APPENDIX O

Global Climate Change Analysis, Assumptions for VMT Reduction for Warner Ranch

APPENDIX O1

Global Climate Change Analysis

GLOBAL CLIMATE CHANGE ANALYSIS

Warner Ranch Residential Development
TM 5508, GPA 06-009
County of San Diego, CA

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Assembly Bill 32 (AB32)

Business as Usual (BAU)

California Air Pollution Control Officers Association's (CAPCOA)

California Air Resource Board (CARB)

California Climate Action Registry General Reporting Protocol Version 3.1 (CCARGRPV3.1)

California Energy Commission (CEC)

California Environmental Quality Act (CEQA)

Carbon Dioxide (CO2)

Cubic Yards (CY)

Environmental Protection Agency (EPA)

Green House Gas (GHG)

International Residential Code (IRC)

Low Carbon Fuel Standard (LCFS)

Methane (CH4)

Nitrous Oxide (N2O)

San Diego Air Basin (SDAB)

San Diego Air Pollution Control District (SDAPCD)

Senate Bill 97 (SB97)

Vehicle Miles Traveled (VMT)

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), California Environmental Quality Act (CEQA) and project specific methodology. 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 proposed project would be developed with 534 Single-Family detached homes, 246 Multi-Family attached townhomes and 11.93 acres of park and recreation areas in which 4.23 acres would be opened to the public. Additionally, the Project would build a fire station to serve the community. All phases (i.e. mass grading, trenching, finish grading and construction) of the proposed Project are anticipated to start in 2017 with construction and opening of the first buildings sometime in 2020 and full buildout in 2025. The project would be fully operational in 2025.

The proposed project will emit GHGs directly through the burning of carbon-based fuels such as gasoline and natural gas as well as indirectly through usage of electricity, water and from the anaerobic bacterial breakdown of organic solid waste. The proposed project would generate approximately 17,056.58 Metric Tons of CO2e each year under business as usual, which exceeds CAPCOA's 900 Metric Ton per year screening threshold. It is important to note that GHGs for projects that exceed this screening threshold are not necessarily considered significant under CEQA; rather, this threshold is used to determine when additional analysis is required. For projects that exceed the CAPCOA threshold of 900 MT CO_2e, CARB recommends that CEQA Lead Agencies "…quantify the GHG emissions, apportion the forecast emissions to relevant source categories, and develop GHG mitigation measures to reduce their emissions".

Combining the effect of State regulations such as Advanced Clean Cars, Low Carbon Fuel Standards, Tire Pressure Regulations, Utility renewable portfolio reductions, increasing building efficiency to Title 24 (2013), implementing a waste recycling program, reducing water demand through adding low flow fixtures, installing 9,605 solar panels onsite to produce 4,756,002 kW hours of electricity per year on average, as well as adding 246 workforce housing units will reduce emissions by 4,172.27 MT each year or 24.46%. A reduction of this size would meet and exceed the requirements of the Scoping Plan's estimates of 16% from business as usual (BAU) 2020 conditions. This is provided for informational purposes only and was not used in the determination of the project's significance under CEQA.

As a condition to this project, the HOA manager for the project will be directed to work with the major nearby employment centers to establish a shuttle program. The HOA manager will coordinate with the employment centers to provide identification and GIS information for

participating households, as well as scheduling needs. The shuttle would provide direct door to door access from each participating household to the employment center. GHG reduction credits for this service was not considered within this analysis. Additionally, the project will plumb for electric vehicle charging stations at all the residential units and include electric vehicle charging stations for 3% of the total off street, common area, parking spaces required. A cabinet, box or enclosure connected to a conduit linking the parking spaces with the electrical service will be provided for the installation of electric vehicle supply equipment to provide electric vehicle charging stations at those common areas. GHG reduction credits for the charging stations were not considered within this analysis.

2020 Efficiency Metric Analysis of Significance

The Efficiency Metric assesses the GHG efficiency of a project on a "service population (SP)" basis (Efficiency Metric = project emissions divided by the sum of the number of jobs and the number of residents provided by a project). The metric represents the rate of emissions needed to achieve a fair share of the State's emissions mandate embodied in AB 32. The use of "fair share" in this instance indicates the GHG efficiency level that, if applied statewide, would meet the AB 32 emissions target and support efforts to reduce emissions beyond 2020. With a reduced rate of emissions per service population, California can accommodate expected population growth and achieve economic development objectives, while also abiding by AB 32's emissions target and supporting efforts to reduce emissions beyond 2020.

