GLOBAL CLIMATE CHANGE

Aventine Residential Development
County of San Diego, CA

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EXECUTIVE SUMMARY

This analysis quantifies and evaluates the significance of Greenhouse Gas (GHG) emissions from the Aventine at Sweetwater Condominium project for purposes of the California Environmental Quality Act (CEQA). In order to evaluate the significance of the project's GHG emissions, this analysis uses the significance thresholds in Appendix G of the CEQA Guidelines, independent of the County's Climate Action Plan (CAP).[1] Specifically, this GHG emissions analysis evaluates the potential for the project to generate GHG emissions that may have a significant impact on the environment, and the potential for the project to conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. As such the analysis does not rely on the CAP to streamline the Project's environmental analysis under CEQA Guidelines pursuant to Section 15183.5. Therefore, regardless of the recent court ruling against the County adopted CAP , this analysis would continue to provide a separate, stand-alone basis for the finding that the project's GHG emissions would not significantly impact the environment and does not rely on the County's CAP or associated mitigation measure M-GHG-1.

The proposed 92-unit project is located on a 10.48-acre site located on the southwest corner of the Sweetwater Springs Boulevard and Austin Drive within the County of San Diego. All construction phases of the proposed Project are anticipated to start in 2020 and full buildout is expected in 2022.

The proposed project would generate approximately 914.172 Metric Tons (MT) of carbon dioxide equivalent (CO_2e) annually from construction and operational emissions, with the incorporation of design features such as solar and high efficiency lighting. The proposed project will emit GHGs directly through operations and indirectly from offsite sources such as water conveyance and utilities. It should be noted that the project requires demolition of an approximate 118,700 Square Feet (SF) existing commercial facility which is currently underutilized, with only 44,740 SF currently leased at the date of this report. The elimination of the commercial uses currently being leased at the commercial facility would remove 1,480.84 MT CO_2e per year from the existing baseline environment. Based on this, the project would remove 566.67 MT CO_2e annually (1,480.84 MT CO_2e – 914.172 MT CO_2e).

[1] It should be noted that the County adopted a new CAP on February 14, 2018, and Sierra Club promptly filed a new petition (Case No. 2018-14081) challenging the 2018 CAP and the concomitant Mitigation Measure M-GHG-1 ("M-GHG-1") incorporated into the 2018 CAP. The San Diego Superior Court (Judge Timothy B. Taylor, presiding) ruled against the County, finding that General Plan Goal COS-20 and Policy COS-20.1 (added as a part of the adoption of the CAP) were "fundamental, mandatory, and clear" policies requiring only in-County GHG emissions reductions and foreclosing the use of offsets if such offsets originated outside San Diego County. (See Order, dated December 24, 2018, page 12.) See below regarding discussion of the County's CAP.

1.0 INTRODUCTION

1.1 Purpose of this Study

The purpose of this Greenhouse Gas Assessment (GHG) is to show conformance to the California Global Warming Solutions Act of 2006 – Assembly Bill 32 (AB32) and Senate Bill 97 (SB97). AB32 requires that by 2020 the state's GHG emissions be reduced to 1990 levels and SB97 a "companion" bill directed amendments to the California Environmental Quality Act (CEQA) statute to specifically establish that GHG emissions and their impacts are appropriate subjects for CEQA analysis. Should impacts be determined, the intent of this study would be to recommend suitable mitigation measures to bring the project to a level considered less than significant.

1.2 Project Location

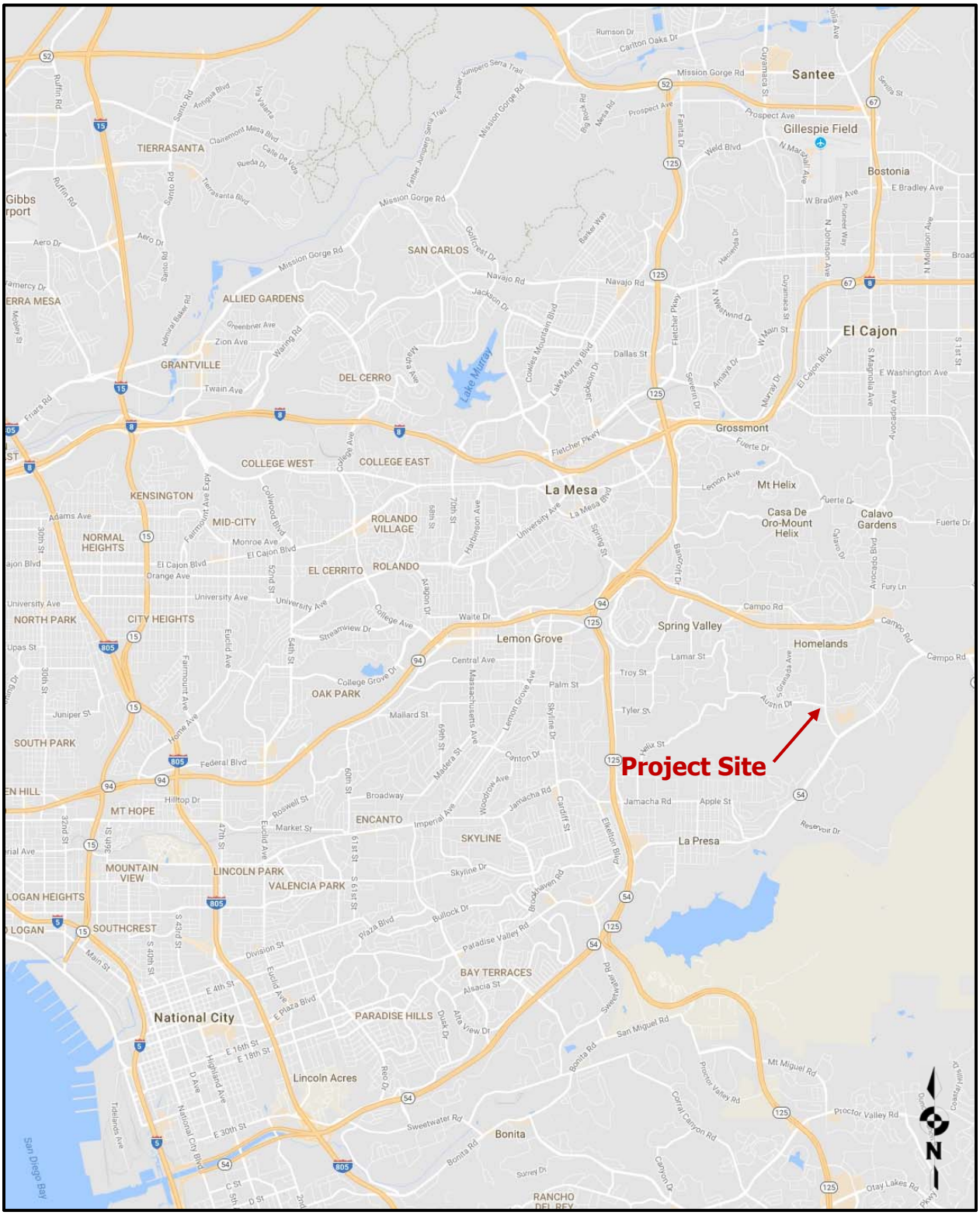
The proposed 92-unit Aventine at Sweetwater Condominium project is located on a 10.48-acre site that covers four parcels (Assessor Parcel Numbers: 505-580-07-00, 505-580-08-00, 505-580-09-00, and 505-580-10-00) within the Spring Valley Community Planning Area within the County of San Diego. The project is located on the southwest corner of the Sweetwater Springs Boulevard and Austin Drive. A general project vicinity map is shown in Figure 1-A.

1.3 Project Description

The proposed project would demolish an existing 118,700 Square Foot (SF) commercial development of which roughly 44,740 SF is occupied and operational. The Project will also include an active recreation area, water retention basin, with two access points. Furthermore, the proposed project would install solar on every residential unit along with installing 100% high efficiency Light Emitting Diode (LED) lighting. Additional project design features are provided in Section 1.4 below. The project site plan is shown in Figure 1-B.

Construction of the project would be expected to begin with demolition of the existing commercial development followed by grading, utility trenching and building construction. Demolition would be expected mid to late 2020 with initial units expected late 2021. Units will be constructed based on market demands and full buildout and operations would be expected in 2022.

Figure 1-A: Project Vicinity Map



Source: (Google, 2018)

Figure 1-B: Proposed Project Site Layout

Source: (Hunsaker and Associates, 2018)

1.4 Project Design Features

Project design features have been incorporated into the Project to reduce emissions associated with construction, energy use, area sources, and water use. It should be noted that not all project design features are analyzed with respect to GHG emission reductions. This report will define specifically which design features were included within GHG estimation software and it should be expected that whenever a design feature is included within air quality modeling that those particular design features would be required for the project to implement as a part of the Project's conditions of approval. A list of design features included within the air quality analysis is shown below:

- Project-related construction activities would use Tier 4 United States (U.S.) Environmental Protection Agency (EPA)/ California Air Resources Board (CARB)-certified construction equipment with diesel particulate filters. The project developer has confirmed commitment to this feature.
- The project will utilize architectural coatings compliant with SDAPCD Rule 67 (SDAPCD, 2015).
- Install high-efficiency LED street and area lighting to achieve reduction in overall lighting energy.
- Provide areas for storage and collection of recyclables and provide literature promoting recycling to achieve additional waste diversion, consistent with AB 341.
- The project applicant will be required to comply with County's Water Conservation in Landscaping Ordinance and demonstrates a 40% reduction in outdoor use, and will submit a Landscape Document Package to show such compliance.
- The Project will install, a 1.8 kWh solar/photovoltaic system on each dwelling unit, which is equivalent to approximately six 300-watt panels for each dwelling unit within the Project.

The project will also include design features that could result in additional operational GHG emissions reductions that are not quantified within this report. Since modeling results would not be dependent on installation of these design features, they were not incorporated in this analysis. These design features are discussed in detail below and the implementation of these features would be required as conditions of any approval from the County.

- Landscaped and screened parking areas consistent with the County's Parking Design Manual, including Section 7 (Landscaping) and the "cool parking" mitigation requirements identified by the CARB.
- Provision of short-term bicycle parking rack at the recreation area within the Project.
- Plumb every residential unit for the future installation of a Level 2 electric vehicle (EV) charging station.
- Building efficiency features such as High-Efficiency HVAC system, sealed (tight) air ducts that minimize heating and cooling HVAC losses, tankless water heaters and Low E dual pane

windows. Work with the regional or local water agency to determine if incentives/rebates are available for the purchase and installation of rain barrels.

- Incorporate into Project Covenants, Conditions & Restrictions (CC&Rs) requirements that the HOA coordinate with SANDAG to provide informational materials on rideshare programs such as iCommute San Diego.
- Provide natural gas and electrical outlets in all private rear yards,
- Increase new tree plantings throughout the neighborhood by planting two trees per dwelling unit which is equivalent to a minimum of 184 trees within the Project Site.
- Install weather-based irrigation systems which include rain sensing timers.

2.0 EXISTING ENVIRONMENTAL SETTING

2.1 Understanding GHGs

GHGs such as water vapor and carbon dioxide are abundant in the earth's atmosphere. These gases are called "Greenhouse Gases" because they absorb and emit thermal infrared radiation which acts like an insulator to the planet. Without these gases, the earth's ambient temperature would either be extremely hot during the day or blistering cold at night. However, because these gases can both absorb and emit heat, the earth's temperature does not sway too far in either direction.

Over the years as human activities require the use of burning fossil fuels stored carbon is released into the air in the form of CO_2 and to a much lesser extent CO. Additionally, over the years scientist have measured this rise in Carbon Dioxide and fear that it may be heating the planet too. Additionally, it is thought that other GHGs such as Methane and Nitrous Oxide are to blame.

GHGs of concern as analyzed in this study are Carbon Dioxide (CO_2), Methane (CH_4), and Nitrous Oxide (N_2O). To simply GHG calculations, both CH_4 and N_2O can be converted to an equivalent amount of CO_2 or CO_2e. CO_2e is calculated by multiplying the calculated levels of CH_4 and N_2O by a Global Warming Potential (GWP). CalEEMod 2016.3.2 uses the Intergovernmental Panel on Climate Change (IPCC) 2007 report as source data for GWP factors for both CH_4 and N_2O (CAPCOA, September 2016), using the 100-year period of 25 and 298, respectively (IPCC, 2007).

2.2 Existing Setting

The property has a General Plan Regional Category designation of Village and General Plan land use designation of C36 (General Commercial). There is a is an existing commercial facility of approximately 118,700 SF located on the site. The site is within the Multiple Species Conservation Program (MSCP) boundaries and the Spring Valley Community Plan.

Land uses surrounding the project site include residential, industrial and commercial. Elevations onsite range from roughly 480 feet on the southern boundary to roughly 492 feet on the northern boundary of the project.

2.3 Climate and Meteorology

Climate within the San Diego Air Basin (SDAB) area often varies dramatically over short geographical distances with cooler temperatures on the western coast gradually warming to

the east as prevailing winds from the west heat up. Most of southern California is dominated by high-pressure systems for much of the year, which keeps San Diego County mostly sunny and warm. Typically, during the winter months, the high-pressure system drops to the south and brings cooler, moister weather from the north. It is common for inversion layers to develop within high-pressure areas, which mostly define pressure patterns over the SDAB. These inversions are caused when a thin layer of the atmosphere increases in temperature with height. An inversion acts like a lid preventing vertical mixing of air through convective overturning.

Meteorological trends within the Spring Valley area generally show daytime highs ranging between 67ºF in the winter to approximately 85ºF in the summer with August usually being the hottest month. Median temperatures range from approximately 55ºF in the winter to approximately 73ºF in the summer. Precipitation is generally about 12.9 inches per year (WRCC, 2016). Prevailing wind patterns for the area vary during any given month during the year and also vary depending on the time of day or night. The predominant pattern though throughout the year is usually from the west or westerly (WRCC, 2018).

3.0 CLIMATE CHANGE REGULATORY ENVIRONMENT

3.1 Federal

Massachusetts v. EPA

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

- The Administrator found that elevated concentrations of GHGs— Carbon Dioxide CO_2, CH_4, N_2O, Hydrofluorocarbons (HFCs), Perfluorocarbons (PFCs), and Sulfur hexafluoride (SF_6)—in the atmosphere threaten the public health and welfare of current and future generations. This is referred to as the "endangerment finding."
- The Administrator further found the combined emissions of GHGs—CO_2, CH_4, N_2O, and HFCs—from new motor vehicles and new motor vehicle engines contribute to the GHG air pollution that endangers public health and welfare. This is referred to as the "cause or contribute finding."

These two findings were necessary to establish the foundation for regulation of GHGs from new motor vehicles as air pollutants under the Clean Air Act.

3.2 State

State Greenhouse Gas Targets

Executive Order S-3-05

EO S-3-05 (June 2005) established the following statewide goals: GHG emissions should be reduced to 2000 levels by 2010, 1990 levels by 2020, and 80 percent below 1990 levels by 2050.

AB 32 and CARB's Climate Change Scoping Plan

In furtherance of the goals established in EO S-3-05, the Legislature enacted Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006. AB 32 requires California to reduce its GHG emissions to 1990 levels by 2020.

Under AB 32, the California Air Resources Board (CARB) is responsible for and is recognized as having the expertise to carry out and develop the programs and regulations necessary to achieve the GHG emissions reduction mandate of AB 32. Therefore, in furtherance of AB 32, CARB adopted regulations requiring the reporting and verification of GHG emissions from specified sources, such as industrial facilities, fuel suppliers and electricity importers (see Health & Safety Code Section 35830; Cal. Code Regs., tit. 17, §§95100 et seq.). CARB is also required to adopt rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emission reductions. AB 32 relatedly authorized CARB to adopt market-based compliance mechanisms to meet the specified requirements. Finally, CARB is ultimately responsible for monitoring compliance and enforcing any rule, regulation, order, emission limitation, emission reduction measure, or market-based compliance mechanism adopted.

In 2007, CARB approved a limit on the statewide GHG emissions level for year 2020 consistent with the determined 1990 baseline (427 million metric tons (MMT) CO_2e). CARB's adoption of this limit is in accordance with Health and Safety Code Section 38550.

Further, in 2008, CARB adopted the *Climate Change Scoping Plan: A Framework for Change* (*Scoping Plan*) in accordance with Health and Safety Code Section 38561. The *Scoping Plan* established an overall framework for the measures that will be implemented to reduce California's GHG emissions for various emission sources/sectors to 1990 levels by 2020. The 2008 *Scoping Plan* evaluated opportunities for sector-specific reductions, integrated all CARB and Climate Action Team[2] early actions and additional GHG reduction features by both entities, identified additional measures to be pursued as regulations, and outlined the role of a cap-and-trade program. The key elements of the 2008 *Scoping Plan* include the following (CARB, 2008):

1. Expanding and strengthening existing energy efficiency programs as well as building and appliance standards
2. Achieving a statewide renewable energy mix of 33 percent
3. Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system and caps sources contributing 85 percent of California's GHG emissions
4. Establishing targets for transportation-related GHG emissions for regions throughout California, and pursuing policies and incentives to achieve those targets
5. Adopting and implementing measures pursuant to existing state laws and policies, including California's clean car standards, goods movement measures, and the Low Carbon Fuel Standard

[2] The Climate Action Team is comprised of state agency secretaries and heads of state agencies, boards and departments; these members work to coordinate statewide efforts to implement GHG emissions reduction programs and adaptation programs.

6. Creating targeted fees, including a public goods charge on water use, fees on high GWP gases, and a fee to fund the administrative costs of the State of California's long-term commitment to AB 32 implementation

In the 2008 *Scoping Plan*, CARB determined that achieving the 1990 emissions level in 2020 would require a reduction in GHG emissions of approximately 28.5 percent from the otherwise projected 2020 emissions level; i.e., those emissions that would occur in 2020, absent GHG-reducing laws and regulations (referred to as "Business-As-Usual" [BAU]). For purposes of calculating this percent reduction, CARB assumed that all new electricity generation would be supplied by natural gas plants, no further regulatory action would impact vehicle fuel efficiency, and building energy efficiency codes would be held at 2005 standards.

In the 2011 Final Supplement to the *Scoping Plan's* Functional Equivalent Document, CARB revised its estimates of the projected 2020 emissions level in light of the economic recession and the availability of updated information about GHG reduction regulations (CARB, 2011). Based on the new economic data, CARB determined that achieving the 1990 emissions level by 2020 would require a reduction in GHG emissions of 21.7 percent (down from 28.5 percent) from the BAU conditions. When the 2020 emissions level projection was updated to account for newly implemented regulatory measures, including Pavley I (model years 2009–2016) and the Renewables Portfolio Standard (12 percent to 20 percent), CARB determined that achieving the 1990 emissions level in 2020 would require a reduction in GHG emissions of 16 percent (down from 28.5 percent) from the BAU conditions.

In 2014, CARB adopted the *First Update to the Climate Change Scoping Plan: Building on the Framework* (*First Update*). The stated purpose of the *First Update* was to "highlight California's success to date in reducing its GHG emissions and lay the foundation for establishing a broad framework for continued emission reductions beyond 2020, on the path to 80 percent below 1990 levels by 2050." The *First Update* found that California is on track to meet the 2020 emissions reduction mandate established by AB 32, and noted that California could reduce emissions further by 2030 to levels squarely in line with those needed to stay on track to reduce emissions to 80 percent below 1990 levels by 2050 if the state realizes the expected benefits of existing policy goals.

In conjunction with the *First Update*, CARB identified "six key focus areas comprising major components of the state's economy to evaluate and describe the larger transformative actions that will be needed to meet the state's more expansive emission reduction needs by 2050." Those six areas are: (1) energy; (2) transportation (vehicles/equipment, sustainable communities, housing, fuels, and infrastructure); (3) agriculture; (4) water; (5) waste management; and, (6) natural and working lands. The *First Update* identified key

recommended actions for each sector that will facilitate achievement of EO S-3-05's 2050 reduction goal.

Based on CARB's research efforts presented in the *First Update*, it has a "strong sense of the mix of technologies needed to reduce emissions through 2050." Those technologies include energy demand reduction through efficiency and activity changes; large-scale electrification of on-road vehicles, buildings and industrial machinery; decarbonizing electricity and fuel supplies; and, the rapid market penetration of efficient and clean energy technologies.

As part of the *First Update*, CARB recalculated the state's 1990 emissions level using more recent global warming potentials identified by the IPCC. Using the recalculated 1990 emissions level (431 MMT CO_2e) and the revised 2020 emissions level projection identified in the 2011 Final Supplement, CARB determined that achieving the 1990 emissions level by 2020 would require a reduction in GHG emissions of approximately 15 percent (instead of 28.5 percent or 16 percent) from the BAU conditions.

In November 2017, CARB released *California's 2017 Climate Change Scoping Plan* (*Second Update*) for public review and comment (CARB, 2017). This update proposes CARB's strategy for achieving the state's 2030 GHG target as established in Senate Bill (SB) 32 (discussed below). The strategy includes continuing the Cap-and-Trade Program through 2030,[3] inclusive policies and broad support for clean technologies, enhanced industrial efficiency and competitiveness, prioritization of transportation sustainability, continued leadership on clean energy, putting waste resources to beneficial use, supporting resilient agricultural and rural economics and natural and working lands, securing California's water supplies, and cleaning the air and public health. When discussing project-level GHG emissions reduction actions and thresholds, the *Second Update* states "[a]chieving no net additional increase in GHG emissions, resulting in no contribution to GHG impacts, is an appropriate overall objective for new development." However, the *Second Update* also recognizes that such an achievement "may not be feasible or appropriate for every project … and the inability of a project to mitigate its GHG emissions to net zero does not imply the project results in a substantial contribution to the cumulatively significant environmental impact of climate change under CEQA." CARB's Governing Board adopted the *Second Update* in December 2017.

EO B-30-15

EO B-30-15 (April 2015) identified an interim GHG reduction target in support of targets previously identified under S-3-05 and AB 32. EO B-30-15 set an interim goal of reducing statewide GHG emissions to 40 percent below 1990 levels by 2030 to keep California on its

[3] In July 2017, AB 398 was enacted into law, thereby extending the legislatively-authorized lifetime of the Cap-and-Trade Program to December 31, 2030.

trajectory toward meeting or exceeding the long-term goal of reducing statewide GHG emissions to 80 percent below 1990 levels by 2050 as set forth in S-3-05. To facilitate achievement of this goal, EO B-30-15 calls for an update to CARB's *Scoping Plan* to express the 2030 target in terms of MMT CO_2e. The EO also calls for state agencies to continue to develop and implement GHG emission reduction programs in support of the reduction targets. Sector-specific agencies in transportation, energy, water, and forestry were required to prepare GHG reduction plans by September 2015, followed by a report on action taken in relation to these plans in June 2016.

SB 32 and AB 197

SB 32 and AB 197 (enacted in 2016) are companion bills that set a new statewide GHG reduction target; make changes to CARB's membership, and increase legislative oversight of CARB's climate change-based activities; and expand dissemination of GHG and other air quality-related emissions data to enhance transparency and accountability. More specifically, SB 32 codified the 2030 emissions reduction goal of EO B-30-15 by requiring CARB to ensure that statewide GHG emissions are reduced to 40 percent below 1990 levels by 2030. AB 197 established the Joint Legislative Committee on Climate Change Policies, consisting of at least three members of the Senate and three members of the Assembly, in order to provide ongoing oversight over implementation of the state's climate policies. AB 197 also added two members of the Legislature to CARB as nonvoting members. The legislation further requires CARB to make available and update (at least annually via its website) emissions data for GHGs, criteria air pollutants, and TACs from reporting facilities; and identify specific information for GHG emissions reduction measures when updating the scoping plan, including information regarding the range of projected GHG emissions and air pollution reductions that result from each measure and the cost-effectiveness (including avoided social costs) of each measure (see Health & Safety Code Section 38562.7).

<u>Building Energy</u>

Title 24, Part 6

Title 24 of the California Code of Regulations was established in 1978 and serves to enhance and regulate California's building standards. While not initially promulgated to reduce GHG emissions, Part 6 of Title 24 specifically establishes Building Energy Efficiency Standards that are designed to ensure new buildings and alterations or additions to existing buildings in California achieve energy efficiency and preserve outdoor and indoor environmental quality. The California Energy Commission (CEC) is required by law to adopt standards every 3 years that are cost effective for homeowners over the 30-year lifespan of a building. These standards are updated to consider and incorporate new energy efficient technologies and

construction methods. As a result, these standards save energy, increase electricity supply reliability, increase indoor comfort, avoid the need to construct new power plants, and help preserve the environment.

The 2013 Title 24 standards went into effect on July 1, 2014 and were estimated to reduce energy uses between 3.8% to 36.4%, depending on the energy source and land (Architectural Energy Corporation (AEC), 2013).

The 2016 Title 24 standards, which went into effect on January 1, 2017, are the currently applicable standards. When comparing the 2013 and 2016 standards for electrical consumption, it is expected that low-rise, single-family detached homes and multi-family homes would use 12% and 15% less electricity under the 2016 standards, respectively. Similarly, implementation of the 2016 standards is expected to reduce natural gas consumption by 21% in single-family homes and 31% in multi-family homes. Newly constructed non-residential buildings are estimated to achieve a 5% reduction in electricity consumption under the 2016 standards and no significant change relative to natural gas consumption (California Energy Commission, 2015). The current version of CalEEMod used in this analysis, as a default parameter, utilizes compliance with the 2016 Title 24 standards to estimate GHG emissions.

