GREENHOUSE GAS ASSESSMENT

Riverside and Lincoln Commercial Development
15209 Lincoln Street
City of Lake Elsinore, CA

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EXECUTIVE SUMMARY

This analysis has been completed in order to quantify Greenhouse Gas (GHG) emissions from the project site and was prepared according to guidelines established within the California Global Warming Solutions Act of 2006 – Assembly Bill 32 (AB32), Senate Bill 97 (SB97) and the California Environmental Quality Act (CEQA). Greenhouse Gasses analyzed in this study are Carbon Dioxide (CO_2), Methane (CH_4), and Nitrous Oxide (N_2O). To simplify greenhouse gas calculations, both CH_4 and N_2O are converted to equivalent amounts of CO_2 and are identified as CO_2e.

The Project proposes to construct 39,463 square feet of self-storage, 4,456 square feet of fast-food restaurant with drive-thru, a 16 fueling position super convenience market/gas station, and an automated car wash. The project would be fully operational in the year 2022. As noted in Section 1.4 of this report, the Project is both consistent with the City's General Plan and will implement Project Design Features (PDFs) consistent with the City's Climate Action Plan (CAP). Given this, a less than significant GHG impact is expected.

Alternatively, using direct project emissions, the project would generate approximately 2,284.84 Metric Tons of CO_2e each year in 2022. Based on this, the project would not exceed South Coast Air Quality Management District's (SQAQMD) acceptable 3,000 Metric Ton (MT) GHG screening threshold either. Given this, a less than significant GHG impact would be expected. It should be noted that these calculations were based on baseline construction methodology and did not consider the reductions from design features.

1.0 INTRODUCTION

1.1 Purpose of this Study

The purpose of this Green House 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 greenhouse gas 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 design measures to bring the project to a level considered less than significant.

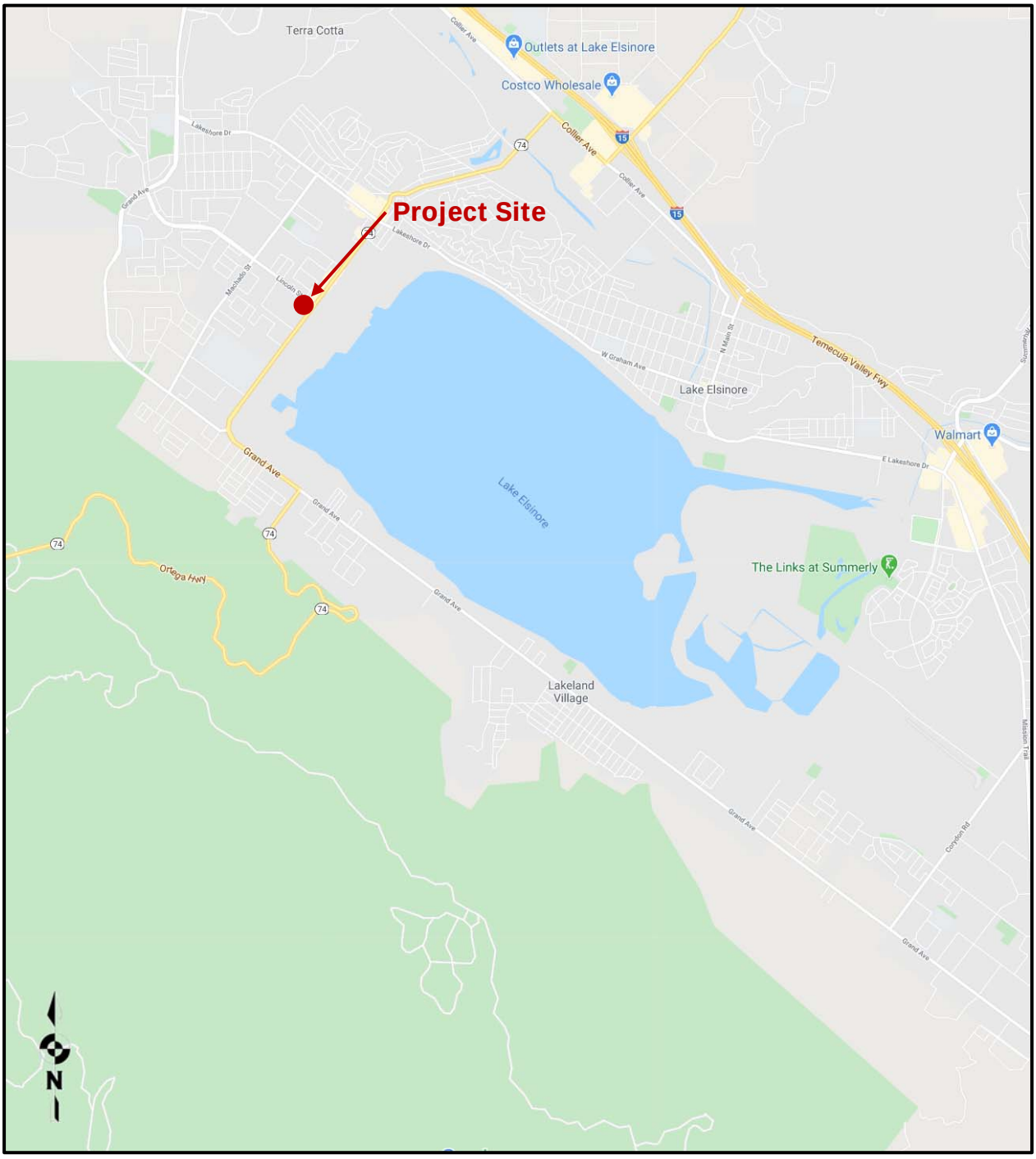
1.2 Project Location

The proposed development is located in the City of Lake Elsinore which is located within the boundaries of the County of Riverside California within the South Coast Air Basin (SCAB). The project is located at 15209 Lincoln Street within the City. A general project vicinity map is shown in Figure 1-A.