The Efficiency Metric is based on the AB 32 GHG reduction target and GHG emissions inventory prepared for ARB's 2008 Scoping Plan. To develop the efficiency metric for 2020, land-use driven sectors in ARB's 1990 GHG inventory were identified and separated to tailor the inventory to land use projects, which total 286.7 MMT CO2e (see Section 3.16 below). This process removes emission sources not applicable to land use projects. The land-use driven sector inventory for 1990 was divided by the service population projections for California in 2020 (total of 59,130,546 SP). The resultant GHG efficiency metric applicable to the project would be 4.9 MT CO2e/service population/year for the year 2020. The Efficiency Metric allows the threshold to be applied evenly to most project types and employs an emissions inventory comprised only of emission sources from land-use related sectors. The Efficiency Metric allows lead agencies to assess whether any given project or plan would accommodate population and employment growth in a way that is consistent with the emissions limit established under AB 32. Table 3.1 in Section 3.16 details the project efficiency metric.

In addition, CARB has identified the overall reduction trajectory needed to achieve 2030 and 2050 targets in the 2030 Target Scoping Plan Workshop Slides dated October 1, 2015. Projects can use this information to develop the GHG efficiency metric for a Project with a buildout year between 2020 and 2050. CARB's Scoping Plan Workshop Slides indicate that an average statewide GHG reduction in emissions of 5.2 percent per year between 2020 and 2050 would be necessary

to achieve the 2030 and 2050 targets, as embodied in EOs B-30-15 (now Senate Bill 32) and S-3-05, respectively. Therefore, a project that is fully operational after the year 2020 would need to comply with a GHG efficiency metric that is developed based on an average 5.2% reduction per year to the underlying emissions used to develop the 4.9 MT/SP efficiency metric for 2020. This would equate to 4.7 for the year 2021, and continue to decrease each year to 3.6 by the year 2025

The project will utilize an efficiency standard based upon the State average efficiency ratio of 4.9 MT CO_2e/year/service population for the year 2020 and apply the 5.2 percent per year reduction to the emissions used to develop the efficiency metric for projects that will have a full buildout year post 2020.

The proposed project would be developed to include 246 multi-family and 534 single family residential units and a fire station. It is anticipated that each residential unit will have 3.01 people per the Project's Market Analysis (MarketPointe Realty Advisors, 2015), the fire station is anticipated to have 10-12 employees on any given day. Therefore, the service population of the project would be 2,358 (3.01*780 + 10).

The proposed project would generate approximately 17,056.58 Metric Tons of CO2e each year. After implementation of all emission reductions, the project's reduced levels of GHGs of 12,884.31 Metric Tons of CO_2e and a service population of 2,358, the project would have an efficiency ratio of 5.46 MT CO_2e/year/service population. Based upon the 2020 target efficiency ratio, the project's efficiency ratio is above the required 4.9 MT CO_2e/year/service population. Based on this, the project's GHG emissions could potentially be cumulatively considerable without additional mitigation or reductions. Mitigation measures to reduce impacts are described below.

The Project is anticipated to be fully operational in the year 2025 and therefore applying a 5.2 percent reduction to each year after 2020, the Project would need to achieve an efficiency metric of approximately 3.6 MT CO_2e/year/service population. Modeling for the project was conducted within CalEEMod for the year 2025 to take credit for increased RPS and reductions in transportation related emissions. The modeling demonstrates that the project's total rate of GHG emissions would continue to decrease due to improvements in fuel efficiency and fleet turnover related to the project's transportation. Additional reductions in the energy sector, and water relative to the degree water emissions would be affected by the de-carbonization of the electrical grid, are due to the continuing effects of RPS. The modeling does not account for any additional reductions due to technological advancements in building efficiency, lighting, waste or increased regulations.

It was determined from the modeling that the Project's GHG emissions would be reduced to 11,809.36 Metric Tons of CO_2e in the year 2025. Thus, the project would have an efficiency ratio

of 5.0 MT CO_2e/year/service population in the year 2025. Therefore, because the project's efficiency ratio is above the required 3.6 MT CO_2e/year/service population needed, the Project's mitigated GHG emissions could potentially be cumulatively considerable without additional mitigation or reductions. Mitigation measures to reduce impacts are described below.