The project would be required, at a minimum, to comply with the latest version of Title 24 standards at the time the project seeks building permits. The 2019 Title 24 Standards are anticipated to go into effect on January 1, 2020. As described, the project would begin construction in 2020 and thus would be required to meet these standards. One of the most notable changes in the 2019 Code is the requirement for the installation of rooftop solar on all residential buildings (California Energy Commission, 2017).

Title 24, Part 11

In addition to the CEC's efforts, in 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (Part 11 of Title 24) is commonly referred to as CALGreen, and establishes minimum mandatory standards as well as voluntary standards pertaining to the planning and design of sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and interior air quality. The CALGreen standards took effect in January 2011 and instituted mandatory minimum environmental performance standards for all ground-up, new construction of commercial, low-rise residential and state-owned buildings and schools and hospitals. The CALGreen 2016 standards became effective on January 1, 2017. The mandatory standards require the following (24 CCR Part 11):

- Mandatory reduction in indoor water use through compliance with specified flow rates for plumbing fixtures and fittings
- Mandatory reduction in outdoor water use through compliance with a local water efficient landscaping ordinance or the California Department of Water Resources' Model Water Efficient Landscape Ordinance
- Sixty-five (65) percent of construction and demolition waste must be diverted from landfills
- Mandatory inspections of energy systems to ensure optimal working efficiency
- Inclusion of electric vehicle charging stations or designated spaces capable of supporting future charging stations
- Low-pollutant emitting exterior and interior finish materials, such as paints, carpets, vinyl flooring, and particle boards

The CALGreen standards also include voluntary efficiency measures that are provided at two separate tiers and implemented at the discretion of local agencies and applicants. CALGreen's Tier 1 standards call for a 15 percent improvement in energy requirements; stricter water conservation, 10 percent recycled content in building materials, 20 percent permeable paving, 20 percent cement reduction, and cool/solar-reflective roofs. CALGreen's more rigorous Tier 2 standards call for a 30 percent improvement in energy requirements, stricter water conservation, 75 percent diversion of construction and demolition waste, 15 percent recycled content in building materials, 30 percent permeable paving, 25 percent cement reduction, and cool/solar-reflective roofs.

Zero Net Energy Design Goals

As recognized in the *First Update* to the *Scoping Plan*, the California Public Utilities Commission, CEC, and CARB also have a shared, established goal of achieving zero net energy (ZNE) for new construction in California. As background, the California Public Utilities Commission first set forth its zero net energy goals in the 2008 Energy Efficiency Strategic Plan and the 2011 Big Bold Energy Efficiency Strategies. It should be noted that Title 24 (2019) which will be effective in 2020 requires rooftop solar for all new residential units.

Title 20

Title 20 of the California Code of Regulations requires manufacturers of appliances to meet state and federal standards for energy and water efficiency. Performance of appliances must be certified through the CEC to demonstrate compliance with standards. New appliances regulated under Title 20 include: refrigerators, refrigerator-freezers and freezers; room air conditioners and room air-conditioning heat pumps; central air conditioners; spot air conditioners; vented gas space heaters; gas pool heaters; plumbing fittings and plumbing

fixtures; fluorescent lamp ballasts; lamps; emergency lighting; traffic signal modules; dishwaters; clothes washers and dryers; cooking products; electric motors; low voltage dry-type distribution transformers; power supplies; televisions and consumer audio and video equipment; and battery charger systems. Title 20 presents protocols for testing for each type of appliance covered under the regulations and appliances must meet the standards for energy performance, energy design, water performance and water design. Title 20 contains three types of standards for appliances: federal and state standards for federally regulated appliances, state standards for federally regulated appliances, and state standards for non-federally regulated appliances.

Mobile Sources

AB 1493

In response to the transportation sector accounting for more than half of California's CO_2 emissions, AB 1493 was enacted in July 2002. AB 1493 required CARB to set GHG emission standards for passenger vehicles, light-duty trucks, and other vehicles determined by the state board to be vehicles that are primarily used for noncommercial personal transportation in the state. The bill required that CARB set GHG emission standards for motor vehicles manufactured in 2009 and all subsequent model years. CARB adopted the standards in September 2004. When fully phased in, the near-term (2009–2012) standards will result in a reduction of about 22 percent in GHG emissions compared to the emissions from the 2002 fleet, while the mid-term (2013–2016) standards will result in a reduction of about 30 percent (CARB, 2017).

EO S-1-07

Issued in January 2007, EO S-1-07 sets a declining Low Carbon Fuel Standard for GHG emissions measured in CO_2e grams per unit of fuel energy sold in California. The target of the Low Carbon Fuel Standard is to reduce the carbon intensity of California passenger vehicle fuels by at least 10 percent by 2020. The carbon intensity measures the amount of GHG emissions in the lifecycle of a fuel, including extraction/feedstock production, processing, transportation, and final consumption, per unit of energy delivered. CARB adopted the implementing regulation in April 2009. The regulation is expected to increase the production of biofuels, including those from alternative sources, such as algae, wood, and agricultural waste.

SB 375

SB 375 (2008) addresses GHG emissions associated with the transportation sector through regional transportation and sustainability plans. SB 375 required CARB to adopt regional GHG reduction targets for the automobile and light-truck sector for 2020 and 2035. Regional metropolitan planning organizations (MPOs) are then responsible for preparing a Sustainable Communities Strategy within their Regional Transportation Plan. The goal of the Sustainable Communities Strategy is to establish a forecasted development pattern for the region that, after considering transportation measures and policies, will achieve, if feasible, the GHG reduction targets. If a Sustainable Communities Strategy is unable to achieve the GHG reduction target, an MPO must prepare an Alternative Planning Strategy demonstrating how the GHG reduction target would be achieved through alternative development patterns, infrastructure, or additional transportation measures or policies.

Pursuant to Government Code Section 65080(b)(2)(K), a Sustainable Communities Strategy does not: (i) regulate the use of land; (ii) supersede the land use authority of cities and counties; or (iii) require that a city's or county's land use policies and regulations, including those in a general plan, be consistent with it. Nonetheless, SB 375 makes regional and local planning agencies responsible for developing those strategies as part of the federally required metropolitan transportation planning process and the state-mandated housing element process.

In 2010, CARB adopted the SB 375 targets for the regional metropolitan planning organizations. SANDAG completed and adopted its *2050 Regional Transportation Plan/Sustainable Communities Strategy* (RTP/SCS) in October 2011. In November 2011, CARB, by resolution, accepted SANDAG's GHG emissions quantification analysis and determination that, if implemented, the SCS would achieve CARB's 2020 and 2035 GHG emissions reduction targets for the region. The targets for the San Diego Association of Governments (SANDAG) are a 7 percent reduction in emissions per capita by 2020 and a 13 percent reduction by 2035.

After SANDAG's 2050 RTP/SCS was adopted, a lawsuit was filed by the Cleveland National Forest Foundation and others. The matter was recently resolved by the California Supreme Court (Case No. S223603), which held that SANDAG did not abuse its discretion when certifying its EIR by declining to explicitly engage in an analysis of the consistency of the RTP/SCS' projected 2050 GHG emissions with the GHG reduction goals reflected in Executive Order No. S-3-05.

In 2015, SANDAG adopted the next iteration of its RTP/SCS in accordance with statutorily mandated timelines and no subsequent litigation challenge was filed. More specifically, in

October 2015, SANDAG adopted *San Diego Forward: The Regional Plan*. Like the 2050 RTP/SCS, this planning document meets CARB's 2020 and 2035 reduction targets for the region (SANDAG, 2015). In December 2015, CARB, by resolution, accepted SANDAG's GHG emissions quantification analysis and determination that, if implemented, the SCS would achieve CARB's 2020 and 2035 GHG emissions reduction targets for the region.

Advanced Clean Cars Program

In January 2012, CARB approved the Advanced Clean Cars program, a new emissions-control program for model years 2015 through 2025. The program combines the control of smog- and soot-causing pollutants and GHG emissions into a single coordinated package. The package includes elements to reduce smog-forming pollution, reduce GHG emissions, promote clean cars, and provide the fuels for clean cars (CARB, 2017). To improve air quality, CARB has implemented new emission standards to reduce smog-forming emissions beginning with 2015 model year vehicles. It is estimated that in 2025 cars will emit 75 percent less smog-forming pollution than the average new car sold today. To reduce GHG emissions, CARB, in conjunction with the EPA and the NHTSA, has adopted new GHG standards for model year 2017 to 2025 vehicles; the new standards are estimated to reduce GHG emissions by 34 percent in 2025 (CARB, 2012).

EO B-16-12

EO B-16-12 (March 2012) directs state entities under the Governor's direction and control to support and facilitate development and distribution of ZEVs. This EO also sets a long-term target of reaching 1.5 million zero-emission vehicles on California's roadways by 2025. On a statewide basis, EO B-16-12 also establishes a GHG emissions reduction target from the transportation sector equaling 80 percent less than 1990 levels by 2050. In furtherance of this EO, the Governor convened an Interagency Working Group on Zero-Emission Vehicles that has published multiple reports regarding the progress made on the penetration of ZEVs in the statewide vehicle fleet. As of January 2018, the Governor has called for as many as 1.5 million EV by 2025 and up to five million EV by 2030 (Office of Governor Edmund G. Brown Jr., 2018).

SB 350

In 2015, SB 350 – the Clean Energy and Pollution Reduction Act – was enacted into law. As one of its elements, SB 350 establishes a statewide policy for widespread electrification of the transportation sector, recognizing that such electrification is required for achievement of the state's 2030 and 2050 reduction targets (see Public Utilities Code Section 740.12).

Renewable Energy Procurement

SB 1078

SB 1078 (2002) established the Renewables Portfolio Standard (RPS) program, which requires an annual increase in renewable generation by the utilities equivalent to at least 1 percent of sales, with an aggregate goal of 20 percent by 2017. This goal was subsequently accelerated, requiring utilities to obtain 20 percent of their power from renewable sources by 2010.

SB X1 2

SB X1 2 (2011) expanded the RPS by establishing that 20 percent of the total electricity sold to retail customers in California per year by December 31, 2013, and 33 percent by December 31, 2020, and in subsequent years be secured from qualifying renewable energy sources. Under the bill, a renewable electrical generation facility is one that uses biomass, solar thermal, photovoltaic, wind, geothermal, fuel cells using renewable fuels, small hydroelectric generation of 30 megawatts or less, digester gas, municipal solid waste conversion, landfill gas, ocean wave, ocean thermal, or tidal current, and that meets other specified requirements with respect to its location. In addition to the retail sellers previously covered by the RPS, SB X1 2 added local, publicly owned electric utilities to the RPS (California, 2018).

SB 350

SB 350 (2015) further expanded the RPS by establishing that 50 percent of the total electricity sold to retail customers in California per year by December 31, 2030 be secured from qualifying renewable energy sources. In addition, SB 350 includes the goal to double the energy efficiency savings in electricity and natural gas final end uses (such as heating, cooling, lighting, or class of energy uses on which an energy-efficiency program is focused) of retail customers through energy conservation and efficiency.

Water

EO B-29-15

In response to drought-related concerns, EO B-29-15 (April 2015) set a goal of achieving a statewide reduction in potable urban water usage of 25 percent relative to water use in 2013. The term of the EO extended through February 28, 2016, although many of the directives have since become permanent water-efficiency standards and requirements. The EO includes specific directives that set strict limits on water usage in the state. In response to EO B-29-15, the California Department of Water Resources has modified and adopted a revised version

of the Model Water Efficient Landscape Ordinance that, among other changes, significantly increases the requirements for landscape water use efficiency and broadens its applicability to include new development projects with smaller landscape areas.

Solid Waste

AB 939 and AB 341

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

AB 341 (2011) amended the California Integrated Waste Management Act of 1989 to include a provision declaring that it is the policy goal of the state that not less than 75 percent of solid waste generated be source-reduced, recycled, or composted by the year 2020, and annually thereafter. In addition, AB 341 required the California Department of Resources Recycling and Recovery (CalRecycle) to develop strategies to achieve the state's policy goal. CalRecycle has conducted multiple workshops and published documents that identify priority strategies that CalRecycle believes would assist the state in reaching the 75 percent goal by 2020.

Increasing the amount of commercial solid waste that is recycled, reused, or composted will reduce GHG emissions primarily by 1) reducing the energy requirements associated with the extraction, harvest, and processing of raw materials and 2) using recyclable materials that require less energy than raw materials to manufacture finished products (CalRecycle, 2018). Increased diversion of organic materials (green and food waste) will also reduce GHG emissions (CO_2 and CH_4) resulting from decomposition in landfills by redirecting this material to processes that use the solid waste material to produce vehicle fuels, heat, electricity, or compost.

3.3 County of San Diego Climate Action Plan

In February 2018, the County's Board of Supervisors adopted a Climate Action Plan (CAP) that serves as a long-term programmatic plan that identifies strategies and measures to meet the County's targets to reduce GHG emissions by 2020 and 2030, consistent with the State's legislative GHG reduction targets, and demonstrates progress towards the State's 2050 GHG

reduction goal. The Board's adoption of the CAP is the culmination of a multi-year plan development process that followed from the judicial invalidation (see Sierra Club v. County of San Diego (Case No. D064243)) of the County's prior CAP, which was adopted in 2012. In February 2018, the Board also amended General Plan Goal COS-20 and Policy COS-20.1 – both originally adopted as part of the 2011 General Plan Update – to reflect recent changes in State law. (See the County's Final Supplement to the 2011 General Plan Update Program EIR (SCH No. 2016101055), pages 1-13 through 1-16.) When certifying the Environmental Impact Report (EIR) for the CAP last year, the Board also adopted mitigation measure M-GHG-1, establishing a protocol through which GPA projects may meet a portion of their GHG reduction obligation by purchasing offsets, including offsets that are generated by GHG reduction activities located outside of the County.

In March 2018, several petitioners filed a lawsuit against the County, alleging that the CAP and, in particular, M-GHG-1 were inconsistent with General Plan Goal COS-20 and Policy COS-20.1. In December 2018, the San Diego Superior Court (Judge Timothy B. Taylor, presiding) ruled against the County, finding that Goal COS-20 and Policy COS-20.1 were "fundamental, mandatory, and clear" policies requiring only in-County GHG emissions reductions and foreclosing the use of offsets if such offsets originated outside San Diego County. (See Judge Taylor's Minute Order, dated December 24, 2018, page 12.) The Court issued a writ ordering the approval of the CAP and its EIR to be set aside, and enjoining reliance on the County CAP's mitigation measure M-GHG-1. (See Judge Taylor's Minute Order, dated December 24, 2018, at page 17.) In January 2019, the County appealed the San Diego Superior Court ruling which stayed the above described writ issued by Judge Taylor.

Given the current legal instability concerning the County's CAP brought on by litigation that has attacked the County's CAP since 2012 (resulting in a fourth appeal in seven years), the CEQA analysis prepared for the proposed project did not rely on the CAP to streamline the Project's environmental analysis under CEQA Guidelines Section 15183.5. Rather, the proposed project's significance determination used the criteria contained in CEQA Guidelines Appendix G, (informed by CEQA Guidelines Section 15064.4) and mitigation strategies (informed by CEQA Guidelines Section 15126.4(c)) that are independent of the CAP.[4] As such, in the event that the CAP does not withstand judicial scrutiny, the project has undergone a separate, stand-alone analysis for determining whether the project's GHG emissions would significantly impact the environment.

[4] Individual projects may be approved using thresholds developed on a project-by-project basis. While lead agencies can adopt a significance threshold for general use pursuant to CEQA Guidelines§ 15064.7, they can alternately determine a threshold on a project-by- project basis, which is specifically allowed pursuant to CEQA Guidelines § 15064.4(a), case law and several other expert sources. Under the CEQA Guidelines, lead agencies have the discretion to determine the appropriate method for evaluating GHG emissions, based to the extent possible on scientific and factual data.

Please note however, that the project still underwent a consistency analysis with the CAP through the CAP Consistency Review Checklist (Checklist). As explained in the CAP, the Checklist is the mechanism that is used to demonstrate consistency with the CAP. If a project does not comply with required actions in the Checklist, it would be determined to be inconsistent with the CAP. If a project is consistent with the projections in the CAP, its associated growth in terms of GHG emissions was accounted for in the CAP's projections and would not increase emissions beyond what is anticipated in the CAP or inhibit the County from reaching its reduction targets.

For purposes of CAP analysis, the property currently has a General Plan Regional Category designation of Village and General Plan land use designation of C36 (General Commercial). There is a is an existing commercial facility of approximately 118,700 SF located on the site. The 118,700 SF commercial development has been in existence since well before GHG inventories have been tracked within the County of San Diego and would fall within the GHG emissions that were accounted for within County projections of the General Plan Update. Therefore, for purposes of analysis, the GHG emission generation of the project is calculated as the net difference between the GHG emissions of the project and the GHG emissions of the existing leased 44,470 SF commercial use as accounted for in the General Plan and under the CAP. The project's proposed land use and zoning designation amendment does not result in a more GHG-intensive project than what was contemplated under the CAP and the project would not increase emissions beyond what is anticipated in the CAP or inhibit the County from reaching its reduction targets.

County of San Diego General Plan

The County's General Plan includes smart growth and land use planning principles designed to reduce vehicle miles travelled and result in a reduction in GHG emissions. See Table 5.4 for the project's consistency with applicable General Plan strategies, goals, and policies.

3.4 CEQA Requirements and Thresholds of Significance

SB 97-Related Amendments to the CEQA Guidelines

The following discussion provides a generally applicable overview of the pertinent parameters of the CEQA Guidelines amendments that address GHG emissions.

More specifically, SB 97, enacted in 2007, expressly recognized the need to analyze GHG emissions as a part of the CEQA process. SB 97 required the Governor's Office of Planning and Research to develop, and the Natural Resources Agency to adopt, amendments to the CEQA Guidelines to address the analysis and mitigation of GHG emissions (Pub. Resources

Code Section 21083.05.) In 2010, a series of CEQA Guidelines amendments were adopted to fulfill SB 97 requirements, including revisions to Appendix G of the CEQA Guidelines. The revisions included two questions related to GHG emissions, which were intended to satisfy the Legislative directive in Public Resources Code Section 21083.05 that the effects of GHG emissions be analyzed under CEQA.

Section 15064.4 of the CEQA Guidelines was added as one of the amendments addressing GHG emissions. Section 15064.4 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 should make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project." Section 15064.4(b)(1)-(3) further states that, "a lead agency should consider the following factors, among others, when assessing the significance of impacts from greenhouse gas emissions on the environment: (1) the extent to which a project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting; (2) whether project emissions exceed a threshold of significance that the lead agency determines applies to the project; and, (3) the extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions."

Recognizing that GHG emissions contribute to the cumulative impact condition of global climate change, section 15064(h)(1) of the CEQA Guidelines is also applicable. Section 15064(h)(1) states that "the lead agency shall consider whether the cumulative impact is significant and whether the effects of the project are cumulatively considerable." A cumulative impact may be significant when the project's incremental effect, though individually limited, is cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of other past, current, and reasonably foreseeable probable future projects. As discussed above, climate change is the product of incremental contributions of GHG emissions on a global scale.

Finally, Section 15064(h)(3) of the CEQA Guidelines is pertinent. Section 15064(h)(3) states that: "[a] lead agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project will comply with the requirements in a previously approved plan or mitigation program…that provides specific requirements that will avoid or substantially lessen the cumulative problem within the geographic area in which the project is located."

Appendix G of the CEQA Guidelines

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

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

For purposes of this analysis, the two Appendix G checklist questions set forth above are utilized as the thresholds of significance when evaluating the environmental effects of the project's GHG emissions. In applying these thresholds, reference is made to CEQA Guidelines Section 15064.4(b)(1)-(3), as described above.

4.0 METHODOLOGY

4.1 Construction CO_2e Emissions Calculation Methodology

The Project construction and equipment types necessary to fully construct the proposed development for a fully operational project are shown in Table 4.1 below. The proposed project site would demolish roughly 118,700 SF of existing buildings onsite. The project would then grade the site to allow for 92 residential units. After grading, trenching would be necessary to install new infrastructure and drainage. Once earthwork activities are completed, paving and building construction activities would follow. CalEEMod 2016.3.2 was utilized for all construction calculations. Also, CalEEMod has been updated to reflect SDAPCD Rule 67 paint Volatile Organic Compound (VOC) limits. Also, CalEEMod was manually updated to include Tier 4 construction equipment with diesel particulate filters as the project applicant would include this as a project design feature.

Table 4.1: Expected Construction Equipment

Equipment Identification	Proposed Start	Proposed Complete	Quantity
Demolition	5/10/2020	7/31/2020	
Concrete/Industrial Saws			1
Excavators			3
Rubber Tired Dozers			2
Grading	8/1/2020	8/28/2020	
Graders			1
Rubber Tired Dozers			1
Scrapers			2
Tractors/Loaders/Backhoes			2
Trenching	8/29/2020	9/25/2020	
Excavators			1
Tractors/Loaders/Backhoes			2
Paving	9/26/2020	10/23/2020	
Pavers			2
Paving Equipment			2
Rollers			2
Building Construction without Crane	10/24/2020	3/11/2022	
Forklifts			3
Generator Sets			1
Tractors/Loaders/Backhoes			3
Welders			1
Architectural Coating	1/1/2021	3/11/2022	
Air Compressors			1
Building Construction with Crane	12/21/2021	1/17/2022	
Crane			1
This equipment list is based upon equipment inventory within CalEEMod and similar size projects in the County of San Diego.			

GHG impacts related to construction were calculated using the latest CalEEMod 2016.3.2 model which was developed by BREEZE Software for South Coast Air Quality Management District (SCAQMD). CalEEMod incorporates emission factors from the EMFAC2014 model for on-road vehicle emissions and the OFFROAD2011 model for off-road vehicle emissions. Because CO_2 emissions from construction only occur at the beginning of a project, emissions will be averaged over a 30-year period.

The site is currently comprised mostly of asphalt and concrete with less than two dozen trees. During construction, grading activities will remove mostly asphalt and concrete areas with limited vegetation. The proposed project would add a minimum of 184 trees and shrubs throughout and all vegetation on the western portion of the site will remain. Given this, the project would ultimately sequester more carbon during operations than existing site sequestration. Though a credit would be expected, sequestration was not analyzed, and no vegetation credit was taken for this project.

4.2 Operational Emissions Calculation Methodology

The 118,700 SF commercial development has been in existence since well before GHG inventories have been tracked within the County of San Diego and would fall within the GHG emissions that were accounted for within County projections of the General Plan Update. The traffic study shows the existing facility located on the project site could generate as much as 9,496 average daily trips (ADT) when fully operational while the proposed project would generate 736 ADT (Linscott Law & Greenspan, 2018).

It should be noted however, that the existing commercial operations are underutilized with only 44,470 SF of the 118,700 SF being leased out. Also, it should be noted, the underutilized development currently generates 1,790 ADT. For purposes of this analysis, the GHG emission generation of the project is calculated as the net difference between the GHG emissions of the project and the GHG emissions of the existing leased 44,470 SF commercial use. CalEEMod calculations were prepared for this scenario using historic energy assumptions since the facilities were constructed years before the date of the report.

Operational GHG sources would include area, energy, mobile, solid waste and water uses, which are calculated within CalEEMod. Area Sources include landscaping and architectural coatings as part of regular maintenance. Energy sources would be from uses such as electricity and natural gas. Solid waste generated in the form of trash is also considered as decomposition of organic material breaks down to form GHGs.

Electrical energy-intensity factors were updated within CalEEMod to reflect San Diego Gas and Electric's (SDG&E) emissions rate variations from 2009 which is the default rate data used by

CalEEMod. In 2009, SDG&E achieved 10.5 percent procurement of renewable energy (California Public Utilities Commission, 2016) and in 2020 will have up to 46% in place. For purposes of analysis however the RPS utility requirement was included which requires manual updates to CalEEMod intensity factors. CalEEMod intensity factors are based on 2009 intensities which included a 10.5% RPS during that year. The requirement would be 33% in 2020 and 50% by 2030, an additional 17% reduction would be required or 1.7% per year. Given this, SDG&E energy-intensity factors for 2022 were calculated and were modeled as such within CalEEMod as shown in Table 4.2 and are shown in ***Attachment A*** to this report.

Table 4.2: SDG&E Energy Intensity Factors

GHG	2009 Factors (lbs/MWh) w/10.5% RPS	2022 Factors – 36.4% Renewables (lbs/MWh)
Carbon Dioxide (CO_2)	720.49	511.99
Methane (CH_4)	0.029	0.0206
Nitrous Oxide (N_2O)	0.006	0.0043

As a design feature, the project will exclusively utilize high-efficiency indoor and outdoor lighting in all buildings. One example of high-efficiency lighting is light-emitting diode (LED) lighting. LED indoor lighting is 75-90% more efficient than standard lighting. For example: a 10-watt LED bulb replaces a 60-watt standard bulb, which would be 83% more efficient. A typical 15-watt LED bulb has an equivalent rating of a 100-watt standard bulb. High-efficiency lighting is addressed by both the 2013 Title 24 standards (CEC, 2012) and the 2016 Title 24 standards (CEC, 2015); these standards specifically call out lighting power density requirements for non-residential land uses. However, the lighting power density requirements do not change across the two sets of Title 24 standards. Rather, as illustrated by Table 140.6-B within the 2013 and 2016 Title 24 standards, the applicable requirement is 0.60 watts per ft^2. Of note, the default parameters of the version of CalEEMod used in this analysis (along with its predecessor versions) do not account for high-efficiency lighting technologies or the 2016 Title 24. Calculations on estimated lighting energy reductions are shown in ***Attachment B***. The CalEEMod default lighting energy intensity was adjusted to reflect this reduction. For purposes of this analysis, the design feature to utilize 100% high-efficiency lighting would reduce energy usage from combined indoor and outdoor lighting by at least 65%.

