worker	4.6600e-003	3.5600e-003	0.0402	1.1000e-004	0.0121	7.0000e-005	0.0122	3.2200e-003	7.0000e-005	3.2900e-003	0.0000	10.2403	10.2403	3.4000e-004	3.1000e-004	10.3415
<b>Total</b>	<b>6.7500e-003</b>	<b>0.0428</b>	<b>0.0528</b>	<b>2.4000e-004</b>	<b>0.0160</b>	<b>7.3000e-004</b>	<b>0.0168</b>	<b>4.3500e-003</b>	<b>7.0000e-004</b>	<b>5.0500e-003</b>	<b>0.0000</b>	<b>22.8355</b>	<b>22.8355</b>	<b>7.4000e-004</b>	<b>2.1400e-003</b>	<b>23.4926</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0859	0.6732	0.6116	1.0500e-003		0.0343	0.0343		0.0329	0.0329	0.0000	87.2124	87.2124	0.0172	0.0000	87.6413
<b>Total</b>	<b>0.0859</b>	<b>0.6732</b>	<b>0.6116</b>	<b>1.0500e-003</b>		<b>0.0343</b>	<b>0.0343</b>		<b>0.0329</b>	<b>0.0329</b>	<b>0.0000</b>	<b>87.2124</b>	<b>87.2124</b>	<b>0.0172</b>	<b>0.0000</b>	<b>87.6413</b>

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**3.4 Building Construction - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.0900e-003	0.0393	0.0126	1.3000e-004	3.9000e-003	6.6000e-004	4.5700e-003	1.1300e-003	6.3000e-004	1.7600e-003	0.0000	12.5952	12.5952	4.0000e-004	1.8300e-003	13.1512
Worker	4.6600e-003	3.5600e-003	0.0402	1.1000e-004	0.0121	7.0000e-005	0.0122	3.2200e-003	7.0000e-005	3.2900e-003	0.0000	10.2403	10.2403	3.4000e-004	3.1000e-004	10.3415
<b>Total</b>	<b>6.7500e-003</b>	<b>0.0428</b>	<b>0.0528</b>	<b>2.4000e-004</b>	<b>0.0160</b>	<b>7.3000e-004</b>	<b>0.0168</b>	<b>4.3500e-003</b>	<b>7.0000e-004</b>	<b>5.0500e-003</b>	<b>0.0000</b>	<b>22.8355</b>	<b>22.8355</b>	<b>7.4000e-004</b>	<b>2.1400e-003</b>	<b>23.4926</b>

**3.4 Building Construction - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0241	0.1899	0.1866	3.3000e-004		9.1300e-003	9.1300e-003		8.7500e-003	8.7500e-003	0.0000	26.9984	26.9984	5.2100e-003	0.0000	27.1286
<b>Total</b>	<b>0.0241</b>	<b>0.1899</b>	<b>0.1866</b>	<b>3.3000e-004</b>		<b>9.1300e-003</b>	<b>9.1300e-003</b>		<b>8.7500e-003</b>	<b>8.7500e-003</b>	<b>0.0000</b>	<b>26.9984</b>	<b>26.9984</b>	<b>5.2100e-003</b>	<b>0.0000</b>	<b>27.1286</b>

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.4 Building Construction - 2022**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.0000e-004	0.0100	3.2800e-003	4.0000e-005	1.2100e-003	1.1000e-004	1.3100e-003	3.5000e-004	1.0000e-004	4.5000e-004	0.0000	3.7954	3.7954	1.2000e-004	5.5000e-004	3.9626
Worker	1.3500e-003	9.8000e-004	0.0115	3.0000e-005	3.7500e-003	2.0000e-005	3.7700e-003	1.0000e-003	2.0000e-005	1.0200e-003	0.0000	3.0865	3.0865	1.0000e-004	9.0000e-005	3.1154
<b>Total</b>	<b>1.7500e-003</b>	<b>0.0110</b>	<b>0.0148</b>	<b>7.0000e-005</b>	<b>4.9600e-003</b>	<b>1.3000e-004</b>	<b>5.0800e-003</b>	<b>1.3500e-003</b>	<b>1.2000e-004</b>	<b>1.4700e-003</b>	<b>0.0000</b>	<b>6.8819</b>	<b>6.8819</b>	<b>2.2000e-004</b>	<b>6.4000e-004</b>	<b>7.0780</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0241	0.1899	0.1866	3.3000e-004		9.1300e-003	9.1300e-003		8.7500e-003	8.7500e-003	0.0000	26.9984	26.9984	5.2100e-003	0.0000	27.1286
<b>Total</b>	<b>0.0241</b>	<b>0.1899</b>	<b>0.1866</b>	<b>3.3000e-004</b>		<b>9.1300e-003</b>	<b>9.1300e-003</b>		<b>8.7500e-003</b>	<b>8.7500e-003</b>	<b>0.0000</b>	<b>26.9984</b>	<b>26.9984</b>	<b>5.2100e-003</b>	<b>0.0000</b>	<b>27.1286</b>