After analyzing and requiring all reasonable and feasible on-site mitigation measures for avoiding or reducing greenhouse gas-related impacts (see Attachment E, CAPCOA mitigation evaluation), the lead agency has determined that additional off-site mitigation measures can further reduce impacts from GHG emissions to a less-than-significant level, through the purchase of carbon offset credits to achieve the requisite reductions standards described below.

The carbon credits shall be purchased through any one of the following verifiable entities/registries: California Air Resources Board, Climate Action Reserve, California Air Pollution Control Officer's Association, or any California Air Pollution Control District (APCD) or Air Quality Management District (AQMD), or an equivalent verifiable registry. One example registry program is the California Air Pollution Control Officers Association (CAPCOA) GHG Reduction Exchange (GHG Rx). GHG Rx is a registry and information exchange designed specifically to benefit the state of California. Participating air districts will only quantify credits for projects in California that follow protocols approved by the CAPCOA Board.

Carbon Offsets – Construction Emissions: To ensure the project would result in less than significant construction-related GHG emissions, the project applicant shall complete the following:

> Prior to issuance of the first grading permit, the applicant shall provide evidence to the County of San Diego (County) Planning & Development Services (PDS) that they have obtained a one-time purchase of carbon credits in the amount of 18,144 MT CO2e (note: this number reflects the additional construction-related GHG impacts after applying all other mitigation and reductions), which would reduce the entire contribution of construction-related GHG emissions. Construction emissions include all grading, site preparation, building construction and architectural coatings related emissions (see Table 5.1).

Carbon Offsets – Operational Emissions: To ensure the project would result in less than significant operational-related GHG emissions, the project applicant shall complete one of the following two options. (Note: the project's operational emissions would be 10,902 MT CO2e in the year 2025 at the time of full buildout). Therefore, to achieve an efficiency ratio of 3.6 MT CO2e/year/service population and maintain a less than significant level of GHG emissions, the project may only generate up to 8,489 MT CO2e annually. Therefore, the project will need to reduce the annual emissions by 2,413 MT CO2e until the year 2050. Executive Order (EO) S-3-05 established the goals that GHG emissions should be reduced to 2000 levels by 2010, to 1990 levels by 2020, and

to 80% below 1990 levels by 2050. Therefore, the project needs to mitigate GHG emissions to the year 2050. At this time, there are no regulations pertaining to GHG emission goals post 2050.

It should be noted: as new federal, state and local regulations are adopted or increases in technology occur (for example, solar), this could reduce the amount of carbon credits needed to maintain a level of less than significant.

(1) Prior to the recordation of the first final map, the applicant shall provide evidence to County PDS that they have obtained carbon credits in the amount of 2,413 MTCO2E per year multiplied by the number of years from the commencement of the operational aspects of the project (conservatively calculated for this purpose from the date of the first Final Map approval) until the year 2050.

Evidence shall consist of documentation from a County approved third party verifier that the carbon credits have been obtained and meet the requirements stated herein. The amount of GHG credits may be reduced at the time of first final map issuance if the applicant can demonstrate with substantial evidence that changes in State regulation or law, or other increased building efficiencies have reduced the total MTCO2E emitted by the project. This will require approval from the County Director of PDS.

(2) Prior to recordation of each Final Map, the applicant shall obtain the amount of carbon offset credits required for each Final Map based upon the uses contained within that Final Map. Each Final Map shall include as an attachment a tracking table that identifies any previous offsets purchased, and the amount remaining.

The amount of GHG credits may be reduced at the time of each final map issuance if the applicant can demonstrate with substantial evidence that changes in State regulation or law, or other increased building efficiencies have reduced the total MTCO2E emitted by the project. This will be included in the tabulation and will require approval from the County Director of PDS.

Evidence shall consist of documentation from a County approved third party verifier that the carbon credits have been obtained and meet the requirements stated herein. The amount of GHG credits may be reduced at the time of first final map issuance if the applicant can demonstrate with substantial evidence that changes in State regulation or law, or other increased building efficiencies have reduced the total MTCO2E emitted by the project. This will require approval from the County Director of PDS.