Under AB 341 and the County's own Strategic Plan to Reduce Waste, adopted in April 2017, the County would ultimately be required to increase diversion of waste from landfills by 75%. The project would provide separate waste containers to allow for simpler material separations or would direct the project HOA to utilize a pay for a waste collection service that recycles materials offsite. Additionally, the project would provide for green waste collection so that

green waste is diverted from landfills and recycled as mulch. For purposes of this analysis, a 25% reduction in solid waste-related GHGs was applied to reflect AB 341's diversion standard. CalEEMod results for both the existing land use and the proposed Project and are shown in ***Attachments C and -D*** to this report.

5.0 FINDINGS

5.1 Project Related Construction Emissions

Utilizing the CalEEMod inputs for the model as shown in Table 4.1 above, we find that the total construction of the project will produce approximately 717.160 MT of CO_2e over the construction life of the project. Based on South Coast Air Quality Management District (SCAQMD) methodology, it is recommended to average the construction emissions over the project life which is assumed to be 30 years. Given this, the annual construction emission would be 23.91 MT of CO_2e per year. A summary of the construction emissions is shown in Table 5.1 below.

Table 5.1: Estimated Construction CO_2e Emissions Summary MT/Year

Year	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
2020	0.000	245.048	245.048	0.064	0.000	246.642
2021	0.000	389.319	389.319	0.062	0.000	390.866
2022	0.000	79.341	79.341	0.013	0.000	79.653
Total						**717.160**
Yearly Average Construction Emissions (Metric Tons/year over 30 years)						**23.91**

Expected Construction emissions are based upon CalEEMod modeling assumptions for equipment and durations listed in Table 4.1 above.

5.2 Operational Emissions

The project requires the elimination of the existing commercial uses on the site which consists of an approximately 118,700 SF commercial facility. The existing commercial facility is currently being underutilized, with only 44,740 SF having been leased at the date of this report. For purposes of this analysis only the GHG emissions from that portion of the commercial facility that is currently being utilized was calculated. The underutilized existing commercial development generates 1,790 ADT (Linscott Law & Greenspan, 2018). Based on this, the existing underutilized commercial (44,470 SF) annual GHG emissions as calculated by CalEEMod is 1,480.84 MT CO_2e and is shown in Table 5.2 on the following page. This represents a conservative analysis in that the GHG emissions from the underutilized facility represents fewer emissions than the GHG emissions that could be generated from the existing commercial facility and the uses that are allowed by right that will be eliminated by the project.

Table 5.2: Estimated GHG emissions for Underutilized 44,740 SF Commercial (MT/Year)

Source	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e (MT/Yr)
Area	0.000	0.001	0.001	0.000	0.000	0.001
Energy	0.000	222.005	222.005	0.009	0.002	222.793
Mobile	0.000	1,203.908	1,203.908	0.073	0.000	1,205.736
Waste	10.040	0.000	10.040	0.593	0.000	24.874
Water	1.107	22.610	23.717	0.115	0.003	27.438
Total						**1,480.84**

Data is presented in decimal format and may have rounding errors.

Based on discussions in Section 4.2 above, operational emissions for the project action were also calculated in CalEEMod 2016.3.2. The Project traffic engineer estimated that there would be 736 daily trips from the proposed project (Linscott Law & Greenspan, 2018).

The project would install enough solar to reduce projected emissions at least 90.93 MT of CO_2e per year. Based on calculations using standard data for the San Diego region, the project would install an equivalent photovoltaic system capable of producing 1.8 kWh per unit. Calculations for solar are shown in ***Attachment E*** to this report.

In addition, the project's utilization of emissions reducing strategies recommended by CARB in its *Second Update* to the *Scoping Plan* all reasonable and feasible on-site measures to reduce GHG emissions were also evaluated and incorporated as design features (see ***Attachment F*** to this report).

Based on the above findings, the proposed project would generate 914.172 MT of CO_2e as shown in Table 5.3 on the following page. The 44,470 SF of onsite commercial uses generate roughly 1,480.84 MT of CO_2e. Based on this, the proposed project would result in a net decrease of (1,480.84 - 914.172) 566.67 MT CO_2e from the existing environmental setting. Because the project would result in a reduction of GHG emissions level as compared to the existing environmental setting, the project would not generate GHG emissions that may have a significant impact on the environment. Similarly, because the project would have no net increase in the GHG emissions level, the project would not make a cumulatively considerable contribution to global GHG emissions.

Table 5.3: Operational Emissions Summary (MT/Year)

Source	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e (MT/Yr)
Area	0.000	1.116	1.116	0.001	0.000	1.143
Energy	0.000	161.224	161.224	0.005	0.002	161.961
Mobile	0.000	768.008	768.008	0.040	0.000	769.013
Waste	6.013	0.000	6.013	0.355	0.000	14.898
Water	1.902	25.926	27.828	0.196	0.005	34.176
Total (MT/Year)						**981.191**
Amortized Construction Emissions (Table 5.1 above)						**23.91**
Solar (~1.8 kWh system per unit)						**-90.929**
Project Total						**914.172**
Existing Underutilized Commercial GHG Emissions						**1,480.841**
Difference in GHG Emissions between Existing and Proposed Use						**-566.67**
Data is presented in decimal format and may have rounding errors.						

5.3 Consistency Evaluation

Because the project would not increase net GHG emissions above existing levels, the project would not conflict with any local or state plans, policies, or regulations adopted for the purpose of reducing GHG emissions. The following provides additional discussion of plans, policies, and regulations adopted for the purpose of reducing GHG emissions and the determination that the project does not conflict with such plans, policies, or regulations.

Climate Action Plan

As discussed above, this GHG Analysis did not rely on the CAP. However, the project does show consistency with the General Plan through completion of the CAP Checklist and does not conflict with the CAP (see ***Attachment G*** which contains the County's CAP Checklist). As the Project will result in a reduction of GHG emissions from the existing baseline conditions, the Project will not interfere or affect attainment of the CAP's GHG reduction targets and goal and would not result in a considerable contribution to cumulative global GHG emissions. Also, the Project is consistent with and would not conflict with the County's CAP because the Project would implement all feasible and applicable CAP measures (see Attachment G which provides a Project-specific evaluation of the applicable CAP measures). Although, the Project is

conditioned to include all relevant measures, please note that the Project does not rely on M-GHG-1 described in the CAP.

Consistency with Relevant General Plan Policies.

This discussion analyzes the project's potential to conflict with an applicable plan. The County of San Diego's General Plan contains various goals, policies, and objectives related to the reduction of GHG emissions and global climate change. The project's consistency with specific General Plan Conservation and Open Space Element policies is provided below in Table 5.4.

Table 5.4: County General Plan Policies

Policy	Project Consistency
COS14.3 Sustainable Development. Require design of residential subdivisions and nonresidential development through "green" and sustainable land development practices to conserve energy, water, open space, and natural resources.	*Consistent*. As discussed, the Project includes many Project Design Features to reduce energy and water use.
COS14.7 Alternative Energy Sources for Development Projects. Encourage development projects that use energy recovery, photovoltaic, and wind energy.	*Consistent*. Renewable energy in the form of rooftop solar PV panels (a photovoltaic solar system) will be installed on all residential units.
COS14.10 Low Emission Construction Vehicles and Equipment. Require County contractors and encourage other developers to use low-emission construction vehicles and equipment to improve air quality and reduce GHG emissions.	*Consistent*. All project-related construction equipment would be required to meet Tier 4 emissions standards.
COS15.1 Design and Construction of New Buildings. Require that new buildings be designed and constructed in accordance with "green building" programs that incorporate techniques and materials that maximize energy efficiency, incorporate the use of sustainable resources and recycled materials, and reduce emissions of GHGs and toxic air contaminants.	*Consistent*. The Project proposes sustainability and efficiency features consistent with Title 24, Part 6 of the California Code of Regulations (2016) requirements.
COS15.4 Title 24 Energy Standards. Require development to minimize energy impacts from new buildings in accordance with or exceeding Title 24 energy standards.	*Consistent*. The Project proposes implementing energy efficiency features that would meet 2016 Title 24 standards.
COS17.1 Reduction of Solid Waste Materials. Reduce GHG emissions and future landfill capacity needs through reduction, reuse, or recycling of all types of solid waste that is generated. Divert solid waste from landfills in compliance with State law.	*Consistent*. Areas for storage and collection of recyclables and yard waste would be provided.
COS17.2 Construction and Demolition Waste. Require recycling, reduction and reuse of construction and demolition debris.	*Consistent*. The Project would prepare a Construction Debris Management Plan that complies with Section 68.508-68.518 of the County Municipal Code and would divert at least 90 percent of inerts and 70 percent of construction waste from landfills through reuse and recycling.

Consistency with SANDAG's San Diego Forward: The Regional Plan

Regarding consistency with SANDAG's RTP/SCS, the project would include site design elements and project design features developed to support the policy objectives of the RTP and SB 375. The Project would implement land use and design measures that would create an environment that promotes alternative mode choice (e.g., pedestrian/bicycle networks and proximity to bus routes). The design of the project is based on a compact neighborhood design, where pedestrian and bicycle path provide access to the community facilities such as parks and clubhouse as well as the proposed bike lane and pathway.

As a design feature, the developer will provide to all homeowners an informative brochure to educate homeowners regarding water conservation measures, recycling, location of outdoor electric outlets to promote using electrical lawn and garden equipment, and location of nearby resources such as dining and entertainment venues, small commercial centers, and civic uses to reduce vehicle miles traveled. The project will include sidewalks/pathways throughout the site.

6.0 REFERENCES

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7.0 CERTIFICATIONS

The contents of this report represent an accurate depiction of the projected CO_2e emissions from the project development based upon the best available information at the time of preparation. The report was prepared by Jeremy Louden; a County approved CEQA Consultant for Air Quality and GHG.

Jeremy Louden, Principal — Date March 26, 2019

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ATTACHMENT A

SDG&E GHG Energy Emission Factors with RPS

SDG&E GHG Energy Emission Factors with RPS

Year	RPS Achieved	Co2 Intensity	CH4 Intensity	N2O Intensity	
2009	**10.50%**	**720.49**	**0.0290**	**0.0060**	
2015	**20.0%**	**644.01**	**0.0259**	**0.0054**	
2020	**33.0%**	**539.36**	**0.0217**	**0.0045**	**33% Required by Law**
2021	**34.7%**	**525.68**	**0.0212**	**0.0044**	
2022	**36.4%**	**511.99**	**0.0206**	**0.0043**	
2023	**38.1%**	**498.31**	**0.0201**	**0.0041**	
2024	**39.8%**	**484.62**	**0.0195**	**0.0040**	
2025	**41.5%**	**470.93**	**0.0190**	**0.0039**	
2026	**43.2%**	**457.25**	**0.0184**	**0.0038**	
2027	**44.9%**	**443.56**	**0.0179**	**0.0037**	
2028	**46.6%**	**429.88**	**0.0173**	**0.0036**	
2029	**48.3%**	**416.19**	**0.0168**	**0.0035**	
2030	**50.0%**	**402.51**	**0.0162**	**0.0034**	50% Required by Law

ATTACHMENT B

High Efficiency Lighting Reductions

High Efficiency Lighting

The lighting intensity in CalEEMod is the same for historical buildings and new developments. The number has not been adjusted or changed in Version 2011, 2013 or 2016 that would account for better lighting technologies. High Efficiency lighting is not required per code with the exception of 50% of the outdoor lighting unless additional lighting is needed to meet an allowable lighting requirement. Based on conversations with Architects and Energy Consultants, it was concluded that no interior high efficiency (HE) lighting would be needed to meet Code compliance. Therefore, the use of high efficiency lighting (LED is one example) would be above and beyond code. The amount of energy needed in the interior of the building is typically higher than the amount of energy needed outdoors. Indoor HE lighting is 75-90% more efficient than standard lighting.

For example: a 10 watt LED bulb replaces a 60 watt standard bulb, which would be 83% more efficient. A typical 15 watt LED bulb has an equivalent rating of a 100 watt standard bulb. Outdoor HE lighting is 65-80% more efficient than standard lighting. For example: a 70 watt LED bulb replaces a 250 watt standard bulb, which would be 72% more efficient. If the developer installs 100% HE fixtures and bulbs, this would reduce the energy usage from lighting more than 65% as can be seen in the tables below. Therefore, to be conservative the lighting intensity in CalEEMod was adjusted 65% with the installation of 100% HE bulbs.

100% LED for smaller buildings (i.e., residential and small commercial uses)

	Standard Lights	HE Lights	Standard Wattage	HE Wattage	Energy Use (Standard)	Energy Use (HE)	Total Energy
Normal Lighting	60*	10	100	15	6,000	1500	6,150
100% HE Lighting	0	70	--	15	----	1,050	1,050
						Savings	5,000
						% Reduction	81%

*All indoor lighting is standard bulbs and half of the outdoor lighting is standard bulbs.

100% LED for larger buildings (i.e., commercial and industrial uses)

	Indoor Lights	Outdoor Lights	Indoor Wattage	Outdoor Wattage (Standard/HE)	Energy Use (Indoor)	Energy Use (Outdoor)	Total Energy
Normal Lighting	100	30	60	300/100	6,000	4,500/1,500	12,000
100% HE Lighting	0	30	10	0/100	1,000	0/3,000	4,000
						Savings	8,000
						% Reduction	67%

ATTACHMENT C

CALEEMOD 2016.3.2 (Existing Underutilized Site)

Sweetwater Springs (Partially Occupied Existing Use)

San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Strip Mall	44.74	1000sqft	10.00	44,740.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2020
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Approximatly 10 Acre Site

Construction Phase - No Construction

Off-road Equipment - No Construction

Trips and VMT - No Construction

Grading -

Architectural Coating - No Construction

Vehicle Trips - per traffic study

Woodstoves -

Area Coating - Rule 67 Paint

Energy Use - Historical Data for Energy

Water And Wastewater -

Solid Waste -

Sweetwater Springs (Partially Occupied Existing Use) - San Diego County, Annual

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	22,370.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	67,110.00	0.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaCoating	Area_EF_Nonresidential_Interior	250	100
tblAreaCoating	Area_Nonresidential_Exterior	22370	23550
tblAreaCoating	Area_Nonresidential_Interior	67110	70650
tblLandUse	LotAcreage	1.03	10.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblSolidWaste	SolidWasteGenerationRate	46.98	49.46
tblTripsAndVMT	WorkerTripNumber	3.00	0.00
tblVehicleTrips	ST_TR	42.04	40.00
tblVehicleTrips	SU_TR	20.43	40.00
tblVehicleTrips	WD_TR	44.32	40.00
tblWater	IndoorWaterUseRate	3,314,004.61	3,488,815.76
tblWater	OutdoorWaterUseRate	2,031,164.12	2,138,306.43

2.0 Emissions Summary

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					
2018	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
Maximum	**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**

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					
2018	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
Maximum	**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**

	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	N20	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)
		Highest		

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	0.1966	0.0000	4.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	8.0000e-004	8.0000e-004	0.0000	0.0000	8.5000e-004
Energy	5.8000e-004	5.2900e-003	4.4400e-003	3.0000e-005		4.0000e-004	4.0000e-004		4.0000e-004	4.0000e-004	0.0000	222.0047	222.0047	8.8100e-003	1.9100e-003	222.7932
Mobile	0.4733	1.8863	4.5922	0.0131	1.0387	0.0135	1.0523	0.2782	0.0127	0.2909	0.0000	1,203.9084	1,203.9084	0.0731	0.0000	1,205.7360
Waste						0.0000	0.0000		0.0000	0.0000	10.0399	0.0000	10.0399	0.5933	0.0000	24.8735
Water						0.0000	0.0000		0.0000	0.0000	1.1068	22.6101	23.7169	0.1146	2.8700e-003	27.4378
Total	**0.6704**	**1.8916**	**4.5971**	**0.0131**	**1.0387**	**0.0139**	**1.0527**	**0.2782**	**0.0131**	**0.2913**	**11.1468**	**1,448.5240**	**1,459.6708**	**0.7899**	**4.7800e-003**	**1,480.8414**

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	0.1966	0.0000	4.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	8.0000e-004	8.0000e-004	0.0000	0.0000	8.5000e-004
Energy	5.8000e-004	5.2900e-003	4.4400e-003	3.0000e-005		4.0000e-004	4.0000e-004		4.0000e-004	4.0000e-004	0.0000	222.0047	222.0047	8.8100e-003	1.9100e-003	222.7932
Mobile	0.4733	1.8863	4.5922	0.0131	1.0387	0.0135	1.0523	0.2782	0.0127	0.2909	0.0000	1,203.9084	1,203.9084	0.0731	0.0000	1,205.7360
Waste						0.0000	0.0000		0.0000	0.0000	10.0399	0.0000	10.0399	0.5933	0.0000	24.8735
Water						0.0000	0.0000		0.0000	0.0000	1.1068	22.6101	23.7169	0.1146	2.8700e-003	27.4378
Total	**0.6704**	**1.8916**	**4.5971**	**0.0131**	**1.0387**	**0.0139**	**1.0527**	**0.2782**	**0.0131**	**0.2913**	**11.1468**	**1,448.5240**	**1,459.6708**	**0.7899**	**4.7800e-003**	**1,480.8414**

	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	N20	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**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	4/13/2018	5/10/2018	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	0.00	78	0.48

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
Architectural Coating	1	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Architectural Coating - 2018

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	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	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
Total	**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**

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	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
Total	**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**

3.2 Architectural Coating - 2018

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	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	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
Total	**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**

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	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
Total	**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**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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	0.4733	1.8863	4.5922	0.0131	1.0387	0.0135	1.0523	0.2782	0.0127	0.2909	0.0000	1,203.9084	1,203.9084	0.0731	0.0000	1,205.7360
Unmitigated	0.4733	1.8863	4.5922	0.0131	1.0387	0.0135	1.0523	0.2782	0.0127	0.2909	0.0000	1,203.9084	1,203.9084	0.0731	0.0000	1,205.7360

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Strip Mall	1,789.60	1,789.60	1789.60	2,756,043	2,756,043
Total	1,789.60	1,789.60	1,789.60	2,756,043	2,756,043

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	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
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Strip Mall	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271

5.0 Energy Detail

Historical Energy Use: Y

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	216.2509	216.2509	8.7000e-003	1.8000e-003	217.0051
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	216.2509	216.2509	8.7000e-003	1.8000e-003	217.0051
NaturalGas Mitigated	5.8000e-004	5.2900e-003	4.4400e-003	3.0000e-005		4.0000e-004	4.0000e-004		4.0000e-004	4.0000e-004	0.0000	5.7539	5.7539	1.1000e-004	1.1000e-004	5.7881
NaturalGas Unmitigated	5.8000e-004	5.2900e-003	4.4400e-003	3.0000e-005		4.0000e-004	4.0000e-004		4.0000e-004	4.0000e-004	0.0000	5.7539	5.7539	1.1000e-004	1.1000e-004	5.7881

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					
Strip Mall	107823	5.8000e-004	5.2900e-003	4.4400e-003	3.0000e-005		4.0000e-004	4.0000e-004		4.0000e-004	4.0000e-004	0.0000	5.7539	5.7539	1.1000e-004	1.1000e-004	5.7881
Total		**5.8000e-004**	**5.2900e-003**	**4.4400e-003**	**3.0000e-005**		**4.0000e-004**	**4.0000e-004**		**4.0000e-004**	**4.0000e-004**	**0.0000**	**5.7539**	**5.7539**	**1.1000e-004**	**1.1000e-004**	**5.7881**

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					
Strip Mall	107823	5.8000e-004	5.2900e-003	4.4400e-003	3.0000e-005		4.0000e-004	4.0000e-004		4.0000e-004	4.0000e-004	0.0000	5.7539	5.7539	1.1000e-004	1.1000e-004	5.7881
Total		**5.8000e-004**	**5.2900e-003**	**4.4400e-003**	**3.0000e-005**		**4.0000e-004**	**4.0000e-004**		**4.0000e-004**	**4.0000e-004**	**0.0000**	**5.7539**	**5.7539**	**1.1000e-004**	**1.1000e-004**	**5.7881**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Strip Mall	661705	216.2509	8.7000e-003	1.8000e-003	217.0051
Total		**216.2509**	**8.7000e-003**	**1.8000e-003**	**217.0051**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Strip Mall	661705	216.2509	8.7000e-003	1.8000e-003	217.0051
Total		**216.2509**	**8.7000e-003**	**1.8000e-003**	**217.0051**

6.0 Area Detail

6.1 Mitigation Measures Area

	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	0.1966	0.0000	4.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	8.0000e-004	8.0000e-004	0.0000	0.0000	8.5000e-004
Unmitigated	0.1966	0.0000	4.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	8.0000e-004	8.0000e-004	0.0000	0.0000	8.5000e-004

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	0.0218					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1747					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.0000e-005	0.0000	4.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	8.0000e-004	8.0000e-004	0.0000	0.0000	8.5000e-004
Total	**0.1966**	**0.0000**	**4.1000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**8.0000e-004**	**8.0000e-004**	**0.0000**	**0.0000**	**8.5000e-004**

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	0.0218					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1747					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.0000e-005	0.0000	4.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	8.0000e-004	8.0000e-004	0.0000	0.0000	8.5000e-004
Total	**0.1966**	**0.0000**	**4.1000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**8.0000e-004**	**8.0000e-004**	**0.0000**	**0.0000**	**8.5000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	23.7169	0.1146	2.8700e-003	27.4378
Unmitigated	23.7169	0.1146	2.8700e-003	27.4378

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Strip Mall	3.48882 / 2.13831	23.7169	0.1146	2.8700e-003	27.4378
Total		**23.7169**	**0.1146**	**2.8700e-003**	**27.4378**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Strip Mall	3.48882 / 2.13831	23.7169	0.1146	2.8700e-003	27.4378
Total		**23.7169**	**0.1146**	**2.8700e-003**	**27.4378**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	10.0399	0.5933	0.0000	24.8735
Unmitigated	10.0399	0.5933	0.0000	24.8735

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Strip Mall	49.46	10.0399	0.5933	0.0000	24.8735
Total		**10.0399**	**0.5933**	**0.0000**	**24.8735**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Strip Mall	49.46	10.0399	0.5933	0.0000	24.8735
Total		**10.0399**	**0.5933**	**0.0000**	**24.8735**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

ATTACHMENT D

CALEEMOD 2016.3.2 (Proposed Project Action)

Sweetwater Springs Residential Development

San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Condo/Townhouse	92.00	Dwelling Unit	10.00	92,000.00	263

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2022
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	511.99	**CH4 Intensity (lb/MWhr)**	0.0206	**N2O Intensity (lb/MWhr)**	0.0043

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Fully Operational 2022 RPS corrected (511.99,.0206,.0043

Land Use - Site is 10 acres

Construction Phase - Proposed CS

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - ce

Off-road Equipment - ce

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - ce

Trips and VMT -

Demolition -

Grading - 10 acres

Architectural Coating - Rule 67 Compliant

Vehicle Trips - 8 trips per du...trip distance default

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Woodstoves - Natural Gas Hearths

Area Coating - rule 67 compliant paint

Energy Use - Lighting Intensity was reduced 65% for 100% LED

Land Use Change -

Sequestration -

Construction Off-road Equipment Mitigation - Tier IV equipment

Mobile Land Use Mitigation -

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Off-road Equipment -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	100.00
tblAreaCoating	Area_EF_Residential_Exterior	250	150
tblAreaCoating	Area_EF_Residential_Interior	250	150
tblConstEquipMitigation	DPF	No Change	Level 3

tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
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tblConstEquipMitigation	Tier	No Change	Tier 4 Final
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tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	20.00	311.00
tblConstructionPhase	NumDays	230.00	360.00
tblConstructionPhase	NumDays	230.00	20.00
tblConstructionPhase	NumDays	20.00	60.00
tblEnergyUse	LightingElect	1,001.10	350.38
tblFireplaces	NumberGas	50.60	0.00
tblFireplaces	NumberNoFireplace	9.20	92.00
tblFireplaces	NumberWood	32.20	0.00
tblFleetMix	HHD	0.02	0.02
tblFleetMix	LDA	0.60	0.60
tblFleetMix	LDT1	0.04	0.04
tblFleetMix	LDT2	0.18	0.18
tblFleetMix	LHD1	0.02	0.01

tblFleetMix	LHD2	5.4790e-003	5.4350e-003
tblFleetMix	MCY	6.0160e-003	5.9380e-003
tblFleetMix	MDV	0.11	0.10
tblFleetMix	MH	1.1220e-003	1.0560e-003
tblFleetMix	MHD	0.02	0.02
tblFleetMix	OBUS	1.9260e-003	1.9340e-003
tblFleetMix	SBUS	7.5300e-004	7.5700e-004
tblFleetMix	UBUS	1.9320e-003	1.8880e-003
tblGrading	AcresOfGrading	50.00	10.00
tblLandUse	LotAcreage	5.75	10.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Trenching
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.0206
tblProjectCharacteristics	CO2IntensityFactor	720.49	511.99
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.0043
tblSequestration	NumberOfNewTrees	0.00	184.00
tblVehicleTrips	ST_TR	5.67	8.00
tblVehicleTrips	SU_TR	4.84	8.00
tblVehicleTrips	WD_TR	5.81	8.00
tblWoodstoves	NumberCatalytic	4.60	0.00
tblWoodstoves	NumberNoncatalytic	4.60	0.00