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.4 Building Construction - 2022**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.0000e-004	0.0100	3.2800e-003	4.0000e-005	1.2100e-003	1.1000e-004	1.3100e-003	3.5000e-004	1.0000e-004	4.5000e-004	0.0000	3.7954	3.7954	1.2000e-004	5.5000e-004	3.9626
Worker	1.3500e-003	9.8000e-004	0.0115	3.0000e-005	3.7500e-003	2.0000e-005	3.7700e-003	1.0000e-003	2.0000e-005	1.0200e-003	0.0000	3.0865	3.0865	1.0000e-004	9.0000e-005	3.1154
<b>Total</b>	<b>1.7500e-003</b>	<b>0.0110</b>	<b>0.0148</b>	<b>7.0000e-005</b>	<b>4.9600e-003</b>	<b>1.3000e-004</b>	<b>5.0800e-003</b>	<b>1.3500e-003</b>	<b>1.2000e-004</b>	<b>1.4700e-003</b>	<b>0.0000</b>	<b>6.8819</b>	<b>6.8819</b>	<b>2.2000e-004</b>	<b>6.4000e-004</b>	<b>7.0780</b>

**3.5 Paving - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.7100e-003	0.0467	0.0585	9.0000e-005		2.4400e-003	2.4400e-003		2.2500e-003	2.2500e-003	0.0000	7.7550	7.7550	2.4600e-003	0.0000	7.8165
Paving	2.6200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>7.3300e-003</b>	<b>0.0467</b>	<b>0.0585</b>	<b>9.0000e-005</b>		<b>2.4400e-003</b>	<b>2.4400e-003</b>		<b>2.2500e-003</b>	<b>2.2500e-003</b>	<b>0.0000</b>	<b>7.7550</b>	<b>7.7550</b>	<b>2.4600e-003</b>	<b>0.0000</b>	<b>7.8165</b>

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**3.5 Paving - 2022**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e-004	1.6000e-004	1.8400e-003	1.0000e-005	6.0000e-004	0.0000	6.0000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4946	0.4946	2.0000e-005	1.0000e-005	0.4993
<b>Total</b>	<b>2.2000e-004</b>	<b>1.6000e-004</b>	<b>1.8400e-003</b>	<b>1.0000e-005</b>	<b>6.0000e-004</b>	<b>0.0000</b>	<b>6.0000e-004</b>	<b>1.6000e-004</b>	<b>0.0000</b>	<b>1.6000e-004</b>	<b>0.0000</b>	<b>0.4946</b>	<b>0.4946</b>	<b>2.0000e-005</b>	<b>1.0000e-005</b>	<b>0.4993</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.7100e-003	0.0467	0.0585	9.0000e-005		2.4400e-003	2.4400e-003		2.2500e-003	2.2500e-003	0.0000	7.7550	7.7550	2.4600e-003	0.0000	7.8165
Paving	2.6200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>7.3300e-003</b>	<b>0.0467</b>	<b>0.0585</b>	<b>9.0000e-005</b>		<b>2.4400e-003</b>	<b>2.4400e-003</b>		<b>2.2500e-003</b>	<b>2.2500e-003</b>	<b>0.0000</b>	<b>7.7550</b>	<b>7.7550</b>	<b>2.4600e-003</b>	<b>0.0000</b>	<b>7.8165</b>