1.3 Project Description

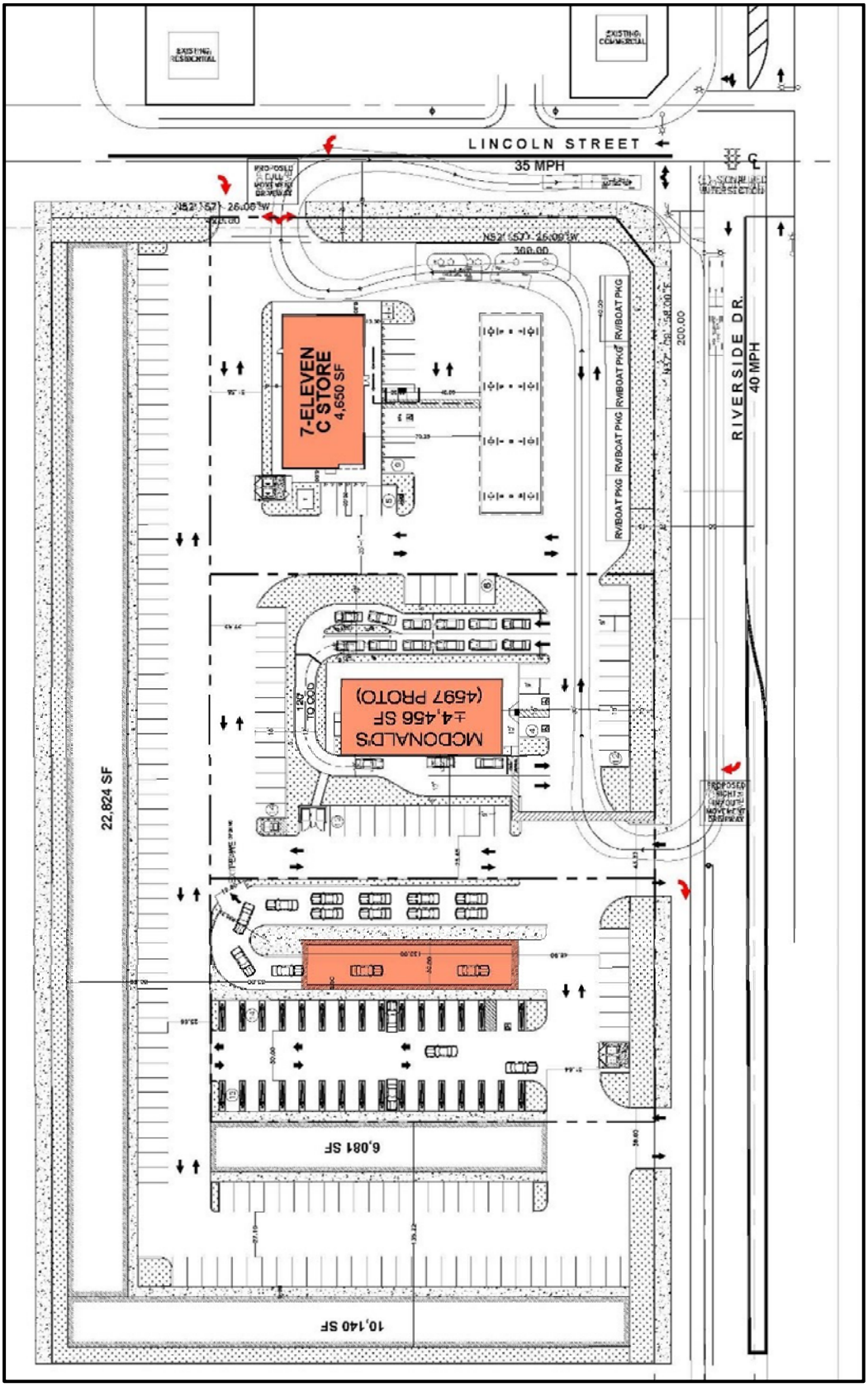
The 5.86-acre project site is located northwest corner of Lincoln Street and Riverside Drive in the City of Lake Elsinore, California. The Project proposes to construct 39,463 square feet of self-storage, 4,456 square feet of fast-food restaurant with drive-thru, a 16 fueling position super convenience market/gas station, and an automated car wash. Construction would begin early 2021 and be completed roughly 13 months later. A site development plan is shown in Figure 1-B. It should be noted that the project would incorporate project design features as identified in Appendix D of the City's Climate Action Plan (CAP) (City of Lake Elsinore, 2011).

Figure 1-A: Project Vicinity Map



Source: (Google, 2020)

Figure 1-B: Site Plan Map



Source: (Golcheh Group, 2019)

1.3 Project Design Features

The proposed Project which is consistent with the City's General Plan would incorporate project design as identified in Appendix D of the City's Climate Action Plan (CAP) (City of Lake Elsinore, 2011). The specific Project actions are identified below:

1. T-1.2 The Project will provide sidewalks along Lincoln Street and add new driveway aprons along Riverside Drive. The aprons will be designed for pedestrian friendly access.
2. T-1.4. The Project will include a neighborhood convenience store and a McDonalds which brings this commercial/retail closer to the City center. Bringing this closer to the City enhances bicycle infrastructure. Therefore, the project is consistent with T-1.4
3. T-1.5 Bicycle Parking will be provided at each of the proposed facilities.
4. T-2.1 The Project would provide parking for fuel efficient vehicles. The parking stalls will be labeled for "Clean Air Vehicles" as required by the City.
5. E-1.1The Project will plant trees along the perimeter and around the facilities where applicable to meet the requirements of E-1.1.
6. E-1.2 In accordance with the CalGreen Tier 1 values, the Project will install cool roofs on each of the facilities. The Solar Reflectance Index shall be 3.
7. E-1.3 The Project will design all facilities to meet Cal Green Tier 1 Standards.
8. E-3.2 The Project will only install LED lighting for both interior and exterior lighting.
9. E-4.1 The Project will be designed to comply with the City's AB 1881 landscaping ordinance.
10. E-4.2 The Project would install low flow water features where applicable and will comply with Cal Green Tier 1, Section A5.303.2.3.1 as required by the City.
11. S-1.4 The Project would incorporate construction waste recycling and will divert at least 65% of all nonhazardous construction debris from landfills.

2.0 EXISTING ENVIRONMENTAL SETTING

2.1 Understanding Greenhouse Gasses

Greenhouse gases 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 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 greenhouse gases such as Methane and Nitrous Oxide are to blame.

Greenhouse Gasses of concern as analyzed in this study are Carbon Dioxide (CO_2), Methane (CH_4), and Nitrous Oxide (N_2O). To simply greenhouse gas 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). The U.S. Environmental Protection Agency publishes GWPs for various GHGs and reports that the GWP for CH_4 and N_2O is 21 and 310, respectively.

2.2 Climate and Meteorology

Climate within the SCAB area often varies dramatically over short geographical distances due to the size and topography. Most of southern California is dominated by high-pressure systems for much of the year, which keeps Lake Elsinore 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 SCAB. 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. Daytime temperature highs within the City of Lake Elsinore typically range between 66 ºF in the winter to approximately 99 ºF in the summer with the month of August usually being the hottest month. Lake Elsinore usually receives an average seasonal precipitation of 12.45 inches of rain per year with the month of January usually being the wettest month of the year (U.S. Climate Data, 2020).

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—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 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

Executive Order (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 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 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[1] 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

[1] 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 SB 32 (discussed below). The strategy includes continuing the Cap-and-Trade Program through 2030[2], 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 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.

[2] 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.

AB 900

In 2011 the Governor of California signed AB 900 (Jobs and Economic Improvement Through Environmental Leadership Act of 2011) (State of California, 2011). AB 900 provides streamlined judicial review of Projects exceeding $100 million which do not generate net additional emission greenhouse gasses. The bill would require, among other things, that the Project create high-wage, highly skilled jobs and not result in any net additional emission of greenhouse gases, including greenhouse gas emissions from employee transportation. Projects which meet these requirements are labeled "Leadership Projects" and would apply directly to the Governor for certification prior to any release of environmental documentation.

After a Project is receives approval from the Governor, if the Project receives any legal challenge, the Project would be litigated directly within the Court of Appeal bypassing any challenges at the superior court level which would ultimately streamline development and which in turn would stimulate Job Growth. AB 900 as written was to be in effect till January 1, 2015. AB 900 was amended by SB 743 (State of California, 2013), SB 734 (State of California, 2016) and AB 246 (California, 2017), which ultimately extend the streamline certification for most Projects through January 2020. AB 987 (State of California, 2018) was signed to extend the streamline process for a specific sports and entertainment Project within the City of Inglewood into 2025.