2.0 Emissions Summary

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					
2020	0.2097	2.0293	1.5524	2.7900e-003	0.0868	0.1024	0.1893	0.0394	0.0953	0.1347	0.0000	245.0480	245.0480	0.0637	0.0000	246.6415
2021	0.7553	2.1045	2.4836	4.4500e-003	0.0940	0.1166	0.2106	0.0252	0.1108	0.1360	0.0000	389.3185	389.3185	0.0619	0.0000	390.8658
2022	0.1425	0.3891	0.4843	9.0000e-004	0.0208	0.0195	0.0403	5.5700e-003	0.0185	0.0241	0.0000	79.3406	79.3406	0.0125	0.0000	79.6531
Maximum	**0.7553**	**2.1045**	**2.4836**	**4.4500e-003**	**0.0940**	**0.1166**	**0.2106**	**0.0394**	**0.1108**	**0.1360**	**0.0000**	**389.3185**	**389.3185**	**0.0637**	**0.0000**	**390.8658**

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					
2020	0.0405	0.1872	1.6325	2.7900e-003	0.0868	8.8000e-004	0.0877	0.0394	8.6000e-004	0.0402	0.0000	245.0477	245.0477	0.0637	0.0000	246.6413
2021	0.5630	0.4396	2.5331	4.4500e-003	0.0940	1.6200e-003	0.0956	0.0252	1.5500e-003	0.0267	0.0000	389.3182	389.3182	0.0619	0.0000	390.8654
2022	0.1089	0.0887	0.5001	9.0000e-004	0.0208	3.3000e-004	0.0211	5.5700e-003	3.2000e-004	5.8800e-003	0.0000	79.3406	79.3406	0.0125	0.0000	79.6531
Maximum	**0.5630**	**0.4396**	**2.5331**	**4.4500e-003**	**0.0940**	**1.6200e-003**	**0.0956**	**0.0394**	**1.5500e-003**	**0.0402**	**0.0000**	**389.3182**	**389.3182**	**0.0637**	**0.0000**	**390.8654**

Sweetwater Springs Residential Development - San Diego County, Annual

	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	N20	CO2e
Percent Reduction	**35.68**	**84.18**	**-3.22**	**0.00**	**0.00**	**98.81**	**53.55**	**0.00**	**98.78**	**75.28**	**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)
9	**4-29-2020**	**7-28-2020**	1.0460	0.0732
10	**7-29-2020**	**10-28-2020**	0.7757	0.0664
11	**10-29-2020**	**1-28-2021**	0.6853	0.1826
12	**1-29-2021**	**4-28-2021**	0.8929	0.3028
13	**4-29-2021**	**7-28-2021**	0.9004	0.3038
14	**7-29-2021**	**10-28-2021**	0.9114	0.3082
15	**10-29-2021**	**1-28-2022**	0.9470	0.3263
16	**1-29-2022**	**4-28-2022**	0.3823	0.1391
		Highest	1.0460	0.3263

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	0.4663	7.8900e-003	0.6839	4.0000e-005		3.7800e-003	3.7800e-003		3.7800e-003	3.7800e-003	0.0000	1.1159	1.1159	1.0800e-003	0.0000	1.1428
Energy	7.1400e-003	0.0610	0.0260	3.9000e-004		4.9300e-003	4.9300e-003		4.9300e-003	4.9300e-003	0.0000	164.0356	164.0356	5.1100e-003	2.0800e-003	164.7830
Mobile	0.2087	0.9439	2.5264	8.9400e-003	0.7919	7.4400e-003	0.7994	0.2121	6.9500e-003	0.2190	0.0000	824.6600	824.6600	0.0427	0.0000	825.7273
Waste						0.0000	0.0000		0.0000	0.0000	8.5906	0.0000	8.5906	0.5077	0.0000	21.2828
Water						0.0000	0.0000		0.0000	0.0000	1.9017	27.8761	29.7778	0.1964	4.8500e-003	36.1329
Total	**0.6822**	**1.0128**	**3.2362**	**9.3700e-003**	**0.7919**	**0.0162**	**0.8081**	**0.2121**	**0.0157**	**0.2277**	**10.4923**	**1,017.6876**	**1,028.1798**	**0.7530**	**6.9300e-003**	**1,049.0688**

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	0.4663	7.8900e-003	0.6839	4.0000e-005		3.7800e-003	3.7800e-003		3.7800e-003	3.7800e-003	0.0000	1.1159	1.1159	1.0800e-003	0.0000	1.1428
Energy	7.1400e-003	0.0610	0.0260	3.9000e-004		4.9300e-003	4.9300e-003		4.9300e-003	4.9300e-003	0.0000	161.2236	161.2236	5.0000e-003	2.0600e-003	161.9611
Mobile	0.2022	0.9040	2.3837	8.3200e-003	0.7341	6.9500e-003	0.7411	0.1966	6.4900e-003	0.2031	0.0000	768.0084	768.0084	0.0402	0.0000	769.0132
Waste						0.0000	0.0000		0.0000	0.0000	6.0134	0.0000	6.0134	0.3554	0.0000	14.8980
Water						0.0000	0.0000		0.0000	0.0000	1.9017	25.9261	27.8277	0.1964	4.8300e-003	34.1761
Total	**0.6756**	**0.9728**	**3.0935**	**8.7500e-003**	**0.7341**	**0.0157**	**0.7498**	**0.1966**	**0.0152**	**0.2118**	**7.9151**	**956.2739**	**964.1889**	**0.5980**	**6.8900e-003**	**981.1910**

	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	N20	CO2e
Percent Reduction	**0.96**	**3.95**	**4.41**	**6.62**	**7.30**	**3.03**	**7.22**	**7.30**	**2.94**	**7.00**	**24.56**	**6.03**	**6.22**	**20.58**	**0.58**	**6.47**

2.3 Vegetation

Vegetation

	CO2e
Category	MT
New Trees	135.0560
Vegetation Land Change	0.0000
Total	**135.0560**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	5/10/2020	7/31/2020	5	60	
2	Grading	Grading	8/1/2020	8/28/2020	5	20	
3	Trenching	Trenching	8/29/2020	9/25/2020	5	20	
4	Building Construction	Building Construction	10/24/2020	3/11/2022	5	360	
5	Building Construction Crane	Building Construction	12/21/2021	1/17/2022	5	20	
6	Paving	Paving	9/26/2020	10/23/2020	5	20	
7	Architectural Coating	Architectural Coating	1/1/2021	3/11/2022	5	311	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 0

Residential Indoor: 186,300; Residential Outdoor: 62,100; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Trenching	Excavators	1	6.00	158	0.38
Trenching	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Building Construction Crane	Cranes	1	7.00	231	0.29

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
Demolition	6	15.00	0.00	1.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	3	8.00	0.00	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
Building Construction	8	66.00	10.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction Crane	1	66.00	10.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

3.2 Demolition - 2020

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					6.0000e-005	0.0000	6.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0994	0.9960	0.6526	1.1600e-003		0.0498	0.0498		0.0463	0.0463	0.0000	101.9958	101.9958	0.0288	0.0000	102.7156
Total	**0.0994**	**0.9960**	**0.6526**	**1.1600e-003**	**6.0000e-005**	**0.0498**	**0.0498**	**1.0000e-005**	**0.0463**	**0.0463**	**0.0000**	**101.9958**	**101.9958**	**0.0288**	**0.0000**	**102.7156**

3.2 Demolition - 2020

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	1.4000e-004	3.0000e-005	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0386	0.0386	0.0000	0.0000	0.0387
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	1.6600e-003	1.2300e-003	0.0120	4.0000e-005	3.6100e-003	3.0000e-005	3.6300e-003	9.6000e-004	2.0000e-005	9.8000e-004	0.0000	3.2619	3.2619	1.0000e-004	0.0000	3.2644
Total	**1.6600e-003**	**1.3700e-003**	**0.0121**	**4.0000e-005**	**3.6200e-003**	**3.0000e-005**	**3.6400e-003**	**9.6000e-004**	**2.0000e-005**	**9.8000e-004**	**0.0000**	**3.3005**	**3.3005**	**1.0000e-004**	**0.0000**	**3.3030**

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					6.0000e-005	0.0000	6.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0139	0.0601	0.6984	1.1600e-003		2.8000e-004	2.8000e-004		2.8000e-004	2.8000e-004	0.0000	101.9957	101.9957	0.0288	0.0000	102.7155
Total	**0.0139**	**0.0601**	**0.6984**	**1.1600e-003**	**6.0000e-005**	**2.8000e-004**	**3.4000e-004**	**1.0000e-005**	**2.8000e-004**	**2.9000e-004**	**0.0000**	**101.9957**	**101.9957**	**0.0288**	**0.0000**	**102.7155**

3.2 Demolition - 2020

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	1.4000e-004	3.0000e-005	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0386	0.0386	0.0000	0.0000	0.0387
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	1.6600e-003	1.2300e-003	0.0120	4.0000e-005	3.6100e-003	3.0000e-005	3.6300e-003	9.6000e-004	2.0000e-005	9.8000e-004	0.0000	3.2619	3.2619	1.0000e-004	0.0000	3.2644
Total	**1.6600e-003**	**1.3700e-003**	**0.0121**	**4.0000e-005**	**3.6200e-003**	**3.0000e-005**	**3.6400e-003**	**9.6000e-004**	**2.0000e-005**	**9.8000e-004**	**0.0000**	**3.3005**	**3.3005**	**1.0000e-004**	**0.0000**	**3.3030**

3.3 Grading - 2020

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					0.0655	0.0000	0.0655	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0396	0.4537	0.2542	5.2000e-004		0.0194	0.0194		0.0179	0.0179	0.0000	45.4103	45.4103	0.0147	0.0000	45.7775
Total	**0.0396**	**0.4537**	**0.2542**	**5.2000e-004**	**0.0655**	**0.0194**	**0.0849**	**0.0337**	**0.0179**	**0.0515**	**0.0000**	**45.4103**	**45.4103**	**0.0147**	**0.0000**	**45.7775**

3.3 Grading - 2020

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	5.5000e-004	4.1000e-004	4.0100e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.0873	1.0873	3.0000e-005	0.0000	1.0881
Total	**5.5000e-004**	**4.1000e-004**	**4.0100e-003**	**1.0000e-005**	**1.2000e-003**	**1.0000e-005**	**1.2100e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**1.0873**	**1.0873**	**3.0000e-005**	**0.0000**	**1.0881**

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					0.0655	0.0000	0.0655	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.3400e-003	0.0275	0.2516	5.2000e-004		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	45.4102	45.4102	0.0147	0.0000	45.7774
Total	**6.3400e-003**	**0.0275**	**0.2516**	**5.2000e-004**	**0.0655**	**1.3000e-004**	**0.0657**	**0.0337**	**1.3000e-004**	**0.0338**	**0.0000**	**45.4102**	**45.4102**	**0.0147**	**0.0000**	**45.7774**

3.3 Grading - 2020

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	5.5000e-004	4.1000e-004	4.0100e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.0873	1.0873	3.0000e-005	0.0000	1.0881
Total	**5.5000e-004**	**4.1000e-004**	**4.0100e-003**	**1.0000e-005**	**1.2000e-003**	**1.0000e-005**	**1.2100e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**1.0873**	**1.0873**	**3.0000e-005**	**0.0000**	**1.0881**

3.4 Trenching - 2020

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	4.9800e-003	0.0497	0.0587	9.0000e-005		2.8700e-003	2.8700e-003		2.6400e-003	2.6400e-003	0.0000	7.4955	7.4955	2.4200e-003	0.0000	7.5561
Total	**4.9800e-003**	**0.0497**	**0.0587**	**9.0000e-005**		**2.8700e-003**	**2.8700e-003**		**2.6400e-003**	**2.6400e-003**	**0.0000**	**7.4955**	**7.4955**	**2.4200e-003**	**0.0000**	**7.5561**

3.4 Trenching - 2020

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	2.9000e-004	2.2000e-004	2.1400e-003	1.0000e-005	6.4000e-004	0.0000	6.5000e-004	1.7000e-004	0.0000	1.7000e-004	0.0000	0.5799	0.5799	2.0000e-005	0.0000	0.5803
Total	**2.9000e-004**	**2.2000e-004**	**2.1400e-003**	**1.0000e-005**	**6.4000e-004**	**0.0000**	**6.5000e-004**	**1.7000e-004**	**0.0000**	**1.7000e-004**	**0.0000**	**0.5799**	**0.5799**	**2.0000e-005**	**0.0000**	**0.5803**

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	1.0500e-003	4.5300e-003	0.0645	9.0000e-005		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	7.4955	7.4955	2.4200e-003	0.0000	7.5561
Total	**1.0500e-003**	**4.5300e-003**	**0.0645**	**9.0000e-005**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**	**0.0000**	**7.4955**	**7.4955**	**2.4200e-003**	**0.0000**	**7.5561**

3.4 Trenching - 2020

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	2.9000e-004	2.2000e-004	2.1400e-003	1.0000e-005	6.4000e-004	0.0000	6.5000e-004	1.7000e-004	0.0000	1.7000e-004	0.0000	0.5799	0.5799	2.0000e-005	0.0000	0.5803
Total	**2.9000e-004**	**2.2000e-004**	**2.1400e-003**	**1.0000e-005**	**6.4000e-004**	**0.0000**	**6.5000e-004**	**1.7000e-004**	**0.0000**	**1.7000e-004**	**0.0000**	**0.5799**	**0.5799**	**2.0000e-005**	**0.0000**	**0.5803**

3.5 Building Construction - 2020

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	0.0422	0.3545	0.3674	5.4000e-004		0.0226	0.0226		0.0214	0.0214	0.0000	45.8772	45.8772	0.0103	0.0000	46.1355
Total	**0.0422**	**0.3545**	**0.3674**	**5.4000e-004**		**0.0226**	**0.0226**		**0.0214**	**0.0214**	**0.0000**	**45.8772**	**45.8772**	**0.0103**	**0.0000**	**46.1355**

3.5 Building Construction - 2020

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	9.3000e-004	0.0279	7.4200e-003	7.0000e-005	1.6300e-003	1.4000e-004	1.7600e-003	4.7000e-004	1.3000e-004	6.0000e-004	0.0000	6.4646	6.4646	5.0000e-004	0.0000	6.4770
Worker	5.9600e-003	4.4100e-003	0.0433	1.3000e-004	0.0130	9.0000e-005	0.0131	3.4500e-003	9.0000e-005	3.5300e-003	0.0000	11.7212	11.7212	3.5000e-004	0.0000	11.7300
Total	**6.8900e-003**	**0.0323**	**0.0507**	**2.0000e-004**	**0.0146**	**2.3000e-004**	**0.0148**	**3.9200e-003**	**2.2000e-004**	**4.1300e-003**	**0.0000**	**18.1859**	**18.1859**	**8.5000e-004**	**0.0000**	**18.2070**

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	6.5100e-003	0.0482	0.3721	5.4000e-004		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004	0.0000	45.8772	45.8772	0.0103	0.0000	46.1354
Total	**6.5100e-003**	**0.0482**	**0.3721**	**5.4000e-004**		**1.2000e-004**	**1.2000e-004**		**1.2000e-004**	**1.2000e-004**	**0.0000**	**45.8772**	**45.8772**	**0.0103**	**0.0000**	**46.1354**

3.5 Building Construction - 2020

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	9.3000e-004	0.0279	7.4200e-003	7.0000e-005	1.6300e-003	1.4000e-004	1.7600e-003	4.7000e-004	1.3000e-004	6.0000e-004	0.0000	6.4646	6.4646	5.0000e-004	0.0000	6.4770
Worker	5.9600e-003	4.4100e-003	0.0433	1.3000e-004	0.0130	9.0000e-005	0.0131	3.4500e-003	9.0000e-005	3.5300e-003	0.0000	11.7212	11.7212	3.5000e-004	0.0000	11.7300
Total	**6.8900e-003**	**0.0323**	**0.0507**	**2.0000e-004**	**0.0146**	**2.3000e-004**	**0.0148**	**3.9200e-003**	**2.2000e-004**	**4.1300e-003**	**0.0000**	**18.1859**	**18.1859**	**8.5000e-004**	**0.0000**	**18.2070**

3.5 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	0.2009	1.7212	1.9367	2.8500e-003		0.1026	0.1026		0.0969	0.0969	0.0000	244.4074	244.4074	0.0542	0.0000	245.7626
Total	**0.2009**	**1.7212**	**1.9367**	**2.8500e-003**		**0.1026**	**0.1026**		**0.0969**	**0.0969**	**0.0000**	**244.4074**	**244.4074**	**0.0542**	**0.0000**	**245.7626**

3.5 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	4.0400e-003	0.1341	0.0358	3.5000e-004	8.6600e-003	2.8000e-004	8.9500e-003	2.5000e-003	2.7000e-004	2.7700e-003	0.0000	34.1179	34.1179	2.5300e-003	0.0000	34.1812
Worker	0.0299	0.0214	0.2152	6.7000e-004	0.0691	4.9000e-004	0.0696	0.0184	4.5000e-004	0.0188	0.0000	60.3360	60.3360	1.7300e-003	0.0000	60.3793
Total	**0.0340**	**0.1555**	**0.2509**	**1.0200e-003**	**0.0777**	**7.7000e-004**	**0.0785**	**0.0209**	**7.2000e-004**	**0.0216**	**0.0000**	**94.4539**	**94.4539**	**4.2600e-003**	**0.0000**	**94.5605**

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	0.0347	0.2566	1.9818	2.8500e-003		6.4000e-004	6.4000e-004		6.4000e-004	6.4000e-004	0.0000	244.4071	244.4071	0.0542	0.0000	245.7623
Total	**0.0347**	**0.2566**	**1.9818**	**2.8500e-003**		**6.4000e-004**	**6.4000e-004**		**6.4000e-004**	**6.4000e-004**	**0.0000**	**244.4071**	**244.4071**	**0.0542**	**0.0000**	**245.7623**

3.5 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	4.0400e-003	0.1341	0.0358	3.5000e-004	8.6600e-003	2.8000e-004	8.9500e-003	2.5000e-003	2.7000e-004	2.7700e-003	0.0000	34.1179	34.1179	2.5300e-003	0.0000	34.1812
Worker	0.0299	0.0214	0.2152	6.7000e-004	0.0691	4.9000e-004	0.0696	0.0184	4.5000e-004	0.0188	0.0000	60.3360	60.3360	1.7300e-003	0.0000	60.3793
Total	**0.0340**	**0.1555**	**0.2509**	**1.0200e-003**	**0.0777**	**7.7000e-004**	**0.0785**	**0.0209**	**7.2000e-004**	**0.0216**	**0.0000**	**94.4539**	**94.4539**	**4.2600e-003**	**0.0000**	**94.5605**

3.5 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	0.0345	0.2989	0.3677	5.5000e-004		0.0164	0.0164		0.0155	0.0155	0.0000	46.8415	46.8415	0.0103	0.0000	47.0988
Total	**0.0345**	**0.2989**	**0.3677**	**5.5000e-004**		**0.0164**	**0.0164**		**0.0155**	**0.0155**	**0.0000**	**46.8415**	**46.8415**	**0.0103**	**0.0000**	**47.0988**

3.5 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	7.2000e-004	0.0243	6.4900e-003	7.0000e-005	1.6600e-003	5.0000e-005	1.7100e-003	4.8000e-004	4.0000e-005	5.2000e-004	0.0000	6.4741	6.4741	4.7000e-004	0.0000	6.4859
Worker	5.4300e-003	3.7300e-003	0.0383	1.2000e-004	0.0132	9.0000e-005	0.0133	3.5200e-003	8.0000e-005	3.6000e-003	0.0000	11.1349	11.1349	3.0000e-004	0.0000	11.1425
Total	**6.1500e-003**	**0.0280**	**0.0448**	**1.9000e-004**	**0.0149**	**1.4000e-004**	**0.0150**	**4.0000e-003**	**1.2000e-004**	**4.1200e-003**	**0.0000**	**17.6090**	**17.6090**	**7.7000e-004**	**0.0000**	**17.6284**

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	6.6400e-003	0.0492	0.3797	5.5000e-004		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004	0.0000	46.8415	46.8415	0.0103	0.0000	47.0988
Total	**6.6400e-003**	**0.0492**	**0.3797**	**5.5000e-004**		**1.2000e-004**	**1.2000e-004**		**1.2000e-004**	**1.2000e-004**	**0.0000**	**46.8415**	**46.8415**	**0.0103**	**0.0000**	**47.0988**

3.5 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	7.2000e-004	0.0243	6.4900e-003	7.0000e-005	1.6600e-003	5.0000e-005	1.7100e-003	4.8000e-004	4.0000e-005	5.2000e-004	0.0000	6.4741	6.4741	4.7000e-004	0.0000	6.4859
Worker	5.4300e-003	3.7300e-003	0.0383	1.2000e-004	0.0132	9.0000e-005	0.0133	3.5200e-003	8.0000e-005	3.6000e-003	0.0000	11.1349	11.1349	3.0000e-004	0.0000	11.1425
Total	**6.1500e-003**	**0.0280**	**0.0448**	**1.9000e-004**	**0.0149**	**1.4000e-004**	**0.0150**	**4.0000e-003**	**1.2000e-004**	**4.1200e-003**	**0.0000**	**17.6090**	**17.6090**	**7.7000e-004**	**0.0000**	**17.6284**

3.6 Building Construction Crane - 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	1.6300e-003	0.0191	7.8100e-003	2.0000e-005		7.8000e-004	7.8000e-004		7.1000e-004	7.1000e-004	0.0000	1.9958	1.9958	6.5000e-004	0.0000	2.0120
Total	**1.6300e-003**	**0.0191**	**7.8100e-003**	**2.0000e-005**		**7.8000e-004**	**7.8000e-004**		**7.1000e-004**	**7.1000e-004**	**0.0000**	**1.9958**	**1.9958**	**6.5000e-004**	**0.0000**	**2.0120**

3.6 Building Construction Crane - 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	1.4000e-004	4.6200e-003	1.2300e-003	1.0000e-005	3.0000e-004	1.0000e-005	3.1000e-004	9.0000e-005	1.0000e-005	1.0000e-004	0.0000	1.1765	1.1765	9.0000e-005	0.0000	1.1787
Worker	1.0300e-003	7.4000e-004	7.4200e-003	2.0000e-005	2.3800e-003	2.0000e-005	2.4000e-003	6.3000e-004	2.0000e-005	6.5000e-004	0.0000	2.0806	2.0806	6.0000e-005	0.0000	2.0820
Total	**1.1700e-003**	**5.3600e-003**	**8.6500e-003**	**3.0000e-005**	**2.6800e-003**	**3.0000e-005**	**2.7100e-003**	**7.2000e-004**	**3.0000e-005**	**7.5000e-004**	**0.0000**	**3.2570**	**3.2570**	**1.5000e-004**	**0.0000**	**3.2607**

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	2.8000e-004	1.2100e-003	0.0102	2.0000e-005		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	1.9958	1.9958	6.5000e-004	0.0000	2.0120
Total	**2.8000e-004**	**1.2100e-003**	**0.0102**	**2.0000e-005**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**1.9958**	**1.9958**	**6.5000e-004**	**0.0000**	**2.0120**

3.6 Building Construction Crane - 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	1.4000e-004	4.6200e-003	1.2300e-003	1.0000e-005	3.0000e-004	1.0000e-005	3.1000e-004	9.0000e-005	1.0000e-005	1.0000e-004	0.0000	1.1765	1.1765	9.0000e-005	0.0000	1.1787
Worker	1.0300e-003	7.4000e-004	7.4200e-003	2.0000e-005	2.3800e-003	2.0000e-005	2.4000e-003	6.3000e-004	2.0000e-005	6.5000e-004	0.0000	2.0806	2.0806	6.0000e-005	0.0000	2.0820
Total	**1.1700e-003**	**5.3600e-003**	**8.6500e-003**	**3.0000e-005**	**2.6800e-003**	**3.0000e-005**	**2.7100e-003**	**7.2000e-004**	**3.0000e-005**	**7.5000e-004**	**0.0000**	**3.2570**	**3.2570**	**1.5000e-004**	**0.0000**	**3.2607**

3.6 Building Construction Crane - 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	1.7900e-003	0.0201	9.1100e-003	3.0000e-005		8.4000e-004	8.4000e-004		7.7000e-004	7.7000e-004	0.0000	2.4398	2.4398	7.9000e-004	0.0000	2.4595
Total	**1.7900e-003**	**0.0201**	**9.1100e-003**	**3.0000e-005**		**8.4000e-004**	**8.4000e-004**		**7.7000e-004**	**7.7000e-004**	**0.0000**	**2.4398**	**2.4398**	**7.9000e-004**	**0.0000**	**2.4595**

3.6 Building Construction Crane - 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	1.6000e-004	5.3400e-003	1.4300e-003	1.0000e-005	3.7000e-004	1.0000e-005	3.8000e-004	1.1000e-004	1.0000e-005	1.2000e-004	0.0000	1.4243	1.4243	1.0000e-004	0.0000	1.4269
Worker	1.1900e-003	8.2000e-004	8.4200e-003	3.0000e-005	2.9100e-003	2.0000e-005	2.9300e-003	7.7000e-004	2.0000e-005	7.9000e-004	0.0000	2.4497	2.4497	7.0000e-005	0.0000	2.4514
Total	**1.3500e-003**	**6.1600e-003**	**9.8500e-003**	**4.0000e-005**	**3.2800e-003**	**3.0000e-005**	**3.3100e-003**	**8.8000e-004**	**3.0000e-005**	**9.1000e-004**	**0.0000**	**3.8740**	**3.8740**	**1.7000e-004**	**0.0000**	**3.8782**