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**3.5 Paving - 2022**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e-004	1.6000e-004	1.8400e-003	1.0000e-005	6.0000e-004	0.0000	6.0000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4946	0.4946	2.0000e-005	1.0000e-005	0.4993
<b>Total</b>	<b>2.2000e-004</b>	<b>1.6000e-004</b>	<b>1.8400e-003</b>	<b>1.0000e-005</b>	<b>6.0000e-004</b>	<b>0.0000</b>	<b>6.0000e-004</b>	<b>1.6000e-004</b>	<b>0.0000</b>	<b>1.6000e-004</b>	<b>0.0000</b>	<b>0.4946</b>	<b>0.4946</b>	<b>2.0000e-005</b>	<b>1.0000e-005</b>	<b>0.4993</b>

**3.6 Architectural Coating - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1896					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0200e-003	7.0400e-003	9.0700e-003	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004	0.0000	1.2766	1.2766	8.0000e-005	0.0000	1.2787
<b>Total</b>	<b>0.1906</b>	<b>7.0400e-003</b>	<b>9.0700e-003</b>	<b>1.0000e-005</b>		<b>4.1000e-004</b>	<b>4.1000e-004</b>		<b>4.1000e-004</b>	<b>4.1000e-004</b>	<b>0.0000</b>	<b>1.2766</b>	<b>1.2766</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>1.2787</b>

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**3.6 Architectural Coating - 2022**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-004	7.0000e-005	8.6000e-004	0.0000	2.8000e-004	0.0000	2.8000e-004	7.0000e-005	0.0000	8.0000e-005	0.0000	0.2308	0.2308	1.0000e-005	1.0000e-005	0.2330
<b>Total</b>	<b>1.0000e-004</b>	<b>7.0000e-005</b>	<b>8.6000e-004</b>	<b>0.0000</b>	<b>2.8000e-004</b>	<b>0.0000</b>	<b>2.8000e-004</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>0.2308</b>	<b>0.2308</b>	<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.2330</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1896					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0200e-003	7.0400e-003	9.0700e-003	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004	0.0000	1.2766	1.2766	8.0000e-005	0.0000	1.2787
<b>Total</b>	<b>0.1906</b>	<b>7.0400e-003</b>	<b>9.0700e-003</b>	<b>1.0000e-005</b>		<b>4.1000e-004</b>	<b>4.1000e-004</b>		<b>4.1000e-004</b>	<b>4.1000e-004</b>	<b>0.0000</b>	<b>1.2766</b>	<b>1.2766</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>1.2787</b>



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**3.6 Architectural Coating - 2022**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-004	7.0000e-005	8.6000e-004	0.0000	2.8000e-004	0.0000	2.8000e-004	7.0000e-005	0.0000	8.0000e-005	0.0000	0.2308	0.2308	1.0000e-005	1.0000e-005	0.2330
<b>Total</b>	<b>1.0000e-004</b>	<b>7.0000e-005</b>	<b>8.6000e-004</b>	<b>0.0000</b>	<b>2.8000e-004</b>	<b>0.0000</b>	<b>2.8000e-004</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>0.2308</b>	<b>0.2308</b>	<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.2330</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.5241	0.5132	3.9738	6.9800e-003	0.6807	6.5600e-003	0.6872	0.1817	6.1300e-003	0.1878	0.0000	648.5966	648.5966	0.0603	0.0360	660.8175
Unmitigated	0.5241	0.5132	3.9738	6.9800e-003	0.6807	6.5600e-003	0.6872	0.1817	6.1300e-003	0.1878	0.0000	648.5966	648.5966	0.0603	0.0360	660.8175

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Fast Food Restaurant with Drive Thru	882.00	882.00	882.00	1,508,930	1,508,930
Hardware/Paint Store	199.03	199.03	199.03	144,891	144,891
Parking Lot	0.00	0.00	0.00		
Strip Mall	189.47	189.47	189.47	165,522	165,522
Total	1,270.50	1,270.50	1,270.50	1,819,343	1,819,343

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Fast Food Restaurant with Drive	4.70	4.70	4.70	2.20	78.80	19.00	100	0	0
Hardware/Paint Store	2.00	2.00	2.00	13.60	67.40	19.00	100	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Strip Mall	2.40	2.40	2.40	16.60	64.40	19.00	100	0	0