Based on review of the Governor's Office of Planning and Research website, 18 Projects have been submitted respect to the Project requirements to produce no net additional GHG emission including from employee transportation. Projects have achieved this requirement for both construction and operations through measures such as installing on-site solar panels, electric vehicle charging stations as well as through the purchase of renewable power and retirement of associated renewable energy credits as well as purchase of verifiable, permanent GHG offsets (State of California, 2019) as discussed in Section 3.3 of this report.

Similarly, the Newhall Ranch GHG mitigation plan was approved under CEQA review using various protocols and standards with GHG offsets. Also, the mitigation plan has bolstered the requirements for how GHG offset registry and the offsets they issue qualify as effective CEQA mitigation measures (Newhall Ranch, 2017).

EO B-30-15

EO B-30-15 (April 2015) identified an interim GHG reduction target in support of targets previously identified under EO 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

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).

EO B-55-18

In 2018, the Governor expanded upon EO S-3-05 by issuing Executive Order B-55-18 and creating a statewide goal of carbon neutrality by 2045. EO B-55-18 identifies the California Air Resources Board as the lead agency to develop a framework for implementation and progress tracking toward this goal. It should be noted that consistency with a statewide carbon neutrality target of 100% below 1990 levels by 2045 represents the Governor's policy goal, but is not required to make a significance determination. The state has already determined that 80% below 1990 levels by 2050 is a long-term threshold that represents California's share of emissions reductions to stabilize and limit global warming and "avoid environmental impacts" it has a significant impact. EO B-30-15 setting forth the 2050 target

endorsed the Intergovernmental Panel on Climate Change's finding and noted that the state's 2050 target will "attain a level of emissions necessary to avoid dangerous climate change" because it limits global warming to 2 degrees Celsius by 2050.

Building Energy

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 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 percent and 15 percent less electricity under the 2016 standards, respectively. Similarly, implementation of the 2016 standards is expected to reduce natural gas consumption by 21 percent in single-family homes and 31 percent in multi-family homes. Newly constructed non-residential buildings are estimated to achieve a 5 percent 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 employs, as a default parameter, 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 standards continue to improve upon the 2016 standards for residential and nonresidential buildings. One of the most notable changes in the 2019 standards is the requirement for the installation of rooftop solar on residential buildings (California Energy Commission, 2017). It should be noted that the State updates these regulations every three years. Thus, throughout Project construction, buildings will need comply with the most recently adopted standards.

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 initially 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 EV 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.

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 CARB 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, Clean Car Standards - Pavley, Assembly Bill 1493, 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.

In 2018, CARB extended and expanded the Low Carbon Fuel Standard regulations to include a 20 percent target for reduction in carbon intensity by 2030.

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 (SCS) within their Regional Transportation Plan. The goal of the SCS is to establish a forecasted development pattern for the region that, after considering transportation measures and policies, will achieve, if feasible and if implemented, the GHG reduction targets. If a SCS 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 SCS 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.

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).

AB 1236

AB 1236 (2015), as enacted in California's Planning and Zoning Law, requires local land use jurisdictions to approve applications for the installation of electric vehicle charging stations,

as defined, through the issuance of specified permits unless there is substantial evidence in the record that the proposed installation would have a specific, adverse impact upon the public health or safety, and there is no feasible method to satisfactorily mitigate or avoid the specific, adverse impact. The bill requires local land use jurisdictions with a population of 200,000 or more residents to adopt an ordinance, by September 30, 2016, that creates an expedited and streamlined permitting process for electric vehicle charging stations, as specified. In August 2016, the County Board of Supervisors adopted Ordinance No. 10437 adding a section to its County Code related to the expedited processing of electric vehicle charging stations permits consistent with AB 1236.

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.

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.

SB 100

SB 100 (2018) has further accelerated and expanded the RPS, requiring achievement of a 50 percent RPS by December 31, 2026 and a 60 percent RPS by December 31, 2030. SB 100 also established a new statewide policy goal that calls for eligible renewable energy resources and zero-carbon resources to supply 100 percent of electricity retail sales and 100 percent of electricity procured to serve all state agencies by December 31, 2045.

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 South Coast Air Quality Management District Thresholds of Significance

Areas within SCAQMD, the district has followed Tier 3 screening standards and Tier 4 Performance standards as the baseline for significance thresholds. Under this methodology, Tier 3 screening values are established at 3,000 MT/year CO_2e for residential/commercial uses and 10,000 MT/year CO_2e for industrial projects.

Tier 4 performance standards establish a 2020 plan use threshold of 6.6 MT/Year CO_2e per SPU (Service Population Unit) and 4.8 MT/Year CO_2e for project level analysis (South Coast Air Quality Management District, 2013). These thresholds were developed as requirements to AB 32 and address potential cumulative impacts that a project's GHG emissions may have on Global Climate Change.

3.4 City of Lake Elsinore Climate Action Plan

The City of Lake Elsinore Climate Action Plan (CAP) is a long-range plan to reduce communitywide greenhouse gas (GHG) emissions from activities within the City limits. The CAP serves as a programmatic screening document for the purposes of CEQA within the City by which applicable projects will be reviewed with respect to GHG. If a proposed development

project can demonstrate it is consistent with the applicable emissions reduction measures included in the CAP, the programs and standards that would be implemented as a result of the CAP, and the General Plan Update growth projections, the project's environmental review pertaining to GHG impacts may be streamlined as allowed by CEQA Guidelines Sections 15152 and 15183.5.

To simplify the determination of "Project Consistency" the City prepared a questionnaire within Appendix D of the CAP. A project would be consistent with the CAP if the project can answer the questions in the affirmative (City of Lake Elsinore, 2011). Also, Appendix D of the CAP is provided as ***Attachment A*** to this report.

4.0 METHODOLOGY

4.1 Construction CO_2e Emissions Calculation Methodology

The Project construction dates were estimated based on a construction kickoff starting in early 2021 and completing the project roughly 13 months later. Construction of the project is likely to be phased however, for purposes of this air quality analysis, a worst-case scenario was used assuming all construction operations would occur simultaneously. Table 4.1 on the following page shows the expected timeframes as well as the expected number of pieces of equipment to complete the project for the scenario identified.

Table 4.1: Expected Construction Equipment

Equipment Identification	Start Dates	Completion Dates	Quantity
Site Preparation	01/01/2021	01/14/2021	
Rubber Tired Dozers			3
Tractors/Loaders/Backhoes			4
Grading	01/15/2021	02/11/2021	
Excavators			1
Graders			1
Rubber Tired Dozers			1
Tractors/Loaders/Backhoes			3
Paving	02/12/2021	03/11/2021	
Pavers			2
Paving Equipment			2
Rollers			2
Building Construction	03/13/2021	01/28/2022	
Cranes			1
Forklifts			3
Generator Sets			1
Tractors/Loaders/Backhoes			3
Welders			1
Architectural Coating	01/01/2022	01/28/2022	
Air Compressors			1
This equipment list is based upon equipment inventory within CALLEEMOD 2016.3.2. The quantity and types are based upon discussions with the project applicant.			

GHG emissions related to construction will be calculated using the latest CalEEMod 2016.3.2 air quality model which was developed by Breeze Software for the 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. This recommendation was based on proposals from South Coast Air Quality Management District in 2008.