Horizon Year 2030 and 2050

The project's progress towards achieving the GHG reduction goals for mid-term year (2030) and horizon-year (2050) must be evaluated, as set forth in in SB 32 and EO S-3-05, respectively. There is an ongoing debate regarding the need to assess a project's consistency with EOs in order to comply with CEQA and this issue is currently pending before the California Supreme Court.[1] Therefore, in an exercise of caution, this report evaluates the project's progress towards achieving the GHG reduction goals identified in both EO B-30-15 and EO S-3-05 for 2050.

SB 32 set an interim target goal of reducing GHG emissions to 40 percent below 1990 levels by 2030. The interim target was established to ensure California would effectively continue its trajectory toward meeting or exceeding the long-term emission reduction statewide goal of reducing GHG emissions to 80 percent below 1990 levels by 2050 as set forth in Executive Order S-3-05.

In accordance with CEQA Guidelines Section 15064.4(b)(3), this section evaluates whether the project's post-buildout GHG emissions trajectory would impede the attainment of the 2030 and 2050 GHG reduction goals identified in SB 32 and S-3-05. Although SB 32 codifies the 2030 GHG reduction goal, there has been no legislative action to adopt the 2030 or 2050 GHG reduction targets.

Executive Order B-30-15 has been issued and set an interim target goal of reducing GHG emissions to 40 percent below 1990 levels by 2030. The Executive Order B-30-15 interim target was established to ensure California would effectively continue its trajectory toward meeting or exceeding the long-term emission reduction goal of reducing GHG emissions to 80 percent below 1990 levels by 2050 as set forth in Executive Order S-3-05.

No statutes or regulations have been adopted to translate these goals into emission reduction targets for 2030 and 2050. No agency with subject matter expertise has adopted regulations to achieve these statewide goals at the project level, and available models cannot currently quantify all project-related emissions in those future years. Nonetheless, this analysis renders a determination as to whether the project would conflict with the interpolated statewide reduction goals. As described above, the interpolated reduction goals are established based on the trajectory needed to meet the goals of SB 32 for 2030 and by EO S-3-05 for 2050. In this case a project would not be considered cumulatively considerable if it does not conflict with the CARB programs.

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[1] See case information webpage for California Supreme Court's consideration of *Cleveland Nat'l Forest Foundation v. SANDAG* (Case No. S223603), available at http://appellatecases.courtinfo.ca.gov/search/case/mainCaseScreen.cfm?dist=0&doc_id =2096944&doc_no=S223603 and accessed May 29, 2015.

It should be noted, CARB has expressed optimism with regard to both the 2030 and 2050 goals. It states in the First Update to the Climate Change Scoping Plan that "California is on track to meet the near-term 2020 greenhouse gas limit and is well positioned to maintain and continue reductions beyond 2020 as required by AB 32." (see First Update to Scoping Plan, p. ES2.) With regard to the 2050 target for reducing GHG emissions to 80 percent below 1990 levels, the First *Update to the Climate Change Scoping Plan states:*

"This level of reduction is achievable in California. In fact, if California realizes the expected benefits of existing policy goals (such as 12,000 megawatts [MW] of renewable distributed generation by 2020, net zero energy homes after 2020, existing building retrofits under AB 758, and others) it could reduce emissions by 2030 to levels squarely in line with those needed in the developed world and to stay on track to reduce emissions to 80 percent below 1990 levels by 2050. Additional measures, including locally driven measures and those necessary to meet federal air quality standards in 2032, could lead to even greater emission reductions."

In other words, the experts at CARB attest the State is on a trajectory to meet the 2020, 2030 and 2050 GHG reduction targets set forth in AB 32, Senate Bill 32 and Executive Order S-3-05. CARB also states that regional and local action will be key towards meeting these long-term goals with sustainable development practices and planning. The following evaluates whether the project would interfere with the four main programs CARB identified to support is conclusions that the state is on a trajectory to meet the 2030 and 2050 GHG targets: (1) initiative to install 12,000 megawatts [MW] of renewable distributed energy by 2020; (2) California Building Commission mandate to construct net zero energy homes after 2020; (3) existing building retrofits under AB 758; and (4) California's Cap-and-Trade Regulations.