**4.4 Fleet Mix**

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Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Fast Food Restaurant with Drive Thru	0.548470	0.062992	0.183336	0.122442	0.024733	0.006148	0.008613	0.006191	0.000732	0.000545	0.029420	0.000989	0.005388
Hardware/Paint Store	0.548470	0.062992	0.183336	0.122442	0.024733	0.006148	0.008613	0.006191	0.000732	0.000545	0.029420	0.000989	0.005388
Parking Lot	0.548470	0.062992	0.183336	0.122442	0.024733	0.006148	0.008613	0.006191	0.000732	0.000545	0.029420	0.000989	0.005388
Strip Mall	0.548470	0.062992	0.183336	0.122442	0.024733	0.006148	0.008613	0.006191	0.000732	0.000545	0.029420	0.000989	0.005388

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	55.5259	55.5259	2.1800e-003	4.8000e-004	55.7246
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	55.5259	55.5259	2.1800e-003	4.8000e-004	55.7246
NaturalGas Mitigated	2.6300e-003	0.0239	0.0201	1.4000e-004		1.8200e-003	1.8200e-003		1.8200e-003	1.8200e-003	0.0000	26.0635	26.0635	5.0000e-004	4.8000e-004	26.2184
NaturalGas Unmitigated	2.6300e-003	0.0239	0.0201	1.4000e-004		1.8200e-003	1.8200e-003		1.8200e-003	1.8200e-003	0.0000	26.0635	26.0635	5.0000e-004	4.8000e-004	26.2184

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Fast Food Restaurant with Drive Thru	462893	2.5000e-003	0.0227	0.0191	1.4000e-004		1.7200e-003	1.7200e-003		1.7200e-003	1.7200e-003	0.0000	24.7017	24.7017	4.7000e-004	4.5000e-004	24.8485
Hardware/Paint Store	16394.7	9.0000e-005	8.0000e-004	6.8000e-004	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.8749	0.8749	2.0000e-005	2.0000e-005	0.8801
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	9124.2	5.0000e-005	4.5000e-004	3.8000e-004	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.4869	0.4869	1.0000e-005	1.0000e-005	0.4898
<b>Total</b>		<b>2.6400e-003</b>	<b>0.0239</b>	<b>0.0201</b>	<b>1.4000e-004</b>		<b>1.8100e-003</b>	<b>1.8100e-003</b>		<b>1.8100e-003</b>	<b>1.8100e-003</b>	<b>0.0000</b>	<b>26.0635</b>	<b>26.0635</b>	<b>5.0000e-004</b>	<b>4.8000e-004</b>	<b>26.2184</b>

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**5.2 Energy by Land Use - NaturalGas**

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Fast Food Restaurant with Drive Thru	462893	2.5000e-003	0.0227	0.0191	1.4000e-004		1.7200e-003	1.7200e-003		1.7200e-003	1.7200e-003	0.0000	24.7017	24.7017	4.7000e-004	4.5000e-004	24.8485
Hardware/Paint Store	16394.7	9.0000e-005	8.0000e-004	6.8000e-004	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.8749	0.8749	2.0000e-005	2.0000e-005	0.8801
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	9124.2	5.0000e-005	4.5000e-004	3.8000e-004	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.4869	0.4869	1.0000e-005	1.0000e-005	0.4898
<b>Total</b>		<b>2.6400e-003</b>	<b>0.0239</b>	<b>0.0201</b>	<b>1.4000e-004</b>		<b>1.8100e-003</b>	<b>1.8100e-003</b>		<b>1.8100e-003</b>	<b>1.8100e-003</b>	<b>0.0000</b>	<b>26.0635</b>	<b>26.0635</b>	<b>5.0000e-004</b>	<b>4.8000e-004</b>	<b>26.2184</b>

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**5.3 Energy by Land Use - Electricity**

**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Fast Food Restaurant with Drive Thru	100601	20.9387	8.2000e-004	1.8000e-004	21.0136
Hardware/Paint Store	90244.7	18.7831	7.4000e-004	1.6000e-004	18.8503
Parking Lot	25707.5	5.3506	2.1000e-004	5.0000e-005	5.3698
Strip Mall	50224.2	10.4534	4.1000e-004	9.0000e-005	10.4908
<b>Total</b>		<b>55.5259</b>	<b>2.1800e-003</b>	<b>4.8000e-004</b>	<b>55.7246</b>