4.2 Operational Emissions Calculation Methodology

Once construction is completed the proposed project would generate air quality and GHG emissions from daily operations which would include sources such as Area, Energy, Mobile, Solid waste and Water uses, which are calculated within CalEEMod. Area Sources include usage of consumer products, 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. GHGs from water are also indirectly generated through the conveyance of the resource via pumping throughout the state and as necessary for wastewater treatment.

Finally, the project would also generate air quality emissions and GHG through the use of carbon fuel burning vehicles for transportation. CalEEMod 2016.3.2 utilizes the latest EMFAC 2014 emissions model (CARB, 2017) and is shown in ***Attachment B*** to this report. Based on that study, the proposed project would generate 7,783 trips not including internal capture and pass by reductions (GANDDINI GROUP, 2020). CalEEMod was updated to reflect these trips.

Additionally, it should be noted that the Traffic Analysis indicated that projects such as these would shorten existing regional trips within the area since the Project would serving the heavily residential areas in the Lake View and Lake View Sphere Districts which currently travel further distances for proposed uses (GANDDINI GROUP, 2020). CalEEMod was adjusted to reflect vehicle miles traveled (VMT) from these residential areas though no region reductions in VMT was assumed within this analysis.

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 grading and construction of the project will produce approximately 446.36 Metric Tons of CO_2e over the construction life of the project. A summary of the construction emissions is shown in Table 5.1 below. As a design feature to the project, all construction debris waste will be sorted and recycled or reused. The project would divert at least 65% of the construction debris from landfills.

Table 5.1: Expected Annual Construction CO_2e Emissions Summary MT/Year

Year	Bio-CO_2	NBio-CO2	Total CO_2	CH_4	N_2O	CO_2e
2021	0.00	408.31	408.31	0.08	0.00	410.41
2022	0.00	35.79	35.79	0.01	0.00	35.94
					Total	**446.36**

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

5.2 Project Related Operational Emissions/Conclusions

As previously discussed, emissions generated from Area, Energy, Mobile, Solid Waste and Water uses is also calculated within CalEEMod. Statewide averages for utility emissions were utilized for the calculations throughout the model. The calculated operational emissions are identified in Table 5.2.

As indicated in Section 1.4 of this analysis, the Project would implement PDFs in accordance with recommendations of Appendix D of the city's CAP. Since the proposed project would not conflict with the City's General Plan, the project would have a less than significant GHG impact. The project's designer of record shall verify that all CAP PDFs are clearly identified within all building permit requests.

Additionally, the project when compared to SCAQMD GHG recommendations, the project, which was found to produce 2,284.84 MT CO_2e. According to SCAQMD, the proposed project would be categorized as Tier III and because emission do not exceed 3,000 MT CO_2e, no significant GHG impacts would be expected and the Project would not conflict with any local

or state plans, policies, or regulations and would be consistent with SCAQMD's requirements. Given this, the project would have less than significant GHG impacts.

Table 5.2: Expected Operational Emissions Summary MT/Year

Year	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Area	0.00	0.01	0.01	0.00	0.00	0.01
Energy	0.00	193.75	193.75	0.01	0.00	194.61
Mobile	0.00	1,964.42	1,964.42	0.26	0.00	1,970.99
Waste	18.06	0.00	18.06	1.07	0.00	44.74
Water	3.38	44.93	48.31	0.35	0.01	59.61
Amortized Construction Emissions (Table 5.1 above)						14.88
					Total Operations	**2,284.84**

Expected Construction emissions are based upon CalEEMod modeling assumptions for equipment and durations listed in Table 1 above. Data is presented in decimal format and may have rounding errors.

6.0 REFERENCES

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ATTACHMENT A

City of Lake Elsinore Climate Action Plan (Appendix D)

Appendix D: Project-Level CAP Consistency Worksheet

The City of Lake Elsinore Climate Action Plan (CAP) is a comprehensive and program-level document to ensure that the City reduces community-wide GHG emissions consistent with AB 32 and Executive Order S-3-05. Once the CAP is adopted following environmental review, later projects consistent with the General Plan growth potential and CAP may tier from and/or incorporate the CAP by reference in their cumulative GHG impact analyses. This appendix is a project level worksheet that an applicant may use to demonstrate consistency with the General Plan growth potential and CAP. In addition, project-level GHG emissions impact analyses can utilize the California Emissions Estimator Model (CalEEMod), or other appropriate software, to determine compliance[1].

1. Is the project consistent with the General Plan land use designation?

2. Is the project consistent with the General Plan population and employment projections for the site, upon which the CAP modeling is based?

3. Does the project incorporate the following CAP measures as binding and enforceable components of the project? Until these measures have been formally adopted by the City and incorporated in to applicable codes, the requirements must be incorporated as mitigation measures applicable to the project (CEQA Guidelines, Section 15183.5(b)(2)).

T-1.2 Pedestrian Infrastructure

- Does the project provide sidewalks along new and reconstructed streets?
- Does the project provide sidewalks or paths to internally link all uses in a project where applicable?
- Does the project provide connections to neighborhood activity centers, major destinations, and transit contiguous to site?

T-1.4 Bicycle Infrastructure

- Where applicable, does the project implement the network of Class I, II and II bikeways, trails and safety features identified in the General Plan, Bike Lane Master Plan, Trails Master Plan and Western Riverside County Non-Motorized Transportation plan?
- Does the project, where applicable, provide connections to the network identified in those plans?

[1] CalEEMod was created by the South Coast Air Quality Management District (SCAQMD) in collaboration with the other California Air Districts to provide an accurate and comprehensive tool for quantifying GHG impacts from land use projects throughout California. This model is available for public download on CalEEMod's website located at http://www.caleemod.com/.

T-1.5 Bicycle Parking

- Does new, non-residential development that is anticipated to generate visitor traffic provide permanently anchored bicycle racks within 200 feet of the visitor entrance, readily visible to passers-by, for 5% of visitor motorized vehicle parking capacity, with a minimum of one two-bike capacity rack?
- Does the development propose a building with over 10 tenant spaces? If so, does it provide secure bicycle parking for 5% of tenant-occupied motorized vehicle parking capacity, with a minimum of one space?

T-2.1 Designated Parking for Fuel-Efficient Vehicles

- Does a non-residential development designate 10% of its total parking spaces for "Clean Air Vehicles?"

E-1.1 Tree Planting

- Does the developer provide a 15-gal non-deciduous, umbrella-form tree per 30 linear feet of boundary length, near buildings, or to shade pavement in parking lots and streets?

E-1.2 Cool Roof Requirements

- Does the new non-residential development use roofing materials having solar reflectance, thermal emittance or Solar Reflectance Index 3 per CalGreen Tier 1 values?

E-1.3 Energy Efficient Building Standards

- Does new construction achieve CalGreen Tier 1 energy efficiency standards?

E-3.2 Energy Efficient Street and Traffic Signal Lights

- Does the project involve the installation of street or traffic signal lights? If so, are they Low Emitting Diode (LED) lights?

E-4.1 Landscaping

- Does the development comply with the City's AB 1881 Landscaping Ordinance?

E-4.2 Indoor Water Conservation Requirements

- Does the development reduce indoor water consumption by 30%, consistent with CalGreen Tier 1, Section A5.303.2.3.1?