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	3.4000e-004	1.4800e-003	0.0125	3.0000e-005		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.4398	2.4398	7.9000e-004	0.0000	2.4595
Total	**3.4000e-004**	**1.4800e-003**	**0.0125**	**3.0000e-005**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**2.4398**	**2.4398**	**7.9000e-004**	**0.0000**	**2.4595**

3.6 Building Construction Crane - 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	1.6000e-004	5.3400e-003	1.4300e-003	1.0000e-005	3.7000e-004	1.0000e-005	3.8000e-004	1.1000e-004	1.0000e-005	1.2000e-004	0.0000	1.4243	1.4243	1.0000e-004	0.0000	1.4269
Worker	1.1900e-003	8.2000e-004	8.4200e-003	3.0000e-005	2.9100e-003	2.0000e-005	2.9300e-003	7.7000e-004	2.0000e-005	7.9000e-004	0.0000	2.4497	2.4497	7.0000e-005	0.0000	2.4514
Total	**1.3500e-003**	**6.1600e-003**	**9.8500e-003**	**4.0000e-005**	**3.2800e-003**	**3.0000e-005**	**3.3100e-003**	**8.8000e-004**	**3.0000e-005**	**9.1000e-004**	**0.0000**	**3.8740**	**3.8740**	**1.7000e-004**	**0.0000**	**3.8782**

3.7 Paving - 2020

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	0.0136	0.1407	0.1465	2.3000e-004		7.5300e-003	7.5300e-003		6.9300e-003	6.9300e-003	0.0000	20.0282	20.0282	6.4800e-003	0.0000	20.1902
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0136**	**0.1407**	**0.1465**	**2.3000e-004**		**7.5300e-003**	**7.5300e-003**		**6.9300e-003**	**6.9300e-003**	**0.0000**	**20.0282**	**20.0282**	**6.4800e-003**	**0.0000**	**20.1902**

3.7 Paving - 2020

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	5.5000e-004	4.1000e-004	4.0100e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.0873	1.0873	3.0000e-005	0.0000	1.0881
Total	**5.5000e-004**	**4.1000e-004**	**4.0100e-003**	**1.0000e-005**	**1.2000e-003**	**1.0000e-005**	**1.2100e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**1.0873**	**1.0873**	**3.0000e-005**	**0.0000**	**1.0881**

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	2.8000e-003	0.0122	0.1730	2.3000e-004		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	20.0282	20.0282	6.4800e-003	0.0000	20.1901
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.8000e-003**	**0.0122**	**0.1730**	**2.3000e-004**		**6.0000e-005**	**6.0000e-005**		**6.0000e-005**	**6.0000e-005**	**0.0000**	**20.0282**	**20.0282**	**6.4800e-003**	**0.0000**	**20.1901**

3.7 Paving - 2020

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	5.5000e-004	4.1000e-004	4.0100e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.0873	1.0873	3.0000e-005	0.0000	1.0881
Total	**5.5000e-004**	**4.1000e-004**	**4.0100e-003**	**1.0000e-005**	**1.2000e-003**	**1.0000e-005**	**1.2100e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**1.0873**	**1.0873**	**3.0000e-005**	**0.0000**	**1.0881**

3.8 Architectural Coating - 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					
Archit. Coating	0.4831					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0286	0.1993	0.2372	3.9000e-004		0.0123	0.0123		0.0123	0.0123	0.0000	33.3200	33.3200	2.2900e-003	0.0000	33.3771
Total	**0.5117**	**0.1993**	**0.2372**	**3.9000e-004**		**0.0123**	**0.0123**		**0.0123**	**0.0123**	**0.0000**	**33.3200**	**33.3200**	**2.2900e-003**	**0.0000**	**33.3771**

3.8 Architectural Coating - 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	5.9000e-003	4.2100e-003	0.0424	1.3000e-004	0.0136	1.0000e-004	0.0137	3.6200e-003	9.0000e-005	3.7000e-003	0.0000	11.8844	11.8844	3.4000e-004	0.0000	11.8929
Total	**5.9000e-003**	**4.2100e-003**	**0.0424**	**1.3000e-004**	**0.0136**	**1.0000e-004**	**0.0137**	**3.6200e-003**	**9.0000e-005**	**3.7000e-003**	**0.0000**	**11.8844**	**11.8844**	**3.4000e-004**	**0.0000**	**11.8929**

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	0.4831					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.8800e-003	0.0168	0.2391	3.9000e-004		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	33.3199	33.3199	2.2900e-003	0.0000	33.3771
Total	**0.4870**	**0.0168**	**0.2391**	**3.9000e-004**		**8.0000e-005**	**8.0000e-005**		**8.0000e-005**	**8.0000e-005**	**0.0000**	**33.3199**	**33.3199**	**2.2900e-003**	**0.0000**	**33.3771**

3.8 Architectural Coating - 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	5.9000e-003	4.2100e-003	0.0424	1.3000e-004	0.0136	1.0000e-004	0.0137	3.6200e-003	9.0000e-005	3.7000e-003	0.0000	11.8844	11.8844	3.4000e-004	0.0000	11.8929
Total	**5.9000e-003**	**4.2100e-003**	**0.0424**	**1.3000e-004**	**0.0136**	**1.0000e-004**	**0.0137**	**3.6200e-003**	**9.0000e-005**	**3.7000e-003**	**0.0000**	**11.8844**	**11.8844**	**3.4000e-004**	**0.0000**	**11.8929**

3.8 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	0.0926					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.1100e-003	0.0352	0.0453	7.0000e-005		2.0400e-003	2.0400e-003		2.0400e-003	2.0400e-003	0.0000	6.3831	6.3831	4.2000e-004	0.0000	6.3935
Total	**0.0977**	**0.0352**	**0.0453**	**7.0000e-005**		**2.0400e-003**	**2.0400e-003**		**2.0400e-003**	**2.0400e-003**	**0.0000**	**6.3831**	**6.3831**	**4.2000e-004**	**0.0000**	**6.3935**

3.8 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	1.0700e-003	7.3000e-004	7.5400e-003	2.0000e-005	2.6100e-003	2.0000e-005	2.6200e-003	6.9000e-004	2.0000e-005	7.1000e-004	0.0000	2.1932	2.1932	6.0000e-005	0.0000	2.1947
Total	**1.0700e-003**	**7.3000e-004**	**7.5400e-003**	**2.0000e-005**	**2.6100e-003**	**2.0000e-005**	**2.6200e-003**	**6.9000e-004**	**2.0000e-005**	**7.1000e-004**	**0.0000**	**2.1932**	**2.1932**	**6.0000e-005**	**0.0000**	**2.1947**

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	0.0926					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.4000e-004	3.2200e-003	0.0458	7.0000e-005		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.3831	6.3831	4.2000e-004	0.0000	6.3935
Total	**0.0933**	**3.2200e-003**	**0.0458**	**7.0000e-005**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**6.3831**	**6.3831**	**4.2000e-004**	**0.0000**	**6.3935**

3.8 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	1.0700e-003	7.3000e-004	7.5400e-003	2.0000e-005	2.6100e-003	2.0000e-005	2.6200e-003	6.9000e-004	2.0000e-005	7.1000e-004	0.0000	2.1932	2.1932	6.0000e-005	0.0000	2.1947
Total	**1.0700e-003**	**7.3000e-004**	**7.5400e-003**	**2.0000e-005**	**2.6100e-003**	**2.0000e-005**	**2.6200e-003**	**6.9000e-004**	**2.0000e-005**	**7.1000e-004**	**0.0000**	**2.1932**	**2.1932**	**6.0000e-005**	**0.0000**	**2.1947**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Improve Pedestrian Network

	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	0.2022	0.9040	2.3837	8.3200e-003	0.7341	6.9500e-003	0.7411	0.1966	6.4900e-003	0.2031	0.0000	768.0084	768.0084	0.0402	0.0000	769.0132
Unmitigated	0.2087	0.9439	2.5264	8.9400e-003	0.7919	7.4400e-003	0.7994	0.2121	6.9500e-003	0.2190	0.0000	824.6600	824.6600	0.0427	0.0000	825.7273

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Condo/Townhouse	736.00	736.00	736.00	2,101,503	1,948,065
Total	736.00	736.00	736.00	2,101,503	1,948,065

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	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
Condo/Townhouse	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Condo/Townhouse	0.602700	0.040134	0.179939	0.104242	0.014985	0.005435	0.016642	0.024350	0.001934	0.001888	0.005938	0.000757	0.001056

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install Energy Efficient Appliances

	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	90.6114	90.6114	3.6500e-003	7.6000e-004	90.9293
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	93.4234	93.4234	3.7600e-003	7.8000e-004	93.7512
NaturalGas Mitigated	7.1400e-003	0.0610	0.0260	3.9000e-004		4.9300e-003	4.9300e-003		4.9300e-003	4.9300e-003	0.0000	70.6122	70.6122	1.3500e-003	1.2900e-003	71.0318
NaturalGas Unmitigated	7.1400e-003	0.0610	0.0260	3.9000e-004		4.9300e-003	4.9300e-003		4.9300e-003	4.9300e-003	0.0000	70.6122	70.6122	1.3500e-003	1.2900e-003	71.0318

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					
Condo/Townhouse	1.32322e+006	7.1400e-003	0.0610	0.0260	3.9000e-004		4.9300e-003	4.9300e-003		4.9300e-003	4.9300e-003	0.0000	70.6122	70.6122	1.3500e-003	1.2900e-003	71.0318
Total		**7.1400e-003**	**0.0610**	**0.0260**	**3.9000e-004**		**4.9300e-003**	**4.9300e-003**		**4.9300e-003**	**4.9300e-003**	**0.0000**	**70.6122**	**70.6122**	**1.3500e-003**	**1.2900e-003**	**71.0318**

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					
Condo/Townhouse	1.32322e+006	7.1400e-003	0.0610	0.0260	3.9000e-004		4.9300e-003	4.9300e-003		4.9300e-003	4.9300e-003	0.0000	70.6122	70.6122	1.3500e-003	1.2900e-003	71.0318
Total		**7.1400e-003**	**0.0610**	**0.0260**	**3.9000e-004**		**4.9300e-003**	**4.9300e-003**		**4.9300e-003**	**4.9300e-003**	**0.0000**	**70.6122**	**70.6122**	**1.3500e-003**	**1.2900e-003**	**71.0318**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Condo/Townhouse	402280	93.4234	3.7600e-003	7.8000e-004	93.7512
Total		**93.4234**	**3.7600e-003**	**7.8000e-004**	**93.7512**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Condo/Townhouse	390171	90.6114	3.6500e-003	7.6000e-004	90.9293
Total		**90.6114**	**3.6500e-003**	**7.6000e-004**	**90.9293**

6.0 Area Detail

6.1 Mitigation Measures Area

	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	0.4663	7.8900e-003	0.6839	4.0000e-005		3.7800e-003	3.7800e-003		3.7800e-003	3.7800e-003	0.0000	1.1159	1.1159	1.0800e-003	0.0000	1.1428
Unmitigated	0.4663	7.8900e-003	0.6839	4.0000e-005		3.7800e-003	3.7800e-003		3.7800e-003	3.7800e-003	0.0000	1.1159	1.1159	1.0800e-003	0.0000	1.1428

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	0.0864					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3593					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	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
Landscaping	0.0207	7.8900e-003	0.6839	4.0000e-005		3.7800e-003	3.7800e-003		3.7800e-003	3.7800e-003	0.0000	1.1159	1.1159	1.0800e-003	0.0000	1.1428
Total	**0.4663**	**7.8900e-003**	**0.6839**	**4.0000e-005**		**3.7800e-003**	**3.7800e-003**		**3.7800e-003**	**3.7800e-003**	**0.0000**	**1.1159**	**1.1159**	**1.0800e-003**	**0.0000**	**1.1428**

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	0.0864					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3593					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	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
Landscaping	0.0207	7.8900e-003	0.6839	4.0000e-005		3.7800e-003	3.7800e-003		3.7800e-003	3.7800e-003	0.0000	1.1159	1.1159	1.0800e-003	0.0000	1.1428
Total	**0.4663**	**7.8900e-003**	**0.6839**	**4.0000e-005**		**3.7800e-003**	**3.7800e-003**		**3.7800e-003**	**3.7800e-003**	**0.0000**	**1.1159**	**1.1159**	**1.0800e-003**	**0.0000**	**1.1428**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	27.8277	0.1964	4.8300e-003	34.1761
Unmitigated	29.7778	0.1964	4.8500e-003	36.1329

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Condo/Townhouse	5.99417 / 3.77893	29.7778	0.1964	4.8500e-003	36.1329
Total		**29.7778**	**0.1964**	**4.8500e-003**	**36.1329**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Condo/Townhouse	5.99417 / 3.02315	27.8277	0.1964	4.8300e-003	34.1761
Total		**27.8277**	**0.1964**	**4.8300e-003**	**34.1761**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	6.0134	0.3554	0.0000	14.8980
Unmitigated	8.5906	0.5077	0.0000	21.2828

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Condo/Townhouse	42.32	8.5906	0.5077	0.0000	21.2828
Total		**8.5906**	**0.5077**	**0.0000**	**21.2828**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Condo/Townhouse	29.624	6.0134	0.3554	0.0000	14.8980
Total		**6.0134**	**0.3554**	**0.0000**	**14.8980**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	135.0560	0.0000	0.0000	135.0560

11.1 Vegetation Land Change

Vegetation Type

	Initial/Final	Total CO2	CH4	N2O	CO2e
	Acres	MT			
Cropland	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

11.2 Net New Trees

Species Class

	Number of Trees	Total CO2	CH4	N2O	CO2e
		MT			
Mixed Hardwood	184	135.0560	0.0000	0.0000	135.0560
Total		**135.0560**	**0.0000**	**0.0000**	**135.0560**

ATTACHMENT E

CALEEMOD 2016.3.2 (Solar Calculations)

Attachment C – CalEEMod attached

Source: https://eosweb.larc.nasa.gov

Northern boundary **34**

Western boundary **-118** | Center Latitude **33.5** Longitude **-117.5** | Eastern boundary **-117**

Southern boundary **33**

Parameters for Tilted Solar Panels:

Monthly Averaged Radiation Incident On An Equator-Pointed Tilted Surface (kWh/m^2/day)

Lat 33.36 Lon -117.07	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Average
SSE HRZ	3.05	3.80	5.05	6.38	6.72	6.97	6.97	6.52	5.53	4.26	3.44	2.86	5.13
K	0.56	0.56	0.59	0.63	0.60	0.60	0.61	0.62	0.61	0.58	0.60	0.57	0.59
Diffuse	0.90	1.18	1.48	1.71	2.08	2.19	2.07	1.82	1.54	1.25	0.90	0.80	1.50
Direct	5.09	5.27	6.22	7.29	6.91	7.06	7.25	7.16	6.59	5.75	5.76	5.14	6.30
Tilt 0	3.00	3.77	5.00	6.23	6.69	6.93	6.93	6.49	5.45	4.23	3.37	2.83	5.08
Tilt 18	3.96	4.60	5.63	6.53	6.58	6.67	6.74	6.59	5.95	5.03	4.39	3.85	5.55
Tilt 33	4.52	5.02	5.83	6.39	6.13	6.09	6.20	6.29	6.03	5.40	4.98	4.47	5.61
Tilt 48	4.82	5.17	5.71	5.92	5.38	5.21	5.36	5.67	5.78	5.48	5.28	4.83	5.38
Tilt 90	4.19	4.10	3.86	3.16	2.48	2.25	2.35	2.84	3.60	4.15	4.50	4.34	3.48
OPT	4.87	5.17	5.83	6.53	6.71	6.93	6.94	6.61	6.04	5.49	5.31	4.9	5.95
OPT ANG	57.0	48.0	35.0	20.0	5.00	0.00	2.00	12.0	29.0	44.0	55.0	60.0	36.4

NOTE: *Diffuse radiation, direct normal radiation and tilted surface radiation are not calculated when the clearness index (K) is below 0.3 or above 0.8.*

Parameter Definition

$$E\ (kWh) = Power\ Installed\ (kW) * H * 365days * PR$$

Power Installed = 160.2 kWp

H= Annual Average irradiation on tilted panels (kwh/m^2/year) = 5.95 (365) = 2,171.75

PR=Performance Ratio (Between .5 and .9) = .80

E=Energy (kWh) = 160.2 kWp * 2,171.75 (kwh/m^2/year) *.80 = 278,332 kWh

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
User Defined Industrial	-278332	-90.9613	-0.0037	-0.0008	-91.2786
Total		**-90.9613**	**-0.0037**	**-0.0008**	**-91.2786**

Sweetwater Place Solar

San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	1.00	User Defined Unit	1.00	0.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2020
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Sweetwater Place Solar - San Diego County, Annual

Project Characteristics - Project would install 1220 Solar Panels 300 Watts Each

Land Use - Rooftop Solar

Construction Phase -

Off-road Equipment -

Off-road Equipment - zero hours

Trips and VMT - zero

Grading -

Architectural Coating -

Vehicle Trips -

Woodstoves - asdf

Area Coating -

Landscape Equipment - zero

Energy Use - E=Energy (kWh) = 6500 * .3 * 2171.75 *.80 = 3,387,930 kWh

Water And Wastewater -

Energy Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Parking	250	0
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	250	0
tblFleetMix	HHD	0.02	0.00
tblFleetMix	LDA	0.59	0.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.18	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	5.5580e-003	0.00
tblFleetMix	MCY	6.1810e-003	0.00
tblFleetMix	MDV	0.11	0.00

tblFleetMix	MH	1.2710e-003	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	1.9020e-003	0.00
tblFleetMix	SBUS	7.4500e-004	0.00
tblFleetMix	UBUS	2.0240e-003	0.00
tblLandUse	LotAcreage	0.00	1.00
tblOffRoadEquipment	HorsePower	187.00	174.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblTripsAndVMT	WorkerTripNumber	3.00	0.00
tblVehicleEF	HHD	0.81	0.03
tblVehicleEF	HHD	0.13	0.01
tblVehicleEF	HHD	0.12	0.00
tblVehicleEF	HHD	2.77	3.16
tblVehicleEF	HHD	1.15	1.37
tblVehicleEF	HHD	3.66	65.60
tblVehicleEF	HHD	4,760.03	528.33
tblVehicleEF	HHD	1,681.18	1,547.78
tblVehicleEF	HHD	10.62	50.38
tblVehicleEF	HHD	23.16	3.96
tblVehicleEF	HHD	4.29	3.73
tblVehicleEF	HHD	19.63	4.25
tblVehicleEF	HHD	0.03	0.01
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.03
tblVehicleEF	HHD	0.02	0.07
tblVehicleEF	HHD	1.3700e-004	1.7690e-003
tblVehicleEF	HHD	0.02	9.2620e-003

tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8130e-003	8.7120e-003
tblVehicleEF	HHD	0.02	0.07
tblVehicleEF	HHD	1.2700e-004	1.5800e-003
tblVehicleEF	HHD	1.1200e-004	1.7100e-003
tblVehicleEF	HHD	6.5690e-003	0.10
tblVehicleEF	HHD	0.69	0.56
tblVehicleEF	HHD	1.0300e-004	1.6090e-003
tblVehicleEF	HHD	0.14	0.23
tblVehicleEF	HHD	6.2800e-004	0.52
tblVehicleEF	HHD	0.12	2.25
tblVehicleEF	HHD	0.04	5.6010e-003
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	1.6700e-004	1.6590e-003
tblVehicleEF	HHD	1.1200e-004	1.7100e-003
tblVehicleEF	HHD	6.5690e-003	0.10
tblVehicleEF	HHD	0.81	0.64
tblVehicleEF	HHD	1.0300e-004	1.6090e-003
tblVehicleEF	HHD	0.28	0.26
tblVehicleEF	HHD	6.2800e-004	0.52
tblVehicleEF	HHD	0.13	2.40
tblVehicleEF	HHD	0.77	0.02
tblVehicleEF	HHD	0.13	0.01
tblVehicleEF	HHD	0.11	0.00
tblVehicleEF	HHD	2.02	2.30
tblVehicleEF	HHD	1.16	1.38
tblVehicleEF	HHD	3.44	49.98

tblVehicleEF	HHD	5,039.91	559.72
tblVehicleEF	HHD	1,681.18	1,547.78
tblVehicleEF	HHD	10.62	50.38
tblVehicleEF	HHD	23.90	4.09
tblVehicleEF	HHD	4.13	3.59
tblVehicleEF	HHD	19.62	4.04
tblVehicleEF	HHD	0.02	8.4870e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.03
tblVehicleEF	HHD	0.02	0.07
tblVehicleEF	HHD	1.3700e-004	1.7690e-003
tblVehicleEF	HHD	0.02	7.8080e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8130e-003	8.7120e-003
tblVehicleEF	HHD	0.02	0.07
tblVehicleEF	HHD	1.2700e-004	1.5800e-003
tblVehicleEF	HHD	1.7100e-004	2.6610e-003
tblVehicleEF	HHD	6.7500e-003	0.10
tblVehicleEF	HHD	0.65	0.53
tblVehicleEF	HHD	1.9000e-004	3.0730e-003
tblVehicleEF	HHD	0.14	0.23
tblVehicleEF	HHD	6.1500e-004	0.51
tblVehicleEF	HHD	0.12	1.85
tblVehicleEF	HHD	0.05	5.9330e-003
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	1.6400e-004	1.4010e-003
tblVehicleEF	HHD	1.7100e-004	2.6610e-003

tblVehicleEF	HHD	6.7500e-003	0.10
tblVehicleEF	HHD	0.76	0.60
tblVehicleEF	HHD	1.9000e-004	3.0730e-003
tblVehicleEF	HHD	0.28	0.26
tblVehicleEF	HHD	6.1500e-004	0.51
tblVehicleEF	HHD	0.13	1.97
tblVehicleEF	HHD	0.88	0.03
tblVehicleEF	HHD	0.13	0.01
tblVehicleEF	HHD	0.12	0.00
tblVehicleEF	HHD	3.81	4.35
tblVehicleEF	HHD	1.15	1.37
tblVehicleEF	HHD	3.76	72.54
tblVehicleEF	HHD	4,373.53	484.98
tblVehicleEF	HHD	1,681.18	1,547.78
tblVehicleEF	HHD	10.62	50.38
tblVehicleEF	HHD	22.14	3.78
tblVehicleEF	HHD	4.28	3.72
tblVehicleEF	HHD	19.64	4.34
tblVehicleEF	HHD	0.03	0.01
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.03
tblVehicleEF	HHD	0.02	0.07
tblVehicleEF	HHD	1.3700e-004	1.7690e-003
tblVehicleEF	HHD	0.03	0.01
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8130e-003	8.7120e-003
tblVehicleEF	HHD	0.02	0.07

tblVehicleEF	HHD	1.2700e-004	1.5800e-003
tblVehicleEF	HHD	1.0000e-004	1.5640e-003
tblVehicleEF	HHD	7.6040e-003	0.11
tblVehicleEF	HHD	0.74	0.61
tblVehicleEF	HHD	9.0000e-005	1.4030e-003
tblVehicleEF	HHD	0.14	0.23
tblVehicleEF	HHD	6.8600e-004	0.57
tblVehicleEF	HHD	0.12	2.43
tblVehicleEF	HHD	0.04	5.1410e-003
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	1.6900e-004	1.7740e-003
tblVehicleEF	HHD	1.0000e-004	1.5640e-003
tblVehicleEF	HHD	7.6040e-003	0.11
tblVehicleEF	HHD	0.87	0.69
tblVehicleEF	HHD	9.0000e-005	1.4030e-003
tblVehicleEF	HHD	0.28	0.26
tblVehicleEF	HHD	6.8600e-004	0.57
tblVehicleEF	HHD	0.14	2.59
tblVehicleEF	LDA	7.5560e-003	0.01
tblVehicleEF	LDA	9.8610e-003	8.5820e-003
tblVehicleEF	LDA	0.67	0.82
tblVehicleEF	LDA	1.76	1.98
tblVehicleEF	LDA	280.70	244.25
tblVehicleEF	LDA	60.62	52.29
tblVehicleEF	LDA	0.08	0.10
tblVehicleEF	LDA	0.10	0.11
tblVehicleEF	LDA	1.9230e-003	1.8230e-003

tblVehicleEF	LDA	2.2920e-003	3.4360e-003
tblVehicleEF	LDA	1.7730e-003	1.6910e-003
tblVehicleEF	LDA	2.1070e-003	3.1870e-003
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.13	0.15
tblVehicleEF	LDA	2.8120e-003	3.5610e-003
tblVehicleEF	LDA	6.3700e-004	7.7000e-004
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.15	0.16
tblVehicleEF	LDA	8.1310e-003	0.01
tblVehicleEF	LDA	8.5880e-003	8.5820e-003
tblVehicleEF	LDA	0.75	0.92
tblVehicleEF	LDA	1.46	1.48
tblVehicleEF	LDA	296.71	258.13
tblVehicleEF	LDA	60.62	52.29
tblVehicleEF	LDA	0.07	0.09
tblVehicleEF	LDA	0.09	0.10
tblVehicleEF	LDA	1.9230e-003	1.8230e-003
tblVehicleEF	LDA	2.2920e-003	3.4360e-003