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**5.3 Energy by Land Use - Electricity**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Fast Food Restaurant with Drive Thru	100601	20.9387	8.2000e-004	1.8000e-004	21.0136
Hardware/Paint Store	90244.7	18.7831	7.4000e-004	1.6000e-004	18.8503
Parking Lot	25707.5	5.3506	2.1000e-004	5.0000e-005	5.3698
Strip Mall	50224.2	10.4534	4.1000e-004	9.0000e-005	10.4908
<b>Total</b>		<b>55.5259</b>	<b>2.1800e-003</b>	<b>4.8000e-004</b>	<b>55.7246</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0791	1.0000e-005	8.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5700e-003	1.5700e-003	0.0000	0.0000	1.6700e-003
Unmitigated	0.0791	1.0000e-005	8.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5700e-003	1.5700e-003	0.0000	0.0000	1.6700e-003

**6.2 Area by SubCategory**

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0190					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0600					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	7.0000e-005	1.0000e-005	8.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5700e-003	1.5700e-003	0.0000	0.0000	1.6700e-003
<b>Total</b>	<b>0.0791</b>	<b>1.0000e-005</b>	<b>8.1000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.5700e-003</b>	<b>1.5700e-003</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.6700e-003</b>



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**6.2 Area by SubCategory**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0190					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0600					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	7.0000e-005	1.0000e-005	8.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.5700e-003	1.5700e-003	0.0000	0.0000	1.6700e-003
<b>Total</b>	<b>0.0791</b>	<b>1.0000e-005</b>	<b>8.1000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.5700e-003</b>	<b>1.5700e-003</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.6700e-003</b>

**7.0 Water Detail**

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**7.1 Mitigation Measures Water**

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	8.4157	0.0766	1.8700e-003	10.8880
Unmitigated	8.4157	0.0766	1.8700e-003	10.8880

**7.2 Water by Land Use**

**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Fast Food Restaurant with Drive Thru	0.8074 / 0.0515362	2.5635	0.0264	6.4000e-004	3.4146
Hardware/Paint Store	0.546655 / 0.335047	2.4297	0.0179	4.4000e-004	3.0084
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.987983 / 0.186591	3.4225	0.0323	7.9000e-004	4.4650
<b>Total</b>		<b>8.4157</b>	<b>0.0766</b>	<b>1.8700e-003</b>	<b>10.8880</b>

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**7.2 Water by Land Use**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Fast Food Restaurant with Drive Thru	0.8074 / 0.0515362	2.5635	0.0264	6.4000e-004	3.4146
Hardware/Paint Store	0.546655 / 0.335047	2.4297	0.0179	4.4000e-004	3.0084
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.987983 / 0.186591	3.4225	0.0323	7.9000e-004	4.4650
<b>Total</b>		<b>8.4157</b>	<b>0.0766</b>	<b>1.8700e-003</b>	<b>10.8880</b>

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

Los Coches 2021 - San Diego Air Basin, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	23.7093	1.4012	0.0000	58.7389
Unmitigated	23.7093	1.4012	0.0000	58.7389

**8.2 Waste by Land Use**

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Fast Food Restaurant with Drive Thru	30.64	6.2196	0.3676	0.0000	15.4089
Hardware/Paint Store	81.84	16.6128	0.9818	0.0000	41.1575
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	4.32	0.8769	0.0518	0.0000	2.1725
<b>Total</b>		<b>23.7093</b>	<b>1.4012</b>	<b>0.0000</b>	<b>58.7389</b>

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**8.2 Waste by Land Use**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Fast Food Restaurant with Drive Thru	30.64	6.2196	0.3676	0.0000	15.4089
Hardware/Paint Store	81.84	16.6128	0.9818	0.0000	41.1575
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	4.32	0.8769	0.0518	0.0000	2.1725
<b>Total</b>		<b>23.7093</b>	<b>1.4012</b>	<b>0.0000</b>	<b>58.7389</b>

**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment**

**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Equipment Type	Number
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**11.0 Vegetation**

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