S-1.4: Construction and Demolition Waste Diversion

- Is the project accompanied by a waste management plan that demonstrates how 65% of the nonhazardous construction and demolition debris generated at the site will be recycled or salvaged?

If it is determined that a proposed project does not fall within the assumptions of the General Plan and/or is not consistent with the CAP, incorporating all applicable measures as binding and enforceable components of the project, further CEQA analysis would be required. The applicant must demonstrate to the City's satisfaction how the project will achieve its share of the established targets through the use of alternative design components and/or operational protocols to achieve equivalent reductions, or use permanent, verifiable and enforceable offsets that would result in emissions reductions in the City to achieve remaining reductions. The project would also be required to demonstrate that it would not substantially interfere with implementation of the CAP strategies or measures.

ATTACHMENT B

CalEEMod 2016.3.2 (Project Buildout Emissions)

Riverside at Lincoln Retail

Riverside-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	39.50	1000sqft	2.50	39,500.00	0
User Defined Industrial	1.00	User Defined Unit	0.50	2,000.00	0
Parking Lot	188.00	Space	1.69	75,200.00	0
Fast Food Restaurant with Drive Thru	4.50	1000sqft	0.50	4,500.00	0
Convenience Market With Gas Pumps	16.00	Pump	0.71	2,258.80	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - 5.9 acre; user defined industrial for Carwash

Construction Phase -

Vehicle Trips - Per TS. Project would service nearby developments per TS

Construction Off-road Equipment Mitigation - T4

Architectural Coating -

Fleet Mix - Carwash to service LDA and LDT1 vehicles

Area Coating -

Energy Use - Carwash assumed to have same energy as Convenience Market with Gas Pumps

Table Name	Column Name	Default Value	New Value
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	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
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tblConstEquipMitigation	Tier	No Change	Tier 4 Final
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tblEnergyUse	NT24E	0.00	2.44
tblEnergyUse	NT24NG	0.00	0.30
tblEnergyUse	T24E	0.00	4.58
tblEnergyUse	T24NG	0.00	1.92
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tblFleetMix	LDA	0.55	0.60

tblFleetMix	LDT1	0.04	0.40
tblFleetMix	LDT2	0.19	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	4.9700e-003	0.00
tblFleetMix	MCY	4.5470e-003	0.00
tblFleetMix	MDV	0.12	0.00
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tblFleetMix	OBUS	1.3970e-003	0.00
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tblFleetMix	UBUS	1.1600e-003	0.00
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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					
2021	0.2864	2.6218	2.3698	4.6400e-003	0.2323	0.1300	0.3623	0.1039	0.1217	0.2256	0.0000	408.3128	408.3128	0.0841	0.0000	410.4149
2022	0.2561	0.1894	0.2028	4.1000e-004	7.9700e-003	8.9800e-003	0.0169	2.1400e-003	8.4900e-003	0.0106	0.0000	35.7874	35.7874	6.1800e-003	0.0000	35.9420
Maximum	**0.2864**	**2.6218**	**2.3698**	**4.6400e-003**	**0.2323**	**0.1300**	**0.3623**	**0.1039**	**0.1217**	**0.2256**	**0.0000**	**408.3128**	**408.3128**	**0.0841**	**0.0000**	**410.4149**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0750	0.4850	2.5067	4.6400e-003	0.1465	1.5700e-003	0.1481	0.0581	1.5200e-003	0.0596	0.0000	408.3124	408.3124	0.0841	0.0000	410.4145
2022	0.2406	0.0428	0.2140	4.1000e-004	7.9700e-003	1.4000e-004	8.1000e-003	2.1400e-003	1.3000e-004	2.2800e-003	0.0000	35.7874	35.7874	6.1800e-003	0.0000	35.9419
Maximum	**0.2406**	**0.4850**	**2.5067**	**4.6400e-003**	**0.1465**	**1.5700e-003**	**0.1481**	**0.0581**	**1.5200e-003**	**0.0596**	**0.0000**	**408.3124**	**408.3124**	**0.0841**	**0.0000**	**410.4145**

	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	**41.81**	**81.22**	**-5.75**	**0.00**	**35.68**	**98.77**	**58.81**	**43.21**	**98.73**	**73.79**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-1-2021	3-31-2021	0.7856	0.0846
2	4-1-2021	6-30-2021	0.7023	0.1573
3	7-1-2021	9-30-2021	0.7100	0.1590
4	10-1-2021	12-31-2021	0.7096	0.1586
5	1-1-2022	3-31-2022	0.4454	0.2833
		Highest	0.7856	0.2833

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	0.2030	3.0000e-005	3.1800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.1800e-003	6.1800e-003	2.0000e-005	0.0000	6.5900e-003
Energy	7.1200e-003	0.0647	0.0544	3.9000e-004		4.9200e-003	4.9200e-003		4.9200e-003	4.9200e-003	0.0000	193.7495	193.7495	6.4400e-003	2.3400e-003	194.6092
Mobile	1.5986	8.9401	7.6446	0.0210	0.8390	0.0153	0.8544	0.2244	0.0143	0.2386	0.0000	1,964.4223	1,964.4223	0.2628	0.0000	1,970.9926
Waste						0.0000	0.0000		0.0000	0.0000	18.0601	0.0000	18.0601	1.0673	0.0000	44.7432
Water						0.0000	0.0000		0.0000	0.0000	3.3843	44.9290	48.3134	0.3495	8.5900e-003	59.6101
Total	**1.8087**	**9.0049**	**7.7021**	**0.0214**	**0.8390**	**0.0203**	**0.8593**	**0.2244**	**0.0192**	**0.2436**	**21.4444**	**2,203.1069**	**2,224.5514**	**1.6861**	**0.0109**	**2,269.9617**

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	0.2030	3.0000e-005	3.1800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.1800e-003	6.1800e-003	2.0000e-005	0.0000	6.5900e-003
Energy	7.1200e-003	0.0647	0.0544	3.9000e-004		4.9200e-003	4.9200e-003		4.9200e-003	4.9200e-003	0.0000	193.7495	193.7495	6.4400e-003	2.3400e-003	194.6092
Mobile	1.5986	8.9401	7.6446	0.0210	0.8390	0.0153	0.8544	0.2244	0.0143	0.2386	0.0000	1,964.4223	1,964.4223	0.2628	0.0000	1,970.9926
Waste						0.0000	0.0000		0.0000	0.0000	18.0601	0.0000	18.0601	1.0673	0.0000	44.7432
Water						0.0000	0.0000		0.0000	0.0000	3.3843	44.9290	48.3134	0.3495	8.5900e-003	59.6101
Total	**1.8087**	**9.0049**	**7.7021**	**0.0214**	**0.8390**	**0.0203**	**0.8593**	**0.2244**	**0.0192**	**0.2436**	**21.4444**	**2,203.1069**	**2,224.5514**	**1.6861**	**0.0109**	**2,269.9617**

	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	Site Preparation	Site Preparation	1/1/2021	1/14/2021	5	10	
2	Grading	Grading	1/15/2021	2/11/2021	5	20	
3	Paving	Paving	2/12/2021	3/11/2021	5	20	
4	Building Construction	Building Construction	3/13/2021	1/28/2022	5	230	
5	Architectural Coating	Architectural Coating	1/1/2022	1/28/2022	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 1.69