tblVehicleEF	LDA	1.7730e-003	1.6910e-003
tblVehicleEF	LDA	2.1070e-003	3.1870e-003
tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.06	0.06
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	0.04	0.21
tblVehicleEF	LDA	0.12	0.12
tblVehicleEF	LDA	2.9730e-003	3.7660e-003
tblVehicleEF	LDA	6.3200e-004	7.6100e-004
tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.06	0.06
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.04	0.21
tblVehicleEF	LDA	0.13	0.13
tblVehicleEF	LDA	7.4330e-003	0.01
tblVehicleEF	LDA	0.01	8.5820e-003
tblVehicleEF	LDA	0.66	0.81
tblVehicleEF	LDA	1.88	2.17
tblVehicleEF	LDA	277.81	241.74
tblVehicleEF	LDA	60.62	52.29
tblVehicleEF	LDA	0.08	0.10
tblVehicleEF	LDA	0.11	0.11
tblVehicleEF	LDA	1.9230e-003	1.8230e-003
tblVehicleEF	LDA	2.2920e-003	3.4360e-003
tblVehicleEF	LDA	1.7730e-003	1.6910e-003

tblVehicleEF	LDA	2.1070e-003	3.1870e-003
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.11	0.10
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	0.04	0.27
tblVehicleEF	LDA	0.14	0.16
tblVehicleEF	LDA	2.7830e-003	3.5240e-003
tblVehicleEF	LDA	6.3900e-004	7.7300e-004
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.11	0.10
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.04	0.27
tblVehicleEF	LDA	0.15	0.17
tblVehicleEF	LDT1	0.01	0.02
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	1.51	1.56
tblVehicleEF	LDT1	3.68	3.69
tblVehicleEF	LDT1	349.50	297.79
tblVehicleEF	LDT1	74.92	63.53
tblVehicleEF	LDT1	0.16	0.17
tblVehicleEF	LDT1	0.22	0.21
tblVehicleEF	LDT1	2.9980e-003	2.9460e-003
tblVehicleEF	LDT1	3.6780e-003	4.4870e-003
tblVehicleEF	LDT1	2.7620e-003	2.7320e-003
tblVehicleEF	LDT1	3.3820e-003	4.1620e-003

tblVehicleEF	LDT1	0.12	0.10
tblVehicleEF	LDT1	0.32	0.23
tblVehicleEF	LDT1	0.13	0.10
tblVehicleEF	LDT1	0.03	0.04
tblVehicleEF	LDT1	0.22	0.78
tblVehicleEF	LDT1	0.26	0.27
tblVehicleEF	LDT1	3.5140e-003	4.1300e-003
tblVehicleEF	LDT1	8.1400e-004	9.1200e-004
tblVehicleEF	LDT1	0.12	0.10
tblVehicleEF	LDT1	0.32	0.23
tblVehicleEF	LDT1	0.13	0.10
tblVehicleEF	LDT1	0.05	0.05
tblVehicleEF	LDT1	0.22	0.78
tblVehicleEF	LDT1	0.29	0.29
tblVehicleEF	LDT1	0.01	0.02
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	1.66	1.72
tblVehicleEF	LDT1	3.02	2.77
tblVehicleEF	LDT1	368.39	313.82
tblVehicleEF	LDT1	74.92	63.53
tblVehicleEF	LDT1	0.14	0.16
tblVehicleEF	LDT1	0.20	0.20
tblVehicleEF	LDT1	2.9980e-003	2.9460e-003
tblVehicleEF	LDT1	3.6780e-003	4.4870e-003
tblVehicleEF	LDT1	2.7620e-003	2.7320e-003
tblVehicleEF	LDT1	3.3820e-003	4.1620e-003
tblVehicleEF	LDT1	0.18	0.15

tblVehicleEF	LDT1	0.34	0.25
tblVehicleEF	LDT1	0.21	0.17
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.20	0.71
tblVehicleEF	LDT1	0.23	0.22
tblVehicleEF	LDT1	3.7050e-003	4.3560e-003
tblVehicleEF	LDT1	8.0300e-004	8.9600e-004
tblVehicleEF	LDT1	0.18	0.15
tblVehicleEF	LDT1	0.34	0.25
tblVehicleEF	LDT1	0.21	0.17
tblVehicleEF	LDT1	0.05	0.06
tblVehicleEF	LDT1	0.20	0.71
tblVehicleEF	LDT1	0.25	0.24
tblVehicleEF	LDT1	0.01	0.02
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	1.48	1.53
tblVehicleEF	LDT1	3.96	4.04
tblVehicleEF	LDT1	346.09	294.90
tblVehicleEF	LDT1	74.92	63.53
tblVehicleEF	LDT1	0.16	0.18
tblVehicleEF	LDT1	0.23	0.22
tblVehicleEF	LDT1	2.9980e-003	2.9460e-003
tblVehicleEF	LDT1	3.6780e-003	4.4870e-003
tblVehicleEF	LDT1	2.7620e-003	2.7320e-003
tblVehicleEF	LDT1	3.3820e-003	4.1620e-003
tblVehicleEF	LDT1	0.10	0.08
tblVehicleEF	LDT1	0.37	0.26

tblVehicleEF	LDT1	0.11	0.09
tblVehicleEF	LDT1	0.03	0.04
tblVehicleEF	LDT1	0.26	0.97
tblVehicleEF	LDT1	0.28	0.29
tblVehicleEF	LDT1	3.4790e-003	4.0890e-003
tblVehicleEF	LDT1	8.1900e-004	9.1800e-004
tblVehicleEF	LDT1	0.10	0.08
tblVehicleEF	LDT1	0.37	0.26
tblVehicleEF	LDT1	0.11	0.09
tblVehicleEF	LDT1	0.05	0.05
tblVehicleEF	LDT1	0.26	0.97
tblVehicleEF	LDT1	0.30	0.31
tblVehicleEF	LDT2	6.7070e-003	0.01
tblVehicleEF	LDT2	8.5260e-003	8.2780e-003
tblVehicleEF	LDT2	0.78	0.93
tblVehicleEF	LDT2	1.77	2.20
tblVehicleEF	LDT2	393.35	364.72
tblVehicleEF	LDT2	84.92	77.49
tblVehicleEF	LDT2	0.09	0.11
tblVehicleEF	LDT2	0.15	0.19
tblVehicleEF	LDT2	1.7920e-003	1.7600e-003
tblVehicleEF	LDT2	2.2190e-003	3.3350e-003
tblVehicleEF	LDT2	1.6480e-003	1.6320e-003
tblVehicleEF	LDT2	2.0400e-003	3.0930e-003
tblVehicleEF	LDT2	0.04	0.04
tblVehicleEF	LDT2	0.12	0.13
tblVehicleEF	LDT2	0.05	0.06

tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.07	0.40
tblVehicleEF	LDT2	0.11	0.15
tblVehicleEF	LDT2	3.9390e-003	4.8440e-003
tblVehicleEF	LDT2	8.7900e-004	1.0420e-003
tblVehicleEF	LDT2	0.04	0.04
tblVehicleEF	LDT2	0.12	0.13
tblVehicleEF	LDT2	0.05	0.06
tblVehicleEF	LDT2	0.02	0.03
tblVehicleEF	LDT2	0.07	0.40
tblVehicleEF	LDT2	0.13	0.16
tblVehicleEF	LDT2	7.2030e-003	0.01
tblVehicleEF	LDT2	7.4120e-003	8.2780e-003
tblVehicleEF	LDT2	0.87	1.04
tblVehicleEF	LDT2	1.47	1.65
tblVehicleEF	LDT2	415.21	384.93
tblVehicleEF	LDT2	84.92	77.49
tblVehicleEF	LDT2	0.08	0.10
tblVehicleEF	LDT2	0.14	0.17
tblVehicleEF	LDT2	1.7920e-003	1.7600e-003
tblVehicleEF	LDT2	2.2190e-003	3.3350e-003
tblVehicleEF	LDT2	1.6480e-003	1.6320e-003
tblVehicleEF	LDT2	2.0400e-003	3.0930e-003
tblVehicleEF	LDT2	0.06	0.07
tblVehicleEF	LDT2	0.13	0.14
tblVehicleEF	LDT2	0.09	0.10
tblVehicleEF	LDT2	0.02	0.02

tblVehicleEF	LDT2	0.07	0.37
tblVehicleEF	LDT2	0.10	0.12
tblVehicleEF	LDT2	4.1590e-003	5.1150e-003
tblVehicleEF	LDT2	8.7400e-004	1.0320e-003
tblVehicleEF	LDT2	0.06	0.07
tblVehicleEF	LDT2	0.13	0.14
tblVehicleEF	LDT2	0.09	0.10
tblVehicleEF	LDT2	0.03	0.03
tblVehicleEF	LDT2	0.07	0.37
tblVehicleEF	LDT2	0.11	0.13
tblVehicleEF	LDT2	6.6010e-003	0.01
tblVehicleEF	LDT2	8.9850e-003	8.2780e-003
tblVehicleEF	LDT2	0.76	0.91
tblVehicleEF	LDT2	1.90	2.41
tblVehicleEF	LDT2	389.40	361.06
tblVehicleEF	LDT2	84.92	77.49
tblVehicleEF	LDT2	0.09	0.11
tblVehicleEF	LDT2	0.16	0.19
tblVehicleEF	LDT2	1.7920e-003	1.7600e-003
tblVehicleEF	LDT2	2.2190e-003	3.3350e-003
tblVehicleEF	LDT2	1.6480e-003	1.6320e-003
tblVehicleEF	LDT2	2.0400e-003	3.0930e-003
tblVehicleEF	LDT2	0.03	0.04
tblVehicleEF	LDT2	0.14	0.14
tblVehicleEF	LDT2	0.05	0.05
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.09	0.49

tblVehicleEF	LDT2	0.12	0.16
tblVehicleEF	LDT2	3.8990e-003	4.7950e-003
tblVehicleEF	LDT2	8.8200e-004	1.0450e-003
tblVehicleEF	LDT2	0.03	0.04
tblVehicleEF	LDT2	0.14	0.14
tblVehicleEF	LDT2	0.05	0.05
tblVehicleEF	LDT2	0.02	0.03
tblVehicleEF	LDT2	0.09	0.49
tblVehicleEF	LDT2	0.13	0.17
tblVehicleEF	LHD1	5.4350e-003	1.1720e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.15	0.17
tblVehicleEF	LHD1	1.30	1.50
tblVehicleEF	LHD1	2.67	3.75
tblVehicleEF	LHD1	9.28	7.98
tblVehicleEF	LHD1	695.30	734.00
tblVehicleEF	LHD1	30.08	36.60
tblVehicleEF	LHD1	0.09	0.06
tblVehicleEF	LHD1	1.87	1.23
tblVehicleEF	LHD1	0.97	1.16
tblVehicleEF	LHD1	1.0190e-003	6.8200e-004
tblVehicleEF	LHD1	0.08	0.05
tblVehicleEF	LHD1	0.01	9.3720e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	9.8100e-004	8.6400e-004
tblVehicleEF	LHD1	9.7500e-004	6.2700e-004

tblVehicleEF	LHD1	0.03	0.02
tblVehicleEF	LHD1	2.5460e-003	2.3430e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	9.0300e-004	8.0000e-004
tblVehicleEF	LHD1	2.3730e-003	2.0350e-003
tblVehicleEF	LHD1	0.10	0.07
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.7530e-003	1.6100e-003
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tblVehicleEF	LHD1	0.30	0.48
tblVehicleEF	LHD1	0.27	0.34
tblVehicleEF	LHD1	9.3000e-005	9.0000e-005
tblVehicleEF	LHD1	6.8190e-003	8.0840e-003
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tblVehicleEF	LHD1	2.3730e-003	2.0350e-003
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tblVehicleEF	LHD1	1.7530e-003	1.6100e-003
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tblVehicleEF	LHD1	0.30	0.48
tblVehicleEF	LHD1	0.30	0.36
tblVehicleEF	LHD1	5.4350e-003	1.1720e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.15	0.17
tblVehicleEF	LHD1	1.32	1.53
tblVehicleEF	LHD1	2.52	2.93

tblVehicleEF	LHD1	9.28	7.98
tblVehicleEF	LHD1	695.30	734.00
tblVehicleEF	LHD1	30.08	36.60
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tblVehicleEF	LHD1	1.79	1.17
tblVehicleEF	LHD1	0.92	1.11
tblVehicleEF	LHD1	1.0190e-003	6.8200e-004
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tblVehicleEF	LHD1	0.01	9.3720e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	9.8100e-004	8.6400e-004
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tblVehicleEF	LHD1	0.03	0.02
tblVehicleEF	LHD1	2.5460e-003	2.3430e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	9.0300e-004	8.0000e-004
tblVehicleEF	LHD1	3.4350e-003	2.9700e-003
tblVehicleEF	LHD1	0.10	0.07
tblVehicleEF	LHD1	0.02	0.03
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tblVehicleEF	LHD1	3.4350e-003	2.9700e-003

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tblVehicleEF	LHD1	2.9810e-003	2.7670e-003
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tblVehicleEF	LHD1	0.29	0.31
tblVehicleEF	LHD1	5.4350e-003	1.1720e-003
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tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.15	0.17
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tblVehicleEF	LHD1	695.30	734.00
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tblVehicleEF	LHD1	0.99	1.18
tblVehicleEF	LHD1	1.0190e-003	6.8200e-004
tblVehicleEF	LHD1	0.08	0.05
tblVehicleEF	LHD1	0.01	9.3720e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	9.8100e-004	8.6400e-004
tblVehicleEF	LHD1	9.7500e-004	6.2700e-004
tblVehicleEF	LHD1	0.03	0.02
tblVehicleEF	LHD1	2.5460e-003	2.3430e-003
tblVehicleEF	LHD1	0.02	0.01

tblVehicleEF	LHD1	9.0300e-004	8.0000e-004
tblVehicleEF	LHD1	2.2160e-003	1.8970e-003
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tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.5490e-003	1.4220e-003
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tblVehicleEF	LHD1	0.28	0.36
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tblVehicleEF	LHD1	2.2160e-003	1.8970e-003
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tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.5490e-003	1.4220e-003
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tblVehicleEF	LHD1	0.31	0.38
tblVehicleEF	LHD2	4.0010e-003	8.7100e-004
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tblVehicleEF	LHD2	9.2800e-003	9.6180e-003
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tblVehicleEF	LHD2	14.23	8.84
tblVehicleEF	LHD2	728.63	623.36
tblVehicleEF	LHD2	25.41	22.28

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tblVehicleEF	LHD2	0.02	0.02
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tblVehicleEF	LHD2	0.08	0.22
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tblVehicleEF	LHD2	2.7900e-004	2.8100e-004
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tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	7.0500e-004	7.9100e-004

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tblVehicleEF	LHD2	8.8860e-003	9.6180e-003
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tblVehicleEF	LHD2	728.63	623.36
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tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.02	0.02
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tblVehicleEF	LHD2	1.2580e-003	1.1810e-003
tblVehicleEF	LHD2	0.04	0.03
tblVehicleEF	LHD2	2.6770e-003	2.6170e-003
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tblVehicleEF	LHD2	4.1800e-004	3.5100e-004
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tblVehicleEF	LHD2	0.02	0.02
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tblVehicleEF	LHD2	9.4580e-003	9.6180e-003
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tblVehicleEF	LHD2	25.41	22.28
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tblVehicleEF	LHD2	1.3150e-003	1.2840e-003
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tblVehicleEF	LHD2	0.02	0.02
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tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	4.1800e-004	3.5100e-004
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tblVehicleEF	LHD2	0.01	0.02
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tblVehicleEF	LHD2	0.09	0.24
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tblVehicleEF	LHD2	7.0910e-003	6.7800e-003
tblVehicleEF	LHD2	2.7900e-004	2.8400e-004
tblVehicleEF	LHD2	8.1000e-004	8.6500e-004
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.2100e-004	6.9500e-004
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tblVehicleEF	MCY	4.0000e-003	8.0000e-003
tblVehicleEF	MCY	2.0020e-003	3.9100e-004
tblVehicleEF	MCY	4.0000e-003	9.6800e-004
tblVehicleEF	MCY	5.0400e-003	0.02
tblVehicleEF	MCY	1.0000e-003	2.0000e-003
tblVehicleEF	MCY	1.8770e-003	3.2800e-004
tblVehicleEF	MCY	3.7820e-003	8.0400e-004
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tblVehicleEF	MCY	6.8700e-004	6.5600e-004
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tblVehicleEF	MCY	0.77	0.39
tblVehicleEF	MCY	0.74	0.52

tblVehicleEF	MCY	3.03	3.22
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tblVehicleEF	MCY	2.33	2.27
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tblVehicleEF	MCY	46.61	38.51
tblVehicleEF	MCY	1.05	1.11
tblVehicleEF	MCY	0.29	0.29
tblVehicleEF	MCY	0.01	0.04
tblVehicleEF	MCY	4.0000e-003	8.0000e-003
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tblVehicleEF	MCY	5.0400e-003	0.02
tblVehicleEF	MCY	1.0000e-003	2.0000e-003
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tblVehicleEF	MCY	3.7820e-003	8.0400e-004
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tblVehicleEF	MCY	6.6400e-004	6.2300e-004

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tblVehicleEF	MDV	0.02	0.02
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tblVehicleEF	MDV	0.29	0.38
tblVehicleEF	MDV	1.9550e-003	2.0400e-003
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tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	0.10	0.60
tblVehicleEF	MDV	0.25	0.34

tblVehicleEF	MDV	5.2220e-003	6.1880e-003
tblVehicleEF	MDV	1.1680e-003	1.3480e-003
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tblVehicleEF	MDV	0.17	0.20
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tblVehicleEF	MDV	0.10	0.60
tblVehicleEF	MDV	0.27	0.36
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tblVehicleEF	MDV	0.02	0.02
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tblVehicleEF	MDV	549.63	516.30
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tblVehicleEF	MDV	0.27	0.35
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tblVehicleEF	MDV	2.2640e-003	3.2110e-003
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.18	0.21
tblVehicleEF	MDV	0.12	0.15
tblVehicleEF	MDV	0.04	0.05
tblVehicleEF	MDV	0.09	0.56
tblVehicleEF	MDV	0.21	0.28
tblVehicleEF	MDV	5.5060e-003	6.5290e-003

tblVehicleEF	MDV	1.1580e-003	1.3290e-003
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.18	0.21
tblVehicleEF	MDV	0.12	0.15
tblVehicleEF	MDV	0.05	0.07
tblVehicleEF	MDV	0.09	0.56
tblVehicleEF	MDV	0.23	0.30
tblVehicleEF	MDV	0.01	0.02
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	1.29	1.66
tblVehicleEF	MDV	3.38	4.58
tblVehicleEF	MDV	516.26	484.72
tblVehicleEF	MDV	111.22	103.31
tblVehicleEF	MDV	0.16	0.23
tblVehicleEF	MDV	0.30	0.40
tblVehicleEF	MDV	1.9550e-003	2.0400e-003
tblVehicleEF	MDV	2.4590e-003	3.4670e-003
tblVehicleEF	MDV	1.8030e-003	1.8870e-003
tblVehicleEF	MDV	2.2640e-003	3.2110e-003
tblVehicleEF	MDV	0.05	0.05
tblVehicleEF	MDV	0.19	0.22
tblVehicleEF	MDV	0.07	0.08
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	0.12	0.72
tblVehicleEF	MDV	0.26	0.36
tblVehicleEF	MDV	5.1710e-003	6.1260e-003
tblVehicleEF	MDV	1.1720e-003	1.3540e-003

tblVehicleEF	MDV	0.05	0.05
tblVehicleEF	MDV	0.19	0.22
tblVehicleEF	MDV	0.07	0.08
tblVehicleEF	MDV	0.05	0.07
tblVehicleEF	MDV	0.12	0.72
tblVehicleEF	MDV	0.28	0.39
tblVehicleEF	MH	0.06	0.00
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	4.45	2.03
tblVehicleEF	MH	7.68	6.63
tblVehicleEF	MH	1,244.38	681.06
tblVehicleEF	MH	63.19	28.25
tblVehicleEF	MH	1.79	1.38
tblVehicleEF	MH	1.01	0.74
tblVehicleEF	MH	0.13	0.05
tblVehicleEF	MH	0.01	8.5470e-003
tblVehicleEF	MH	0.03	0.02
tblVehicleEF	MH	1.6580e-003	7.2200e-004
tblVehicleEF	MH	0.06	0.02
tblVehicleEF	MH	3.2060e-003	2.1370e-003
tblVehicleEF	MH	0.03	0.02
tblVehicleEF	MH	1.5340e-003	6.6300e-004
tblVehicleEF	MH	1.19	0.81
tblVehicleEF	MH	0.10	0.07
tblVehicleEF	MH	0.62	0.44
tblVehicleEF	MH	0.18	0.10
tblVehicleEF	MH	0.03	1.79

tblVehicleEF	MH	0.47	0.37
tblVehicleEF	MH	0.01	7.5150e-003
tblVehicleEF	MH	7.6700e-004	4.2900e-004
tblVehicleEF	MH	1.19	0.81
tblVehicleEF	MH	0.10	0.07
tblVehicleEF	MH	0.62	0.44
tblVehicleEF	MH	0.25	0.12
tblVehicleEF	MH	0.03	1.79
tblVehicleEF	MH	0.51	0.39
tblVehicleEF	MH	0.06	0.00
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	4.56	2.09
tblVehicleEF	MH	7.19	5.08
tblVehicleEF	MH	1,244.38	681.06
tblVehicleEF	MH	63.19	28.25
tblVehicleEF	MH	1.68	1.30
tblVehicleEF	MH	0.96	0.71
tblVehicleEF	MH	0.13	0.05
tblVehicleEF	MH	0.01	8.5470e-003
tblVehicleEF	MH	0.03	0.02
tblVehicleEF	MH	1.6580e-003	7.2200e-004
tblVehicleEF	MH	0.06	0.02
tblVehicleEF	MH	3.2060e-003	2.1370e-003
tblVehicleEF	MH	0.03	0.02
tblVehicleEF	MH	1.5340e-003	6.6300e-004
tblVehicleEF	MH	1.65	1.11
tblVehicleEF	MH	0.10	0.07

tblVehicleEF	MH	1.08	0.76
tblVehicleEF	MH	0.19	0.10
tblVehicleEF	MH	0.03	1.74
tblVehicleEF	MH	0.44	0.31
tblVehicleEF	MH	0.01	7.5160e-003
tblVehicleEF	MH	7.5800e-004	4.0300e-004
tblVehicleEF	MH	1.65	1.11
tblVehicleEF	MH	0.10	0.07
tblVehicleEF	MH	1.08	0.76
tblVehicleEF	MH	0.26	0.12
tblVehicleEF	MH	0.03	1.74
tblVehicleEF	MH	0.48	0.33
tblVehicleEF	MH	0.06	0.00
tblVehicleEF	MH	0.04	0.00
tblVehicleEF	MH	4.42	2.01
tblVehicleEF	MH	7.93	7.33
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tblVehicleEF	MH	1.79	1.38
tblVehicleEF	MH	1.03	0.76
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tblVehicleEF	MH	0.01	8.5470e-003
tblVehicleEF	MH	0.03	0.02
tblVehicleEF	MH	1.6580e-003	7.2200e-004
tblVehicleEF	MH	0.06	0.02
tblVehicleEF	MH	3.2060e-003	2.1370e-003
tblVehicleEF	MH	0.03	0.02

tblVehicleEF	MH	1.5340e-003	6.6300e-004
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tblVehicleEF	MH	0.13	0.09
tblVehicleEF	MH	0.58	0.41
tblVehicleEF	MH	0.18	0.10
tblVehicleEF	MH	0.03	1.92
tblVehicleEF	MH	0.48	0.39
tblVehicleEF	MH	0.01	7.5140e-003
tblVehicleEF	MH	7.7100e-004	4.4100e-004
tblVehicleEF	MH	1.24	0.84
tblVehicleEF	MH	0.13	0.09
tblVehicleEF	MH	0.58	0.41
tblVehicleEF	MH	0.25	0.12
tblVehicleEF	MH	0.03	1.92
tblVehicleEF	MH	0.52	0.42
tblVehicleEF	MHD	0.02	7.6150e-003
tblVehicleEF	MHD	0.01	5.1900e-003
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tblVehicleEF	MHD	0.43	1.91
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tblVehicleEF	MHD	149.39	572.06
tblVehicleEF	MHD	1,211.82	995.11
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tblVehicleEF	MHD	2.26	1.79
tblVehicleEF	MHD	11.17	1.78

tblVehicleEF	MHD	2.9800e-003	0.01
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tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	0.05	0.04
tblVehicleEF	MHD	9.8800e-004	1.6820e-003
tblVehicleEF	MHD	2.8510e-003	0.01
tblVehicleEF	MHD	0.06	0.05
tblVehicleEF	MHD	3.0000e-003	2.8430e-003
tblVehicleEF	MHD	0.04	0.04
tblVehicleEF	MHD	9.0800e-004	1.5330e-003
tblVehicleEF	MHD	1.0710e-003	2.1230e-003
tblVehicleEF	MHD	0.05	0.09
tblVehicleEF	MHD	0.03	0.16
tblVehicleEF	MHD	7.8800e-004	1.6670e-003
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tblVehicleEF	MHD	0.02	0.48
tblVehicleEF	MHD	0.43	0.98
tblVehicleEF	MHD	1.4370e-003	6.0640e-003
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	7.0700e-004	8.4700e-004
tblVehicleEF	MHD	1.0710e-003	2.1230e-003
tblVehicleEF	MHD	0.05	0.09
tblVehicleEF	MHD	0.04	0.19
tblVehicleEF	MHD	7.8800e-004	1.6670e-003
tblVehicleEF	MHD	0.15	0.15
tblVehicleEF	MHD	0.02	0.48
tblVehicleEF	MHD	0.48	1.04