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 72,388; Non-Residential Outdoor: 24,129; Striped Parking Area: 4,512 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	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	Cranes	1	7.00	231	0.29
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

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	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	51.00	20.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Water Exposed Area

3.2 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0194	0.2025	0.1058	1.9000e-004		0.0102	0.0102		9.4000e-003	9.4000e-003	0.0000	16.7179	16.7179	5.4100e-003	0.0000	16.8530
Total	**0.0194**	**0.2025**	**0.1058**	**1.9000e-004**	**0.0903**	**0.0102**	**0.1006**	**0.0497**	**9.4000e-003**	**0.0591**	**0.0000**	**16.7179**	**16.7179**	**5.4100e-003**	**0.0000**	**16.8530**

3.2 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.9000e-004	2.6000e-004	2.8300e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8000	0.8000	2.0000e-005	0.0000	0.8004
Total	**3.9000e-004**	**2.6000e-004**	**2.8300e-003**	**1.0000e-005**	**9.9000e-004**	**1.0000e-005**	**1.0000e-003**	**2.6000e-004**	**1.0000e-005**	**2.7000e-004**	**0.0000**	**0.8000**	**0.8000**	**2.0000e-005**	**0.0000**	**0.8004**

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					0.0407	0.0000	0.0407	0.0223	0.0000	0.0223	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.3300e-003	0.0101	0.1043	1.9000e-004		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	16.7178	16.7178	5.4100e-003	0.0000	16.8530
Total	**2.3300e-003**	**0.0101**	**0.1043**	**1.9000e-004**	**0.0407**	**5.0000e-005**	**0.0407**	**0.0223**	**5.0000e-005**	**0.0224**	**0.0000**	**16.7178**	**16.7178**	**5.4100e-003**	**0.0000**	**16.8530**

3.2 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.9000e-004	2.6000e-004	2.8300e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8000	0.8000	2.0000e-005	0.0000	0.8004
Total	**3.9000e-004**	**2.6000e-004**	**2.8300e-003**	**1.0000e-005**	**9.9000e-004**	**1.0000e-005**	**1.0000e-003**	**2.6000e-004**	**1.0000e-005**	**2.7000e-004**	**0.0000**	**0.8000**	**0.8000**	**2.0000e-005**	**0.0000**	**0.8004**

3.3 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0655	0.0000	0.0655	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0229	0.2474	0.1586	3.0000e-004		0.0116	0.0116		0.0107	0.0107	0.0000	26.0537	26.0537	8.4300e-003	0.0000	26.2644
Total	**0.0229**	**0.2474**	**0.1586**	**3.0000e-004**	**0.0655**	**0.0116**	**0.0771**	**0.0337**	**0.0107**	**0.0443**	**0.0000**	**26.0537**	**26.0537**	**8.4300e-003**	**0.0000**	**26.2644**

3.3 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	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	6.4000e-004	4.3000e-004	4.7200e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3333	1.3333	3.0000e-005	0.0000	1.3341
Total	**6.4000e-004**	**4.3000e-004**	**4.7200e-003**	**1.0000e-005**	**1.6500e-003**	**1.0000e-005**	**1.6600e-003**	**4.4000e-004**	**1.0000e-005**	**4.5000e-004**	**0.0000**	**1.3333**	**1.3333**	**3.0000e-005**	**0.0000**	**1.3341**

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					0.0295	0.0000	0.0295	0.0152	0.0000	0.0152	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.6300e-003	0.0157	0.1775	3.0000e-004		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	26.0537	26.0537	8.4300e-003	0.0000	26.2643
Total	**3.6300e-003**	**0.0157**	**0.1775**	**3.0000e-004**	**0.0295**	**7.0000e-005**	**0.0296**	**0.0152**	**7.0000e-005**	**0.0152**	**0.0000**	**26.0537**	**26.0537**	**8.4300e-003**	**0.0000**	**26.2643**

3.3 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	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	6.4000e-004	4.3000e-004	4.7200e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3333	1.3333	3.0000e-005	0.0000	1.3341
Total	**6.4000e-004**	**4.3000e-004**	**4.7200e-003**	**1.0000e-005**	**1.6500e-003**	**1.0000e-005**	**1.6600e-003**	**4.4000e-004**	**1.0000e-005**	**4.5000e-004**	**0.0000**	**1.3333**	**1.3333**	**3.0000e-005**	**0.0000**	**1.3341**

3.4 Paving - 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	0.0126	0.1292	0.1465	2.3000e-004		6.7800e-003	6.7800e-003		6.2400e-003	6.2400e-003	0.0000	20.0235	20.0235	6.4800e-003	0.0000	20.1854
Paving	2.2100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0148**	**0.1292**	**0.1465**	**2.3000e-004**		**6.7800e-003**	**6.7800e-003**		**6.2400e-003**	**6.2400e-003**	**0.0000**	**20.0235**	**20.0235**	**6.4800e-003**	**0.0000**	**20.1854**

3.4 Paving - 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	6.4000e-004	4.3000e-004	4.7200e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3333	1.3333	3.0000e-005	0.0000	1.3341
Total	**6.4000e-004**	**4.3000e-004**	**4.7200e-003**	**1.0000e-005**	**1.6500e-003**	**1.0000e-005**	**1.6600e-003**	**4.4000e-004**	**1.0000e-005**	**4.5000e-004**	**0.0000**	**1.3333**	**1.3333**	**3.0000e-005**	**0.0000**	**1.3341**

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	20.0235	20.0235	6.4800e-003	0.0000	20.1854
Paving	2.2100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**5.0100e-003**	**0.0122**	**0.1730**	**2.3000e-004**		**6.0000e-005**	**6.0000e-005**		**6.0000e-005**	**6.0000e-005**	**0.0000**	**20.0235**	**20.0235**	**6.4800e-003**	**0.0000**	**20.1854**

3.4 Paving - 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	6.4000e-004	4.3000e-004	4.7200e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3333	1.3333	3.0000e-005	0.0000	1.3341
Total	**6.4000e-004**	**4.3000e-004**	**4.7200e-003**	**1.0000e-005**	**1.6500e-003**	**1.0000e-005**	**1.6600e-003**	**4.4000e-004**	**1.0000e-005**	**4.5000e-004**	**0.0000**	**1.3333**	**1.3333**	**3.0000e-005**	**0.0000**	**1.3341**

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	0.1996	1.8304	1.7404	2.8300e-003		0.1007	0.1007		0.0946	0.0946	0.0000	243.2191	243.2191	0.0587	0.0000	244.6861
Total	**0.1996**	**1.8304**	**1.7404**	**2.8300e-003**		**0.1007**	**0.1007**		**0.0946**	**0.0946**	**0.0000**	**243.2191**	**243.2191**	**0.0587**	**0.0000**	**244.6861**

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	5.0100e-003	0.1958	0.0377	5.4000e-004	0.0133	3.7000e-004	0.0136	3.8300e-003	3.6000e-004	4.1800e-003	0.0000	51.2344	51.2344	3.9100e-003	0.0000	51.3321
Worker	0.0230	0.0155	0.1686	5.3000e-004	0.0589	3.5000e-004	0.0592	0.0156	3.2000e-004	0.0160	0.0000	47.5977	47.5977	1.1100e-003	0.0000	47.6254
Total	**0.0280**	**0.2113**	**0.2063**	**1.0700e-003**	**0.0721**	**7.2000e-004**	**0.0729**	**0.0195**	**6.8000e-004**	**0.0201**	**0.0000**	**98.8321**	**98.8321**	**5.0200e-003**	**0.0000**	**98.9575**