tblVehicleEF	MHD	0.02	7.1760e-003
tblVehicleEF	MHD	0.01	5.1900e-003
tblVehicleEF	MHD	0.06	0.00
tblVehicleEF	MHD	0.31	1.39
tblVehicleEF	MHD	0.66	0.78
tblVehicleEF	MHD	6.84	12.98
tblVehicleEF	MHD	158.23	606.05
tblVehicleEF	MHD	1,211.82	995.11
tblVehicleEF	MHD	57.90	49.80
tblVehicleEF	MHD	1.00	4.74
tblVehicleEF	MHD	2.18	1.72
tblVehicleEF	MHD	11.12	1.70
tblVehicleEF	MHD	2.5120e-003	9.7830e-003
tblVehicleEF	MHD	0.13	0.12
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	0.05	0.04
tblVehicleEF	MHD	9.8800e-004	1.6820e-003
tblVehicleEF	MHD	2.4030e-003	9.0000e-003
tblVehicleEF	MHD	0.06	0.05
tblVehicleEF	MHD	3.0000e-003	2.8430e-003
tblVehicleEF	MHD	0.04	0.04
tblVehicleEF	MHD	9.0800e-004	1.5330e-003
tblVehicleEF	MHD	1.5880e-003	3.1680e-003
tblVehicleEF	MHD	0.05	0.10
tblVehicleEF	MHD	0.03	0.15
tblVehicleEF	MHD	1.4090e-003	3.0070e-003
tblVehicleEF	MHD	0.13	0.13

tblVehicleEF	MHD	0.02	0.47
tblVehicleEF	MHD	0.41	0.83
tblVehicleEF	MHD	1.5200e-003	6.4240e-003
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	6.9900e-004	7.8200e-004
tblVehicleEF	MHD	1.5880e-003	3.1680e-003
tblVehicleEF	MHD	0.05	0.10
tblVehicleEF	MHD	0.04	0.18
tblVehicleEF	MHD	1.4090e-003	3.0070e-003
tblVehicleEF	MHD	0.15	0.15
tblVehicleEF	MHD	0.02	0.47
tblVehicleEF	MHD	0.45	0.89
tblVehicleEF	MHD	0.02	8.2210e-003
tblVehicleEF	MHD	0.01	5.1900e-003
tblVehicleEF	MHD	0.06	0.00
tblVehicleEF	MHD	0.59	2.63
tblVehicleEF	MHD	0.65	0.77
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tblVehicleEF	MHD	137.16	525.12
tblVehicleEF	MHD	1,211.82	995.11
tblVehicleEF	MHD	57.90	49.80
tblVehicleEF	MHD	0.92	4.39
tblVehicleEF	MHD	2.25	1.78
tblVehicleEF	MHD	11.19	1.82
tblVehicleEF	MHD	3.6260e-003	0.01
tblVehicleEF	MHD	0.13	0.12
tblVehicleEF	MHD	0.01	0.01

tblVehicleEF	MHD	0.05	0.04
tblVehicleEF	MHD	9.8800e-004	1.6820e-003
tblVehicleEF	MHD	3.4690e-003	0.01
tblVehicleEF	MHD	0.06	0.05
tblVehicleEF	MHD	3.0000e-003	2.8430e-003
tblVehicleEF	MHD	0.04	0.04
tblVehicleEF	MHD	9.0800e-004	1.5330e-003
tblVehicleEF	MHD	1.0090e-003	2.0010e-003
tblVehicleEF	MHD	0.05	0.11
tblVehicleEF	MHD	0.04	0.18
tblVehicleEF	MHD	6.9400e-004	1.4670e-003
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tblVehicleEF	MHD	0.03	0.54
tblVehicleEF	MHD	0.44	1.04
tblVehicleEF	MHD	1.3220e-003	5.5670e-003
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tblVehicleEF	MHD	7.1000e-004	8.7600e-004
tblVehicleEF	MHD	1.0090e-003	2.0010e-003
tblVehicleEF	MHD	0.05	0.11
tblVehicleEF	MHD	0.05	0.20
tblVehicleEF	MHD	6.9400e-004	1.4670e-003
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tblVehicleEF	MHD	0.03	0.54
tblVehicleEF	MHD	0.49	1.11
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tblVehicleEF	OBUS	0.02	2.8860e-003
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tblVehicleEF	OBUS	1,349.07	1,037.87
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tblVehicleEF	OBUS	2.17	2.33
tblVehicleEF	OBUS	2.51	1.52
tblVehicleEF	OBUS	2.9900e-004	9.5470e-003
tblVehicleEF	OBUS	0.13	0.09
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	0.01	0.04
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tblVehicleEF	OBUS	2.8600e-004	8.7830e-003
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tblVehicleEF	OBUS	0.43	0.65
tblVehicleEF	OBUS	1.0380e-003	5.6700e-003

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tblVehicleEF	OBUS	1.4400e-003	7.6500e-004
tblVehicleEF	OBUS	0.02	0.03
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tblVehicleEF	OBUS	9.0100e-004	5.2600e-004
tblVehicleEF	OBUS	0.12	0.18
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tblVehicleEF	OBUS	0.47	0.70
tblVehicleEF	OBUS	0.01	0.02
tblVehicleEF	OBUS	0.02	2.8860e-003
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tblVehicleEF	OBUS	1,349.07	1,037.87
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tblVehicleEF	OBUS	2.46	1.45
tblVehicleEF	OBUS	2.5200e-004	8.0480e-003
tblVehicleEF	OBUS	0.13	0.09
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	0.01	0.04
tblVehicleEF	OBUS	9.0300e-004	6.9800e-004
tblVehicleEF	OBUS	2.4100e-004	7.4040e-003

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tblVehicleEF	OBUS	8.3200e-004	6.4300e-004
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tblVehicleEF	OBUS	1.6430e-003	9.5200e-004
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tblVehicleEF	OBUS	1.0900e-003	6.0070e-003
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tblVehicleEF	OBUS	1.6430e-003	9.5200e-004
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tblVehicleEF	OBUS	0.02	2.8860e-003
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tblVehicleEF	OBUS	1.4050e-003	7.3600e-004

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tblVehicleEF	SBUS	0.03	0.04
tblVehicleEF	SBUS	7.4700e-004	5.1810e-003
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tblVehicleEF	SBUS	1.5270e-003	0.02
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tblVehicleEF	SBUS	5.07	6.72
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tblVehicleEF	SBUS	0.74	0.55
tblVehicleEF	SBUS	0.01	0.01
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tblVehicleEF	SBUS	0.32	0.23
tblVehicleEF	SBUS	2.7390e-003	2.7220e-003
tblVehicleEF	SBUS	0.03	0.04
tblVehicleEF	SBUS	6.8700e-004	4.6650e-003
tblVehicleEF	SBUS	3.6960e-003	0.04
tblVehicleEF	SBUS	0.03	0.21
tblVehicleEF	SBUS	0.74	0.09
tblVehicleEF	SBUS	2.7830e-003	0.03
tblVehicleEF	SBUS	0.14	0.39
tblVehicleEF	SBUS	0.01	1.43
tblVehicleEF	SBUS	0.34	1.95
tblVehicleEF	SBUS	0.01	6.1430e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	4.9500e-004	1.8010e-003
tblVehicleEF	SBUS	3.6960e-003	0.04
tblVehicleEF	SBUS	0.03	0.21
tblVehicleEF	SBUS	1.06	0.10
tblVehicleEF	SBUS	2.7830e-003	0.03

tblVehicleEF	SBUS	0.17	0.44
tblVehicleEF	SBUS	0.01	1.43
tblVehicleEF	SBUS	0.38	2.08
tblVehicleEF	SBUS	0.88	4.8080e-003
tblVehicleEF	SBUS	0.02	5.3930e-003
tblVehicleEF	SBUS	0.10	0.00
tblVehicleEF	SBUS	6.36	1.45
tblVehicleEF	SBUS	1.16	4.22
tblVehicleEF	SBUS	8.56	36.98
tblVehicleEF	SBUS	1,160.65	502.12
tblVehicleEF	SBUS	1,129.88	1,024.49
tblVehicleEF	SBUS	39.00	116.73
tblVehicleEF	SBUS	11.75	7.24
tblVehicleEF	SBUS	5.25	6.98
tblVehicleEF	SBUS	14.92	2.67
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.74	0.55
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.03	0.04
tblVehicleEF	SBUS	7.4700e-004	5.1810e-003
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.32	0.23
tblVehicleEF	SBUS	2.7390e-003	2.7220e-003
tblVehicleEF	SBUS	0.03	0.04
tblVehicleEF	SBUS	6.8700e-004	4.6650e-003
tblVehicleEF	SBUS	2.6180e-003	0.03
tblVehicleEF	SBUS	0.03	0.26

tblVehicleEF	SBUS	0.75	0.10
tblVehicleEF	SBUS	1.3800e-003	0.01
tblVehicleEF	SBUS	0.13	0.38
tblVehicleEF	SBUS	0.02	1.93
tblVehicleEF	SBUS	0.42	2.34
tblVehicleEF	SBUS	0.01	5.3230e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	5.3700e-004	1.9490e-003
tblVehicleEF	SBUS	2.6180e-003	0.03
tblVehicleEF	SBUS	0.03	0.26
tblVehicleEF	SBUS	1.07	0.12
tblVehicleEF	SBUS	1.3800e-003	0.01
tblVehicleEF	SBUS	0.17	0.43
tblVehicleEF	SBUS	0.02	1.93
tblVehicleEF	SBUS	0.46	2.50
tblVehicleEF	UBUS	2.00	0.00
tblVehicleEF	UBUS	0.04	0.00
tblVehicleEF	UBUS	8.55	3.03
tblVehicleEF	UBUS	6.93	5.66
tblVehicleEF	UBUS	1,976.87	1,981.57
tblVehicleEF	UBUS	106.18	22.78
tblVehicleEF	UBUS	8.97	11.05
tblVehicleEF	UBUS	14.67	0.89
tblVehicleEF	UBUS	0.59	0.71
tblVehicleEF	UBUS	0.01	8.0000e-003
tblVehicleEF	UBUS	0.14	0.19
tblVehicleEF	UBUS	8.0800e-004	2.0500e-004

tblVehicleEF	UBUS	0.25	0.30
tblVehicleEF	UBUS	3.0000e-003	2.0000e-003
tblVehicleEF	UBUS	0.13	0.18
tblVehicleEF	UBUS	7.4300e-004	1.9000e-004
tblVehicleEF	UBUS	2.0420e-003	1.9740e-003
tblVehicleEF	UBUS	0.04	0.04
tblVehicleEF	UBUS	1.9360e-003	1.8420e-003
tblVehicleEF	UBUS	0.67	0.58
tblVehicleEF	UBUS	8.1940e-003	0.32
tblVehicleEF	UBUS	0.60	0.52
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	1.1880e-003	3.5800e-004
tblVehicleEF	UBUS	2.0420e-003	1.9740e-003
tblVehicleEF	UBUS	0.04	0.04
tblVehicleEF	UBUS	1.9360e-003	1.8420e-003
tblVehicleEF	UBUS	2.75	0.66
tblVehicleEF	UBUS	8.1940e-003	0.32
tblVehicleEF	UBUS	0.66	0.56
tblVehicleEF	UBUS	2.00	0.00
tblVehicleEF	UBUS	0.04	0.00
tblVehicleEF	UBUS	8.57	3.06
tblVehicleEF	UBUS	5.91	4.66
tblVehicleEF	UBUS	1,976.87	1,981.57
tblVehicleEF	UBUS	106.18	22.78
tblVehicleEF	UBUS	8.65	10.66
tblVehicleEF	UBUS	14.62	0.85
tblVehicleEF	UBUS	0.59	0.71

tblVehicleEF	UBUS	0.01	8.0000e-003
tblVehicleEF	UBUS	0.14	0.19
tblVehicleEF	UBUS	8.0800e-004	2.0500e-004
tblVehicleEF	UBUS	0.25	0.30
tblVehicleEF	UBUS	3.0000e-003	2.0000e-003
tblVehicleEF	UBUS	0.13	0.18
tblVehicleEF	UBUS	7.4300e-004	1.9000e-004
tblVehicleEF	UBUS	2.5120e-003	2.4040e-003
tblVehicleEF	UBUS	0.04	0.05
tblVehicleEF	UBUS	3.4810e-003	3.2720e-003
tblVehicleEF	UBUS	0.67	0.59
tblVehicleEF	UBUS	7.3480e-003	0.29
tblVehicleEF	UBUS	0.55	0.47
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	1.1710e-003	3.4100e-004
tblVehicleEF	UBUS	2.5120e-003	2.4040e-003
tblVehicleEF	UBUS	0.04	0.05
tblVehicleEF	UBUS	3.4810e-003	3.2720e-003
tblVehicleEF	UBUS	2.75	0.66
tblVehicleEF	UBUS	7.3480e-003	0.29
tblVehicleEF	UBUS	0.60	0.50
tblVehicleEF	UBUS	2.00	0.00
tblVehicleEF	UBUS	0.05	0.00
tblVehicleEF	UBUS	8.54	3.02
tblVehicleEF	UBUS	7.38	6.10
tblVehicleEF	UBUS	1,976.87	1,981.57
tblVehicleEF	UBUS	106.18	22.78

tblVehicleEF	UBUS	8.92	11.00
tblVehicleEF	UBUS	14.70	0.91
tblVehicleEF	UBUS	0.59	0.71
tblVehicleEF	UBUS	0.01	8.0000e-003
tblVehicleEF	UBUS	0.14	0.19
tblVehicleEF	UBUS	8.0800e-004	2.0500e-004
tblVehicleEF	UBUS	0.25	0.30
tblVehicleEF	UBUS	3.0000e-003	2.0000e-003
tblVehicleEF	UBUS	0.13	0.18
tblVehicleEF	UBUS	7.4300e-004	1.9000e-004
tblVehicleEF	UBUS	1.9160e-003	1.8930e-003
tblVehicleEF	UBUS	0.05	0.05
tblVehicleEF	UBUS	1.7620e-003	1.6820e-003
tblVehicleEF	UBUS	0.67	0.58
tblVehicleEF	UBUS	0.01	0.40
tblVehicleEF	UBUS	0.62	0.55
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	1.1960e-003	3.6600e-004
tblVehicleEF	UBUS	1.9160e-003	1.8930e-003
tblVehicleEF	UBUS	0.05	0.05
tblVehicleEF	UBUS	1.7620e-003	1.6820e-003
tblVehicleEF	UBUS	2.74	0.66
tblVehicleEF	UBUS	0.01	0.40
tblVehicleEF	UBUS	0.68	0.59

2.0 Emissions Summary

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					
2016	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
Maximum	**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**

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					
2016	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
Maximum	**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**

	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	N20	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)
		Highest		

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	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Energy	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
Mobile	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
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0000**	**2.0000e-005**

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	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	-90.9613	-90.9613	-0.0037	-0.0008	-91.2786
Mobile	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
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**-90.9613**	**-90.9613**	**-0.0037**	**-0.0008**	**-91.2786**

	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	N20	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**	**454,806,700.00**	**454,806,700.00**	**0.00**	**0.00**	**456,393,000.00**

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	12/30/2016	12/31/2016	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	0.00	174	0.41

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	1	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2016

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	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
Total	**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**

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	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
Total	**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**

3.2 Site Preparation - 2016

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	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
Total	**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**

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	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
Total	**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**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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	0.0000	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
Unmitigated	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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
User Defined Industrial	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	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
User Defined Industrial	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
User Defined Industrial	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Kilowatt Hours of Renewable Electricity Generated

	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	-90.9613	-90.9613	-0.0037	-0.0008	-91.2786
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	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
NaturalGas Unmitigated	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

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					
User Defined Industrial	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
Total		**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**

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					
User Defined Industrial	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
Total		**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**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
User Defined Industrial	-278332	-90.9613	-0.0037	-0.0008	-91.2786
Total		**-90.9613**	**-0.0037**	**-0.0008**	**-91.2786**

6.0 Area Detail

6.1 Mitigation Measures Area

	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	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Unmitigated	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005

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	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Total	**0.0000**	**0.0000**	**1.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0000**	**2.0000e-005**

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	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Total	**0.0000**	**0.0000**	**1.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0000**	**2.0000e-005**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

ATTACHMENT F

CARB Scoping Plan Onsite Mitigation Evaluation

AVENTINE PROJECT

ASSESSMENT OF MITIGATION MEASURES

RECOMMENDED BY THE CALIFORNIA AIR RESOURCES BOARD

TO REDUCE GREENHOUSE GAS EMISSIONS

Appendix B of *California's 2017 Climate Change Scoping Plan* (December 2017) is a reference document prepared by the California Air Resources Board (CARB) regarding mitigation measures that could be required of individual projects under the California Environmental Quality Act (CEQA), if feasible, when the local jurisdiction is the lead agency.

CARB states that the appendix "should be viewed as a general reference document;" it "should not be interpreted as official guidance or as dictating requirements." CARB relatedly notes that "[n]ot all of the listed local measures or CEQA measures listed will be relevant to, or appropriate for, a given area or project. Nothing in the Scoping Plan or this appendix limits the discretion conferred to lead agencies in determining the appropriate level and type of mitigation, so long as their decisions are supportable by evidence in the record as required by CEQA. There is no 'one size fits all' solution and different policies will be more suitable in urban and suburban areas versus rural areas, among other considerations."

The purpose of this attachment is to assess the potential applicability of CARB's identified mitigation measures to the Project. Where potentially applicable, this attachment then discusses whether the Project implements the identified mitigation measures and/or other comparable strategies designed to reduce greenhouse gas emissions. As illustrated by the tabular analysis that follows, the Project implements a wide range of strategies that will reduce greenhouse gas emissions on the Project site and within the County of San Diego.

Evaluation of the Project's Utilization of Mitigation Measures
Identified by The California Air Resources Board in Appendix B of the 2017 Scoping Plan Update

Mitigation Options	Project Evaluation
Construction	
Enforce idling time restrictions for construction vehicles	*Consistent*. As a matter of regulatory compliance, construction equipment shall be operated in accordance with the California Air Resources Board's (CARB) Airborne Toxic Control Measure (ATCM) that limits diesel-fueled commercial motor vehicle idling. In accordance with the subject ATCM (see Cal. Code Regs., tit. 13, §2485), the drivers of diesel-fueled commercial motor vehicles meeting certain specifications shall not idle the vehicle's primary diesel engine for longer than five minutes at any location. The ATCM requires the owners and motor carriers that own or dispatch such vehicles to ensure compliance with the ATCM requirements. For additional information, please see https://www.arb.ca.gov/msprog/truck-idling/truck-idling.htm.
Require construction vehicles to operate with the highest tier engines commercially available	*Consistent*. Project-related construction activities will use Tier IV United States (US) Environmental Protection Agency (EPA)/California Air Resources Board (CARB) certified construction equipment. Also, to the extent practicable and feasible, contractors will be required to implement the following: utilize electricity to power appropriate types and categories of construction equipment (e.g., hand tools), utilize electric and renewable fuel powered construction equipment and utilize diesel equipment fleets consisting of Tier IV and biodiesel that exceed existing emissions standards if commercially available in the San Diego region.
Divert and recycle construction and demolition waste, and use locally-sourced building materials with a high recycled material content to the greatest extent feasible	*Consistent*. As a matter of regulatory compliance, the Project would comply with the County of San Diego's ordinance regarding the disposal of construction and demolition debris. The subject ordinance requires that 90% of inert materials and 70% of all other materials associated with construction and demolition activities be recycled. The ordinance also requires the preparation and submittal of a Construction and Demolition

Mitigation Options	Project Evaluation
	Debris Management Plan and a refundable Performance Guarantee prior to building permit issuance. For additional information, please see http://www.sandiegocounty.gov/dpw/recycling/cdhome.html.
Minimize tree removal, and mitigate indirect GHG emissions increases that occur due to vegetation removal, loss of sequestration, and soil disturbance	*Consistent.* The proposed project will increase the amount of vegetation on the site through landscaping slopes and commons areas per the landscape plans. Very few trees, in the existing parking lot area, will be removed. In order to increase the net number of trees in the county, the Project will plant a minimum of 184 trees within the project site as referenced within the Landscape Plan, which is equivalent to two trees per unit.
Utilize existing grid power for electric energy rather than operating temporary gasoline/diesel powered generators	*Consistent.* To the extent practicable and feasible, electricity will be used to power appropriate types and categories of construction equipment (e.g., hand tools).
Increase use of electric and renewable fuel powered construction equipment and require renewable diesel fuel where commercially available	*Consistent.* To the extent practicable and feasible, electric and renewable fuel powered construction equipment, biodiesel, will be utilized.
Require diesel equipment fleets to be lower emitting than any current emission standard	*Consistent.* To the extent practicable and feasible, diesel equipment fleets that exceed existing emissions standards will be utilized.
Operation	
Comply with lead agency's standards for mitigating transportation impacts under SB 743	*Not Applicable.* The Governor's Office of Planning and Research (OPR) has not yet adopted amendments to the State CEQA Guidelines pursuant to Senate Bill (SB) 743. Additionally, the County of San Diego has not adopted guidelines or guidance regarding the implementation of SB 743 at the jurisdictional level, and its obligation to do so will be triggered upon completion of OPR's amendment process to the State CEQA Guidelines.
Require on-site EV charging capabilities for parking spaces serving the project to meet jurisdiction-wide EV proliferation goals	*Consistent.* The Project would plumb every residential unit for a Level 2 electric vehicle (EV) charging station.

Mitigation Options	Project Evaluation
Allow for new construction to install fewer on-site parking spaces than required by local municipal building code, if appropriate[1] [1] This is not to be confused with the Americans with Disabilities Act (ADA) requirements or other minimum parking requirements for dedicating space to clean air vehicles and/or EV charging infrastructure.	*Not Applicable. Project is meeting the County's parking requirements*
Dedicate on-site parking for shared vehicles	*Consistent*. As a matter of regulatory compliance, the Project would comply with Section 5.106.5.2 of the 2016 California Green Building Standards Code (CALGreen Code), which requires the provision of designated parking for shared vehicles.
Provide adequate, safe, convenient, and secure on-site bicycle parking and storage in multi-family residential projects and in non-residential projects	*Consistent*. The Project is designed to include bicycle parking at the active rec and children's play area meet the requirement for "bicycle parking facilities" per CALGreen requirements.
Provide on- and off-site safety improvements for bike, pedestrian, and transit connections, and/or implement relevant improvements identified in an applicable bicycle and/or pedestrian master plan	*Consistent.* The Project will provide infrastructure (e.g., designated bike lanes and multi-purpose/multi-use trails already exist on Sweetwater Springs Blvd and Austin Drive) and related amenities for bicyclists and pedestrians on the project site that will facilitate the creation of integrated, walkable neighborhood. Additionally, the Project site is serviced by public transit opportunities. The Project frontage includes a bus stop on Sweetwater Springs Blvd.
Require on-site renewable energy generation	*Consistent*. The Project's will enhance efficiencies in the building envelopes and the utilization of on-site renewable energy sources (i.e., rooftop solar). by installing a 1.8 kWh solar/photovoltaic system on each dwelling unit, which is equivalent to approximately six 300-watt panels for each dwelling unit within the Project.
Prohibit wood-burning fireplaces in new development, and require replacement of wood-burning fireplaces for renovations over a certain size developments	*Consistent.* The Project's is not proposing any fireplaces.