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	0.0344	0.2346	1.8333	2.8300e-003		6.4000e-004	6.4000e-004		6.4000e-004	6.4000e-004	0.0000	243.2189	243.2189	0.0587	0.0000	244.6858
Total	**0.0344**	**0.2346**	**1.8333**	**2.8300e-003**		**6.4000e-004**	**6.4000e-004**		**6.4000e-004**	**6.4000e-004**	**0.0000**	**243.2189**	**243.2189**	**0.0587**	**0.0000**	**244.6858**

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	5.0100e-003	0.1958	0.0377	5.4000e-004	0.0133	3.7000e-004	0.0136	3.8300e-003	3.6000e-004	4.1800e-003	0.0000	51.2344	51.2344	3.9100e-003	0.0000	51.3321
Worker	0.0230	0.0155	0.1686	5.3000e-004	0.0589	3.5000e-004	0.0592	0.0156	3.2000e-004	0.0160	0.0000	47.5977	47.5977	1.1100e-003	0.0000	47.6254
Total	**0.0280**	**0.2113**	**0.2063**	**1.0700e-003**	**0.0721**	**7.2000e-004**	**0.0729**	**0.0195**	**6.8000e-004**	**0.0201**	**0.0000**	**98.8321**	**98.8321**	**5.0200e-003**	**0.0000**	**98.9575**

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	0.0171	0.1562	0.1636	2.7000e-004		8.0900e-003	8.0900e-003		7.6100e-003	7.6100e-003	0.0000	23.1725	23.1725	5.5500e-003	0.0000	23.3113
Total	**0.0171**	**0.1562**	**0.1636**	**2.7000e-004**		**8.0900e-003**	**8.0900e-003**		**7.6100e-003**	**7.6100e-003**	**0.0000**	**23.1725**	**23.1725**	**5.5500e-003**	**0.0000**	**23.3113**

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	4.5000e-004	0.0176	3.3400e-003	5.0000e-005	1.2600e-003	3.0000e-005	1.2900e-003	3.6000e-004	3.0000e-005	3.9000e-004	0.0000	4.8375	4.8375	3.5000e-004	0.0000	4.8463
Worker	2.0500e-003	1.3300e-003	0.0148	5.0000e-005	5.6100e-003	3.0000e-005	5.6400e-003	1.4900e-003	3.0000e-005	1.5200e-003	0.0000	4.3677	4.3677	9.0000e-005	0.0000	4.3701
Total	**2.5000e-003**	**0.0189**	**0.0181**	**1.0000e-004**	**6.8700e-003**	**6.0000e-005**	**6.9300e-003**	**1.8500e-003**	**6.0000e-005**	**1.9100e-003**	**0.0000**	**9.2052**	**9.2052**	**4.4000e-004**	**0.0000**	**9.2164**

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	3.2800e-003	0.0224	0.1746	2.7000e-004		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	23.1725	23.1725	5.5500e-003	0.0000	23.3113
Total	**3.2800e-003**	**0.0224**	**0.1746**	**2.7000e-004**		**6.0000e-005**	**6.0000e-005**		**6.0000e-005**	**6.0000e-005**	**0.0000**	**23.1725**	**23.1725**	**5.5500e-003**	**0.0000**	**23.3113**

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	4.5000e-004	0.0176	3.3400e-003	5.0000e-005	1.2600e-003	3.0000e-005	1.2900e-003	3.6000e-004	3.0000e-005	3.9000e-004	0.0000	4.8375	4.8375	3.5000e-004	0.0000	4.8463
Worker	2.0500e-003	1.3300e-003	0.0148	5.0000e-005	5.6100e-003	3.0000e-005	5.6400e-003	1.4900e-003	3.0000e-005	1.5200e-003	0.0000	4.3677	4.3677	9.0000e-005	0.0000	4.3701
Total	**2.5000e-003**	**0.0189**	**0.0181**	**1.0000e-004**	**6.8700e-003**	**6.0000e-005**	**6.9300e-003**	**1.8500e-003**	**6.0000e-005**	**1.9100e-003**	**0.0000**	**9.2052**	**9.2052**	**4.4000e-004**	**0.0000**	**9.2164**

3.6 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2341					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.0500e-003	0.0141	0.0181	3.0000e-005		8.2000e-004	8.2000e-004		8.2000e-004	8.2000e-004	0.0000	2.5533	2.5533	1.7000e-004	0.0000	2.5574
Total	**0.2362**	**0.0141**	**0.0181**	**3.0000e-005**		**8.2000e-004**	**8.2000e-004**		**8.2000e-004**	**8.2000e-004**	**0.0000**	**2.5533**	**2.5533**	**1.7000e-004**	**0.0000**	**2.5574**

3.6 Architectural Coating - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-004	2.6000e-004	2.9000e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.8564	0.8564	2.0000e-005	0.0000	0.8569
Total	**4.0000e-004**	**2.6000e-004**	**2.9000e-003**	**1.0000e-005**	**1.1000e-003**	**1.0000e-005**	**1.1100e-003**	**2.9000e-004**	**1.0000e-005**	**3.0000e-004**	**0.0000**	**0.8564**	**0.8564**	**2.0000e-005**	**0.0000**	**0.8569**

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	0.2341					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.0000e-004	1.2900e-003	0.0183	3.0000e-005		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.5533	2.5533	1.7000e-004	0.0000	2.5574
Total	**0.2344**	**1.2900e-003**	**0.0183**	**3.0000e-005**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**2.5533**	**2.5533**	**1.7000e-004**	**0.0000**	**2.5574**

3.6 Architectural Coating - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-004	2.6000e-004	2.9000e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.8564	0.8564	2.0000e-005	0.0000	0.8569
Total	**4.0000e-004**	**2.6000e-004**	**2.9000e-003**	**1.0000e-005**	**1.1000e-003**	**1.0000e-005**	**1.1100e-003**	**2.9000e-004**	**1.0000e-005**	**3.0000e-004**	**0.0000**	**0.8564**	**0.8564**	**2.0000e-005**	**0.0000**	**0.8569**

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	1.5986	8.9401	7.6446	0.0210	0.8390	0.0153	0.8544	0.2244	0.0143	0.2386	0.0000	1,964.4223	1,964.4223	0.2628	0.0000	1,970.9926
Unmitigated	1.5986	8.9401	7.6446	0.0210	0.8390	0.0153	0.8544	0.2244	0.0143	0.2386	0.0000	1,964.4223	1,964.4223	0.2628	0.0000	1,970.9926

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Convenience Market With Gas Pumps	3,688.32	3,688.32	3688.32	862,587	862,587
Fast Food Restaurant with Drive Thru	2,119.28	2,119.28	2119.28	831,201	831,201
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	59.65	59.65	59.65	60,801	60,801
User Defined Industrial	1,936.00	1,936.00	1936.00	452,772	452,772
Total	7,803.24	7,803.24	7,803.24	2,207,362	2,207,362