Mitigation Options	Project Evaluation
Require cool roofs and "cool parking" that promotes cool surface treatment for new parking facilities as well as existing surface lots undergoing resurfacing	*Consistent*. The Project's parking facilities will be required to comply with the County's Parking Design Manual that requires parking areas to minimize the heat island effect that results from asphalt and/or large building block surfaces such as parking lots. Parking areas include landscaped areas to screen parking areas consistent with the County's Parking Design Manual, including Section 7 (Landscaping) and the "cool parking" mitigation requirements identified by the California Air Resources Board.
Require solar-ready roofs	*Consistent*. As discussed above, the Project's residential development would utilize rooftop solar to achieve emission reductions.
Require organic collection in new developments	*Consistent*. The Project will work with the local waste collection services to provide areas for storage and collection of recyclables and yard waste for each residence
Require low-water landscaping in new developments. Require water efficient landscape maintenance to conserve water and reduce landscape waste.	*Consistent*. The Project's landscape and irrigation plans shall be submitted to the County of San Diego for review and approval prior to the start of construction. Such plans are required to comply with the County's Water Conservation Landscaping Ordinance, the Water Efficient Landscape Design Manual, and other enumerated requirements.
Achieve Zero Net Energy performance targets prior to dates required by CALGreen	*Consistent*. The project has incorporated design features that would increase building efficiencies beyond what the current building code requirements by utilizing and applying a number of sustainable building design elements to the project. For example: High-Efficiency HVAC system, Sealed (tight) air ducts that minimize heating and cooling HVAC losses, tankless water heaters, Low E dual pane windows. Additionally, the project includes solar on every unit.
Require new construction, including municipal building construction, to achieve third-party green building certifications, such as the GreenPoint Rated program or the LEED rating system	*Consistent*. Many of the Project's design features are consistent with the types of green building strategies recommended by GreenPoint and LEED. (See above)

Mitigation Options	Project Evaluation
Require the design of bike lanes to connect to the regional bicycle network	*Consistent*. The Project will provide infrastructure and related amenities for bicyclists and pedestrians on the project site that can be used to connect to designated bike lanes and multi-purpose/multi-use trails that already exist on Sweetwater Springs Blvd and Austin Drive.
Expand urban forestry and green infrastructure in new land development	*Consistent*. The proposed project will increase the amount of vegetation on the site through landscaping slopes and commons areas per the landscape plans. Very few trees, in the existing parking lot area, will be removed. In order to increase the net number of trees in the county, the Project will plant a minimum of 184 trees within the project site as referenced within the Landscape Plan, which is equivalent to two trees per unit.
Require preferential parking spaces for park and ride to incentivize carpooling, vanpooling, commuter bus, electric vehicles, and rail service use	*Consistent*. As a matter of regulatory compliance, the Project would comply with Section 5.106.5.2 of the 2016 CALGreen Code, which requires the provision of designated parking for shared vehicles and clean air vehicles. The Project would also incentive electric vehicles by plumbing every residential unit for a Level 2 electric vehicle charging station. The project is also severed by a bus stop on Sweetwater Springs Blvd connecting to Jamacha Boulevard, with access to route 855 providing access to Spring Street trolley station located 4.3 miles away and route 856 which provides access to Rancho San Diego, San Diego State University, and Cuyamaca College. Combined these two routes provide over 64 buses per day.
Require a transportation management plan for specific plans which establishes a numeric target for non-SOV travel and overall VMT	*Not applicable*
Develop a rideshare program targeting commuters to major employment centers	*Consistent*. Project will work with SANDAG to provide informational materials on rideshare programs like icommute to promote rideshare programs and opportunities.
Require the design of bus stops/shelters/express lanes in new developments to promote the usage of mass-transit	*Consistent*. The project is served by a bus stop on Sweetwater Springs Blvd connecting to Jamacha Boulevard, with access to

Mitigation Options	Project Evaluation
	route 855 providing access to Spring Street trolley station located 4.3 miles away and route 856 which provides access to Rancho San Diego, San Diego State University, and Cuyamaca College. Combined these two routes provide over 64 buses per day.
Require gas outlets in residential backyards for use with outdoor cooking appliances such as gas barbeques if natural gas service is available	*Consistent*. The Project would provide natural gas outlets in all residential backyards and within the common areas of multi-family development areas.
Require the installation of electrical outlets on the exterior walls of both the front and back of residences to promote the use of electric landscape maintenance equipment	*Consistent*. The Project would provide electrical outlets in all residential backyards and within the common areas of multi-family development areas.
Require the design of the electric boxes in new residential unit garages to promote electric vehicle usage	*Consistent.* The Project would plumb a Level 2 EV charging station for every residential unit.
Require electric vehicle charging station (Conductive/inductive) and signage for non-residential developments	*Not Applicable. Project is a residential development.*
Provide electric outlets to promote the use of electric landscape maintenance equipment to the extent feasible on parks and public/quasi-public lands	*Consistent.* The Project would provide electrical outlets in all residential backyards and within the common areas of multi-family development areas.
Require each residential unit to be "solar ready," including installing the appropriate hardware and proper structural engineering	*Consistent*. As discussed above, the Project's residential development would install rooftop solar on every residence.
Require the installation of energy conserving appliances such as on-demand tank-less water heaters and whole-house fans	*Consistent.* The Project design features include a number of sustainable building design elements that includes high-Efficiency HVAC system, sealed (tight) air ducts that minimize heating and cooling HVAC losses, and tank-less water heaters.
Require each residential and commercial building equip buildings with energy efficient AC units and heating systems with programmable thermostats/timers	*Consistent.* The Project design features include a number of sustainable building design elements that includes energy efficient AC units and heating systems with programmable thermostats/timers.

Mitigation Options	Project Evaluation
Require large-scale residential developments and commercial buildings to report energy use, and set specific targets for per-capita energy use	*Not Applicable*.
Require each residential and commercial building to utilize low flow water fixtures such as low flow toilets and faucets	*Consistent.* As a matter of regulatory compliance, the Project would install low flow water fixtures in the project.
Require the use of energy-efficient lighting for all street, parking, and area lighting	*Consistent.* As a matter of regulatory compliance, the Project would be required to use energy efficient fixtures and bulbs.
Require the landscaping design for parking lots to utilize tree cover	*Consistent*. The Project's parking facilities will be required to comply with the County's Parking Design Manual that provides measures that require parking areas to minimize the heat island effect that results from asphalt and/or large building block surfaces such as parking lots. Additionally, the Project's parking facilities will be required to comply with the vegetation requirements of the Parking Design Manual.
Incorporate water retention in the design of parking lots and landscaping	*Consistent.* The Project would install stormwater detention basins, bio-retention areas, permeable pavers and other best management practices described in the Drainage Study (Preliminary Drainage Study, Hunsaker & Associates May, 2018) and Priority Development Project (PDP) SWQMP prepared by Hunsaker & Associates dated April, 2018, which will contribute to the proposed project being hydrologically invisible. The project proposes and will be required to implement the site design measures and/or source control BMPs and/or treatment control BMPs to reduce potential pollutants to the maximum extent practicable from entering storm water runoff: Refer also to the County of San Diego Water Conservation in Landscaping Ordinance and the Water Efficient Landscape Design Manual for current information regarding irrigation requirements. Irrigation requirements are provided in Section 86.709 of the Water Conservation in Landscaping Ordinance and Section E of the Landscape Design Manual General Requirements.
Require the development project to propose an off-site mitigation project which should generate carbon credits equivalent to the	*Not Applicable*. The Project would result in lower emissions than the current use emits. Thus, the project would improve

Mitigation Options	Project Evaluation
anticipated GHG emission reductions. This would be implemented via an approved protocol for carbon credits from California Air Pollution Control Officers Association (CAPCOA), the California Air Resources Board, or other similar entities determined acceptable by the local air district	greenhouse gas emissions in the region.
Require the project to purchase carbon credits from the CAPCOA GHG Reduction Exchange Program, American Carbon Registry (ACR), Climate Action Reserve (CAR) or other similar carbon credit registry determined to be acceptable by the local air district	*Not Applicable*. The Project would result in lower emissions than the current use emits. Thus, the project would improve greenhouse gas emissions in the region.
Encourage the applicant to consider generating or purchasing local and California-only carbon credits as the preferred mechanism to implement its off-site mitigation measure for GHG emissions and that will facilitate the State's efforts in achieving the GHG emission reduction goal	*Not Applicable*. The Project would result in lower emissions than the current use emits. Thus, the project would improve greenhouse gas emissions in the region.

ATTACHMENT G

CAP Consistency Checklist

Appendix A: Final Climate Action Plan Consistency Review Checklist

Introduction

The County of San Diego (County) Climate Action Plan (CAP), adopted by the Board of Supervisors on February 14, 2018, outlines actions that the County will undertake to meet its greenhouse gas (GHG) emissions reduction targets. Implementation of the CAP will require that new development projects incorporate more sustainable design standards and implement applicable reduction measures consistent with the CAP. To help plan and design projects consistent with the CAP, and to assist County staff in implementing the CAP and determining the consistency of proposed projects with the CAP during development review, the County has prepared a CAP Consistency Review Checklist (Checklist). This Checklist, in conjunction with the CAP, provides a streamlined review process for proposed discretionary projects that require environmental review pursuant to the California Environmental Quality Act (CEQA). Please refer to the County's Guidelines for Determining Significance for Climate Change (Guidelines) for more information on GHG emissions, climate change impact requirements, thresholds of significance, and compliance with CEQA Guidelines Section 15183.5.

The purpose of this Checklist is to implement GHG reduction measures from the CAP that apply to new development projects. The CAP presents the County's comprehensive strategy to reduce GHG emissions to meet its reduction targets. These reductions will be achieved through a combination of County initiatives and reduction actions for both existing and new development. Reduction actions that apply to existing and new development will be implemented through a combination of mandatory requirements and incentives. This Checklist specifically applies to proposed discretionary projects that require environmental review pursuant to CEQA. Therefore, the Checklist represents one implementation tool in the County's overall strategy to implement the CAP. Implementation of measures that do not apply to new development projects will occur through the implementation mechanisms identified in Chapter 5 of the CAP. Implementation of applicable reduction measures in new development projects will help the County achieve incremental reductions towards its targets, with additional reductions occurring through County initiatives and measures related to existing development that are implemented outside of the Checklist process.

The Checklist follows a two-step process to determine if projects are consistent with the CAP and whether they may have a significant cumulative impact under the County's adopted GHG thresholds of significance. The Checklist first assesses a project's consistency with the growth projections and land use assumptions that formed the basis of CAP emissions projections. If a project is consistent with the projections and land use assumptions in the CAP, its associated growth in terms of GHG emissions would have been accounted for in the CAP's projections and project implementation of the CAP reduction measures will contribute towards reducing the County's emissions and meeting the County's reduction targets. Projects that include a land use plan and/or zoning designation amendment that would result in an equivalent or less GHG-intensive project

when compared to existing designation, would also be within the projections assumed in the CAP. Projects responding in the affirmative to Step 1 questions can move forward to Step 2 of the Checklist. If a land use and/or zoning designation amendment results in a more GHG-intensive project, the project is required to demonstrate consistency with applicable CAP measures and offset the increase in emissions as described in the Guidelines. Step 2 of the Checklist contains the CAP GHG reduction measures that projects are required to implement to ensure compliance with the CAP. Implementation of these measures would ensure that new development is consistent with relevant CAP strategies and measures and will contribute towards achieving the identified GHG reduction targets. Projects that are consistent with the CAP, as determined using this Checklist, may rely on the CAP for the cumulative impacts analysis of GHG emissions under CEQA.

A project's incremental contribution to cumulative GHG emissions may be determined to not be cumulatively considerable if it is determined to be consistent with the CAP. As specified in the CEQA Guidelines, the mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the project's incremental effects are "cumulatively considerable" (CCR, Title 14, Division 6, Chapter 3, Section 15064[h][4]). Projects requiring discretionary review that cannot demonstrate consistency with the CAP using this Checklist may have a cumulatively considerable contribution to a significant cumulative impact and would be required to prepare a separate, more detailed project-level GHG analysis as part of the CEQA document prepared for the project.

Checklist Applicability

This Checklist only applies to development projects that require discretionary review and are subject to environmental review (i.e., not statutorily or categorically exempt projects) pursuant to CEQA. Projects that are limited to ministerial review and approval (e.g., only building permits) would not be subject to the Checklist. The CAP contains other measures that, when implemented, would apply broadly to all ministerial and discretionary projects. These measures are included for discretionary projects in this Checklist, but could also apply more broadly once the County takes action to codify specific requirements or standards.

Checklist Procedures

General procedures for Checklist compliance and review are described below. Specific guidance is also provided under each of the questions under Steps 1 and 2 of the Checklist in subsequent pages.

1. The County's Department of Planning & Development Services (PDS) reviews development applications and makes determinations regarding environmental review requirements under CEQA. Procedures for CEQA can be found on the County's Process Guidance & Regulations/Statutes Homepage. The Director of PDS will determine whether environmental review is required, and if so, whether completion of the CAP Checklist is required for a proposed project or whether a separate project-level GHG analysis is required.

2. The specific applicable requirements outlined in the Checklist shall be required as a condition of project approval.

3. The project must provide substantial evidence that demonstrates how the proposed project will implement each applicable Checklist requirement described herein to the satisfaction of the Director of PDS.

4. If a question in the Checklist is deemed not applicable (N/A) to a project, substantial evidence shall be provided to the satisfaction of the Director of PDS demonstrating why the Checklist item is not applicable. Feasibility of reduction measures for new projects was assessed in development of the

CAP and measures determined to be feasible were incorporated into the Checklist. Therefore, it is expected that projects would have the ability to comply with all applicable Checklist measures.

5. Development projects requiring discretionary review that cannot demonstrate consistency with the CAP using this Checklist shall prepare a separate, project-level GHG analysis as part of the CEQA document prepared for the project and may be required to prepare an Environmental Impact Report (EIR). Guidance for project-specific GHG Technical Reports is outlined in the Report Format and Content Requirements for Climate Change document, provided under separate cover. The Report Format and Content Requirements document provides guidance on the outline and content of GHG analyses for discretionary projects processed by PDS that cannot show compliance with the CAP Checklist.

Checklist Updates

The Guidelines and Checklist may be administratively updated by the County from time to time to comply with amendments to State laws or court directives, or to remove measures that may become mandatory through future updates to State or local codes. Administrative revisions to the Guidelines and Checklist will be limited to changes that do not trigger a subsequent EIR or a supplement to the SEIR for the CAP pursuant to CEQA Guidelines Section 15162. Administrative revisions, as described above, will not require approval by the Board of Supervisors (Board). All other changes to the Guidelines and Checklist require Board approval.

Comprehensive updates to the Guidelines and Checklist will be coordinated with each CAP update (i.e., every five years beginning in 2025) and would require Board approval. Future updates of the CAP, Guidelines, and Checklist shall comply with CEQA.

Application Information

Contact Information

Project No. and Name: Aventine Sweetwater

Property Address and APN: 2770-2792 Sweetwater Springs Blvd., Spring Valley Community

Applicant Name and Co.: Alex Plishner, Lennar Homes

Contact Phone: 858-618-4919 Contact Email: alex.plishner@lennar.com

Was a consultant retained to complete this checklist? ■ Yes ☐ No
If Yes, complete the following:

Consultant Name: Jeremy Louden Contact Phone: 760-473-1253

Company Name: Ldn Consulting Contact Email: jlouden@ldnconsulting.net

Project Information

1. What is the size of the project site (acres [gross and net])? gross/net: 10.57/10.54

2. Identify all applicable proposed land uses (indicate square footage [gross and net]):

   ☐ Residential (indicate # of single-family dwelling units):

   ■ Residential (indicate # of multi-family dwelling units): 92

   ☐ Commercial (indicate total square footage [gross and net]):

   ☐ Industrial (indicate total square footage [gross and net]):

   ☐ Agricultural (indicate total acreage [gross and net]):

   ☐ Other (describe):

3. Provide a description of the project proposed. This description should match the project description used for the CEQA document. The description may be attached to the Checklist if there are space constraints.

The project will require a General Plan (Land Use Element) Amendment (including an amendment to the Spring Valley Community Plan), Specific Plan Amendment (SP-74-01), Rezone, Site Plan, Major Use Permit Minor Deviation, and Tentative Map. The General Plan Amendment would change the General Plan Land Use Designation from General Commercial to Village Residential (VR-10.9), and the Rezone would change the zoning designation from General Commercial (C36) to Multi-Family Residential (RM). The property has a General Plan regional category designation of Village which will not be changed. The proposed land use would be less intense under the County of San Diego's General Plan.

CAP Consistency Checklist Questions

Step 1: Land Use Consistency

For projects that are subject to CAP consistency review, the first step in determining consistency is to assess the project's consistency with the growth projections used in the development of the CAP. This section allows the County to determine a project's consistency with the land use assumptions used in the CAP.

Step 1: Land Use Consistency		
Checklist Item (Check the appropriate box and provide explanation and supporting documentation for your answer)	Yes	No
1. Is the proposed project consistent with the existing General Plan regional category, land use designations, and zoning designations? If **"Yes,"** provide substantiation below and then proceed to Step 2 (CAP Measures Consistency) of the Checklist. If **"No,"** proceed to question 2 below.	☐	☒
Project Detail: Please substantiate how the project satisfies question 1. The property has a General Plan regional category designation of Village which will not be changed. The land use designation is being redesignated to a less intense use.		
2. Does the project include a land use element and/or zoning designation amendment that would result in an equivalent or less GHG-intensive project when compared to the existing designations? If **"Yes,"** the project must provide estimated project GHG emissions under both existing and proposed designation(s) for comparison to substantiate the response and proceed to Step 2 (CAP Measures Consistency) of the Checklist. If **"No,"** (i.e., the project proposes an increase in density or intensity above that which is allowed under existing General Plan designations and consequently would not result in an equivalent or less GHG-intensive project when compared to the existing designations), the project must prepare a separate, more detailed project-level GHG analysis. As outlined in the County's Guidelines for Determining Significance for Climate Change and Report Format and Content Requirements for Climate Change, this analysis must demonstrate how the project would offset the increase in GHG emissions over the existing designations or baseline conditions. The project must also incorporate each of the CAP measures identified in Step 2 to mitigate cumulative GHG emissions impacts. Proceed and complete a separate project-specific GHG analysis and Step 2 of the Checklist. Refer to Section 4 of the County's Guidelines for procedures on analyzing General Plan Amendments.	☒	☐
Project Detail: Please substantiate how the project satisfies question 2. The General Plan Amendment would change the General Plan Land Use Designation from General Commercial (C36) to Multi-Family Residential (RM). A GHG analysis was prepared to document that the proposed land uses GHG emissions would be less than what is in the General Plan and the currently use. Please refer to the Global Climate Change Analysis prepared by LDN Consulting dated March 26, 2019.		

Step 2: CAP Measures Consistency

The second step of the CAP consistency review is to review and evaluate a project's consistency with the applicable measures of the CAP. Each checklist item is associated with a specific GHG reduction measure(s) in the County CAP.

Step 2: CAP Measures Consistency				
Checklist Item (Check the appropriate box and provide an explanation for your answer)	CAP Measure	Yes	No	N/A
Step 2A: Project Operations (All projects with an operational component must fill out this portion of the Checklist)				
Reducing Vehicle Miles Traveled				
1a. Reducing Vehicle Miles Traveled <u>Non-Residential:</u> For non-residential projects with anticipated tenant-occupants of 25 or more, will the project achieve a 15% reduction in emissions from commute vehicle miles traveled (VMT), and commit to monitoring and reporting results to demonstrate on-going compliance? VMT reduction may be achieved through a combination of Transportation Demand Management (TDM) and parking strategies, as long as the 15% reduction can be substantiated. VMT reduction actions though TDM may include, but are not limited to: ☐ Telecommuting ☐ Car Sharing ☐ Shuttle Service ☐ Carpools ☐ Vanpools ☐ Bicycle Parking Facilities ☐ Transit Subsidies Shared and reduced parking strategies may include, but are not limited to:[1] ☐ Shared parking facilities ☐ Carpool/vanpool-only parking spaces ☐ Shuttle facilities ☐ Electric Vehicle-only parking spaces The project may incorporate the measures listed above, and propose additional trip reduction measures, as long as a 15% reduction in emissions from commute VMT can be demonstrated through substantial evidence. Check "N/A" if the project is a residential project or if the project would not accommodate more than 25 tenant-occupants.	T-2.2 and T-2.4	☐	☐	☒
1b. Project Detail: Please substantiate how the project satisfies question 1a. The project is a residential project.				

[1] Reduction actions and strategies under 1a may be used to achieve a 10% reduction in emissions from commute VMT under 2a

Step 2: CAP Measures Consistency				
Checklist Item (Check the appropriate box and provide an explanation for your answer)	CAP Measure	Yes	No	N/A
Shared and Reduced Parking				
2a. Shared and Reduced Parking Non-Residential: For non-residential projects with anticipated tenant-occupants of 24 or less, will the project implement shared and reduced parking strategies that achieves a 10% reduction in emissions from commute VMT? Shared and reduced parking strategies may include, but are not limited to: ☐ Shared parking facilities ☐ Carpool/vanpool-only parking spaces ☐ Shuttle facilities ☐ Electric Vehicle-only parking spaces Check "N/A" if the project is a residential project or if the project would accommodate 25 or more tenant-occupants.	T-2.4	☐	☐	☒

2b. Project Detail:
Please substantiate how the project satisfies question 2a.
The project is a residential project.

Water Heating Systems				
3a. Electric or Alternatively-Fueled Water Heating Systems Residential: For projects that include residential construction, will the project, as a condition of approval, install the following types of electric or alternatively-fueled water heating system(s)? Please check which types of system(s) will be installed: ☐ Solar thermal water heater ■ Tankless electric water heater ☐ Storage electric water heaters ☐ Electric heat pump water heater ■ Tankless gas water heater ☐ Other Check "N/A" if the project does not contain any residential buildings.	E-1.2	☒	☐	☐

3b. Project Detail:
Please substantiate how the project satisfies question 3a.
The Project's residences will be equipped with tankless electric or gas water heaters.Confirmation of such installation shall be verified at building plan check and compliance with this measure shall be made a condition of the Project's approvals.

Step 2: CAP Measures Consistency				
Checklist Item (Check the appropriate box and provide an explanation for your answer)	CAP Measure	Yes	No	N/A
Water-Efficient Appliances and Plumbing Fixtures				
4a. Water Efficient Appliances and Plumbing Fixtures Residential: For new residential projects, will the project comply with all of the following water efficiency and conservation BMPs[2]? ■ Kitchen Faucets: The maximum flow rate of kitchen faucets shall not exceed 1.5 gallons per minute at 60 psi. Kitchen faucets may temporarily increase the flow above the maximum rate, but not to exceed 2.2 gallons per minute at 60 psi, and must default to a maximum flow rate of 1.5 gallons per minute at 60 psi[3]. ■ Energy Efficient Appliances: Install at least one qualified ENERGY STAR dishwasher or clothes washer per unit. Check "N/A" if the project is a non-residential project.	W-1.1	☒	☐	☐

4b. Project Detail:
Please substantiate how the project satisfies question 4a.

The Project's residences will be equipped with water efficient appliances and plumbing fixtures. More specifically, EnergyStar or equivalent appliances will be installed, as well as low-flow bathroom faucets, kitchen faucets, toilets and showers as stated above. Confirmation of such installation shall be verified at building plan check and compliance with this measure shall be made a condition of the Project's approvals.

Rain Barrel Installations				
5a. Rain Barrel Installations Residential: For new residential projects, will the project make use of incentives to install one rain barrel per every 500 square feet of available roof area? Check "N/A" if the project is a non-residential project; if State, regional or local incentives/rebates to purchase rain barrels are not available; or if funding for programs/rebates has been exhausted.	W-2.1	☒	☐	☐

5b. Project Detail:
Please substantiate how the project satisfies question 5a.

The project will work with the regional or local water agency to determine if incentives/rebates are available for the purchase and installation of rain barrels. Should rebates be available for use by the project, compliance with this measure will be included in the project's conditions of approval.

[2] CALGreen Tier 1 residential voluntary measure A4.303 of the California Green Building Standards Code.
[3] Where complying faucets are unavailable, aerators or other means may be used to achieve reduction.

Step 2: CAP Measures Consistency				
Checklist Item (Check the appropriate box and provide an explanation for your answer)	CAP Measure	Yes	No	N/A
Reduce Outdoor Water Use				
6a. Reduce Outdoor Water Use Residential: Will the project submit a Landscape Document Package that is compliant with the County's Water Conservation in Landscaping Ordinance[4] and demonstrates a 40% reduction in current Maximum Applied Water Allowance (MAWA) for outdoor use? Non-Residential: Will the project submit a Landscape Document Package that is compliant with the County's Water Conservation in Landscaping Ordinance and demonstrates a 40% reduction in current MAWA for outdoor use? Check "N/A" if the project does not propose any landscaping, or if the aggregate landscaped area is between 500 – 2,499 square feet and elects to comply with the Prescriptive Compliance Option within the Water Conservation in Landscaping Ordinance.	W-1.2	☒	☐	☐
6b. Project Detail: Please substantiate how the project satisfies question 6a. The Project shall submit a Landscape Document Package that complies with the referenced County Ordinance and demonstrates a 40 percent reduction in outdoor use. The Landscape Document Package shall be submitted to the County for review and approval prior to issuance of any building permits and compliance with this measure shall be made a condition of the Project's approval.				
Agricultural and Farming Operations[5]				
7a. Agricultural and Farming Equipment Will the project use the San Diego County Air Pollution Control District's (SDAPCD's) farm equipment incentive program to convert gas- and diesel-powered farm equipment to electric equipment? Check "N/A" if the project does not contain any agricultural or farming operations; if the SDAPCD incentive program is no longer available; or if funding for the incentive program has been exhausted.	A-1.1	☐	☐	☒
7b. Project Detail: Please substantiate how the project satisfies question 7a. The Project does not propose any agricultural or farming operations.				

[4] http://www.sandiegocounty.gov/content/dam/sdc/cob/ordinances/ord10427.pdf.

[5] Existing agricultural operations would not be subject to questions 7 and 8 of the Checklist, unless a proposed expansion is subject to discretionary review and requires environmental review pursuant to CEQA.

Step 2: CAP Measures Consistency				
Checklist Item (Check the appropriate box and provide an explanation for your answer)	CAP Measure	Yes	No	N/A
8a. Electric Irrigation Pumps Will the project use SDAPCD's farm equipment incentive program to convert diesel- or gas-powered irrigation pumps to electric irrigation pumps? Check "N/A" if the project does not contain any agricultural or farming operations; if the SDAPCD incentive program is no longer available; or if funding for the incentive program has been exhausted.	A-1.2	☐	☐	☒

8b. Project Detail:
Please substantiate how the project satisfies question 8a.
The Project does not propose any agricultural or farming operations.

Tree Planting				
9a. Tree Planting <u>Residential:</u> For residential projects, will the project plant, at a minimum, two trees per every new residential dwelling unit proposed? Check "N/A" if the project is a non-residential project.	A-2.1	☒	☐	☐

9b. Project Detail:
Please substantiate how the project satisfies question 9a.
Confirmation of the tree plantings required by this measure shall be verified in conjunction with County review of the master landscape plan design and compliance with this measure shall be made a condition of the Project's approvals. The project will install a minimum of 184 trees, or 2 trees per home.