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
Convenience Market With Gas	3.00	3.00	3.00	0.80	80.20	19.00	14	21	65
Fast Food Restaurant with Drive	3.00	3.00	3.00	2.20	78.80	19.00	29	21	50
Parking Lot	3.00	3.00	3.00	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	3.00	3.00	3.00	59.00	0.00	41.00	92	5	3
User Defined Industrial	3.00	3.00	3.00	0.80	80.20	19.00	14	21	65

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Convenience Market With Gas Pumps	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Fast Food Restaurant with Drive Thru	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Parking Lot	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Unrefrigerated Warehouse-No Rail	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
User Defined Industrial	0.600000	0.400000	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

	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	123.3029	123.3029	5.0900e-003	1.0500e-003	123.7440
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	123.3029	123.3029	5.0900e-003	1.0500e-003	123.7440
NaturalGas Mitigated	7.1200e-003	0.0647	0.0544	3.9000e-004		4.9200e-003	4.9200e-003		4.9200e-003	4.9200e-003	0.0000	70.4466	70.4466	1.3500e-003	1.2900e-003	70.8652
NaturalGas Unmitigated	7.1200e-003	0.0647	0.0544	3.9000e-004		4.9200e-003	4.9200e-003		4.9200e-003	4.9200e-003	0.0000	70.4466	70.4466	1.3500e-003	1.2900e-003	70.8652

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					
Convenience Market With Gas Pumps	5014.54	3.0000e-005	2.5000e-004	2.1000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.2676	0.2676	1.0000e-005	0.0000	0.2692
Fast Food Restaurant with Drive Thru	1.23048e+006	6.6300e-003	0.0603	0.0507	3.6000e-004		4.5800e-003	4.5800e-003		4.5800e-003	4.5800e-003	0.0000	65.6631	65.6631	1.2600e-003	1.2000e-003	66.0533
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	80185	4.3000e-004	3.9300e-003	3.3000e-003	2.0000e-005		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004	0.0000	4.2790	4.2790	8.0000e-005	8.0000e-005	4.3044
User Defined Industrial	4440	2.0000e-005	2.2000e-004	1.8000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.2369	0.2369	0.0000	0.0000	0.2383
Total		**7.1100e-003**	**0.0647**	**0.0544**	**3.8000e-004**		**4.9200e-003**	**4.9200e-003**		**4.9200e-003**	**4.9200e-003**	**0.0000**	**70.4466**	**70.4466**	**1.3500e-003**	**1.2800e-003**	**70.8652**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Convenience Market With Gas Pumps	5014.54	3.0000e-005	2.5000e-004	2.1000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.2676	0.2676	1.0000e-005	0.0000	0.2692
Fast Food Restaurant with Drive Thru	1.23048e+006	6.6300e-003	0.0603	0.0507	3.6000e-004		4.5800e-003	4.5800e-003		4.5800e-003	4.5800e-003	0.0000	65.6631	65.6631	1.2600e-003	1.2000e-003	66.0533
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	80185	4.3000e-004	3.9300e-003	3.3000e-003	2.0000e-005		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004	0.0000	4.2790	4.2790	8.0000e-005	8.0000e-005	4.3044
User Defined Industrial	4440	2.0000e-005	2.2000e-004	1.8000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.2369	0.2369	0.0000	0.0000	0.2383
Total		**7.1100e-003**	**0.0647**	**0.0544**	**3.8000e-004**		**4.9200e-003**	**4.9200e-003**		**4.9200e-003**	**4.9200e-003**	**0.0000**	**70.4466**	**70.4466**	**1.3500e-003**	**1.2800e-003**	**70.8652**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Convenience Market With Gas Pumps	28528.6	9.0898	3.8000e-004	8.0000e-005	9.1224
Fast Food Restaurant with Drive Thru	213660	68.0767	2.8100e-003	5.8000e-004	68.3202
Parking Lot	26320	8.3861	3.5000e-004	7.0000e-005	8.4161
Unrefrigerated Warehouse-No Rail	93220	29.7019	1.2300e-003	2.5000e-004	29.8082
User Defined Industrial	25260	8.0484	3.3000e-004	7.0000e-005	8.0772
Total		**123.3029**	**5.1000e-003**	**1.0500e-003**	**123.7440**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Convenience Market With Gas Pumps	28528.6	9.0898	3.8000e-004	8.0000e-005	9.1224
Fast Food Restaurant with Drive Thru	213660	68.0767	2.8100e-003	5.8000e-004	68.3202
Parking Lot	26320	8.3861	3.5000e-004	7.0000e-005	8.4161
Unrefrigerated Warehouse-No Rail	93220	29.7019	1.2300e-003	2.5000e-004	29.8082
User Defined Industrial	25260	8.0484	3.3000e-004	7.0000e-005	8.0772
Total		**123.3029**	**5.1000e-003**	**1.0500e-003**	**123.7440**

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	0.2030	3.0000e-005	3.1800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.1800e-003	6.1800e-003	2.0000e-005	0.0000	6.5900e-003
Unmitigated	0.2030	3.0000e-005	3.1800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.1800e-003	6.1800e-003	2.0000e-005	0.0000	6.5900e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0234					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1792					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.0000e-004	3.0000e-005	3.1800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.1800e-003	6.1800e-003	2.0000e-005	0.0000	6.5900e-003
Total	**0.2030**	**3.0000e-005**	**3.1800e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**6.1800e-003**	**6.1800e-003**	**2.0000e-005**	**0.0000**	**6.5900e-003**

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	0.0234					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1792					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.0000e-004	3.0000e-005	3.1800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.1800e-003	6.1800e-003	2.0000e-005	0.0000	6.5900e-003
Total	**0.2030**	**3.0000e-005**	**3.1800e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**6.1800e-003**	**6.1800e-003**	**2.0000e-005**	**0.0000**	**6.5900e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

Riverside at Lincoln Retail - Riverside-South Coast County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	48.3134	0.3495	8.5900e-003	59.6101
Unmitigated	48.3134	0.3495	8.5900e-003	59.6101

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Convenience Market With Gas Pumps	0.167315 / 0.102548	1.1102	5.5000e-003	1.4000e-004	1.2887
Fast Food Restaurant with Drive Thru	1.3659 / 0.0871852	6.4088	0.0448	1.1000e-003	7.8560
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	9.13438 / 0	40.7943	0.2992	7.3500e-003	50.4654
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**48.3133**	**0.3495**	**8.5900e-003**	**59.6101**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Convenience Market With Gas Pumps	0.167315 / 0.102548	1.1102	5.5000e-003	1.4000e-004	1.2887
Fast Food Restaurant with Drive Thru	1.3659 / 0.0871852	6.4088	0.0448	1.1000e-003	7.8560
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	9.13438 / 0	40.7943	0.2992	7.3500e-003	50.4654
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**48.3133**	**0.3495**	**8.5900e-003**	**59.6101**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	18.0601	1.0673	0.0000	44.7432
Unmitigated	18.0601	1.0673	0.0000	44.7432

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Fast Food Restaurant with Drive Thru	51.84	10.5231	0.6219	0.0000	26.0704
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	37.13	7.5371	0.4454	0.0000	18.6727
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		**18.0601**	**1.0673**	**0.0000**	**44.7431**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Fast Food Restaurant with Drive Thru	51.84	10.5231	0.6219	0.0000	26.0704
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	37.13	7.5371	0.4454	0.0000	18.6727
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		**18.0601**	**1.0673**	**0.0000**	**44.7431**

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