State's Goal to Install 12,000 MW of Renewable Distributed Generation Systems by 2020:

The project does not interfere with the State's goal to install 12,000 MW of renewable distributed generation systems by 2020. The project includes a mitigation measure to install solar panels onsite to produce 4,756,002 kW hours of electricity per year on average. Under current technology, this equates to up to 9,605 solar panels or an average of 12 solar panels on each single family home and 100 solar panels on the clubhouse and fire station with each solar panel, having an estimated rating of 285 watts. Based on these reductions in electrical generation, this would reduce the electricity usage emissions by approximately 60%. The actual capacity and/or conversion efficiency of the photovoltaic panels may alter the actual number of roofs or non-residential roof space requirements to meet the annual 4,756,002 kW-h requirement at project build out. Therefore, the project would not interfere or conflict with the state's goal of 12,000 MW of renewable distributed generation by 2020.

Non-interference with Construction of Net-Zero Energy Homes after 2020:

The project does not interfere with the ability of the California Building Commission to mandate constructing net-zero energy homes after 2020. The proposed project is anticipated to start in 2017 with construction and opening of the first buildings sometime in 2020 and full buildout in 2025. The project will be required to construct homes in conformance with the then-existing California Building Commission mandates for net-zero energy homes because the County does not issue occupancy permits for projects that do not comply with the California Building Code in effect at that time.

Non-interference with AB 758's Existing Buildings Energy Efficiency Action Plan:

The project will not interfere with the state's implementation of building retrofits to further energy efficiency for existing buildings under AB 758. AB 758, (Comprehensive Energy Efficiency in Existing Buildings Law). The California Energy Commission ("CEC") is tasked with developing and implementing a comprehensive program to increase energy efficiency in existing residential and nonresidential buildings that "fall significantly below the current standards in Title 24." (Pub. Resources Code, section 25943(a)(1).) The project will be constructed in compliance with the applicable Title 24 standards and therefore will not interfere with CEC or other initiatives implemented to increase energy efficiency and reduce GHG emissions associated with buildings that do not adhere to Title 24 standards.

Other State Programs – Cap-and-Trade:

The 2008 Scoping Plan identified cap-and-trade as a strategy for helping California reduce its GHG emissions (CARB 2008). A cap-and-trade program sets the total amount of GHG emissions allowable for facilities under the cap and allows covered sources, including producers and consumers of energy, to determine the least expensive strategies to comply. AB 32 required CARB to adopt the cap-and-trade regulation by January 1, 2011, and the program itself began in November 2012. The Cap-and-Trade Regulation is being implemented in two stages. Electric generating utilities, electricity importers, and large industrial facilities became subject to the program beginning in 2013, and fuel distributors are brought under the cap in 2015.

The project does not interfere with the state's implementation of this GHG reducing program because it is not an electric generating utility, electricity importer, large industrial facility, or fuel distributor. Rather, the project, like all consumers of energy and fuel from the sources regulated by Cap-and- Trade will have the related GHG emissions reduced from these resources as the generators must invest heavily in GHG reducing technologies in order to comply with the ever decreasing cap. In this sense, like all consumers paying for the use of fuel and electricity resources, the project and its residents will contribute financially toward these GHG reducing technologies.

It is expected that regulatory emission reductions will continue to improve well beyond what is known at this time, and that a Project's emissions in 2030 and 2050 would also decrease from increased renewables, better vehicle emissions, reductions in water and waste along with increased building efficiencies and technologies. Given this, the project's GHG emissions will decrease with time as the state's existing and planned regulatory objectives are implemented and achieved. Also, as statewide regulatory initiatives, including those identified by CARB in the Scoping Plan are implemented, and other technological innovations occur, it is reasonable to assume that the statewide and the proposed project's GHG emissions levels would be reduced further.

Based on the foregoing, the project is not anticipated to interfere with the state's implementation of SB 32's target of reducing statewide GHG emissions to 40 percent below 1990 levels by 2030 or EO S-3-05's target of reducing statewide GHG emission to 80 percent below 1990 levels by 2050 because it would not interfere with the state's implementation of GHG emission reduction measures described in CARB's First Update to the Scoping Plan. Including the state providing for 12,000 MW of renewable distributed generation by 2020, the California Energy Commission mandating new zero energy homes in the building code after 2020, existing building retrofits under AB 758, and Cap-and-Trade Regulations. CARB identified these programs to reduce emissions by 2030 to levels squarely in line with those needed in the developed world and to stay on track to reduce emissions to 80 percent below 1990 levels by 2050.

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.

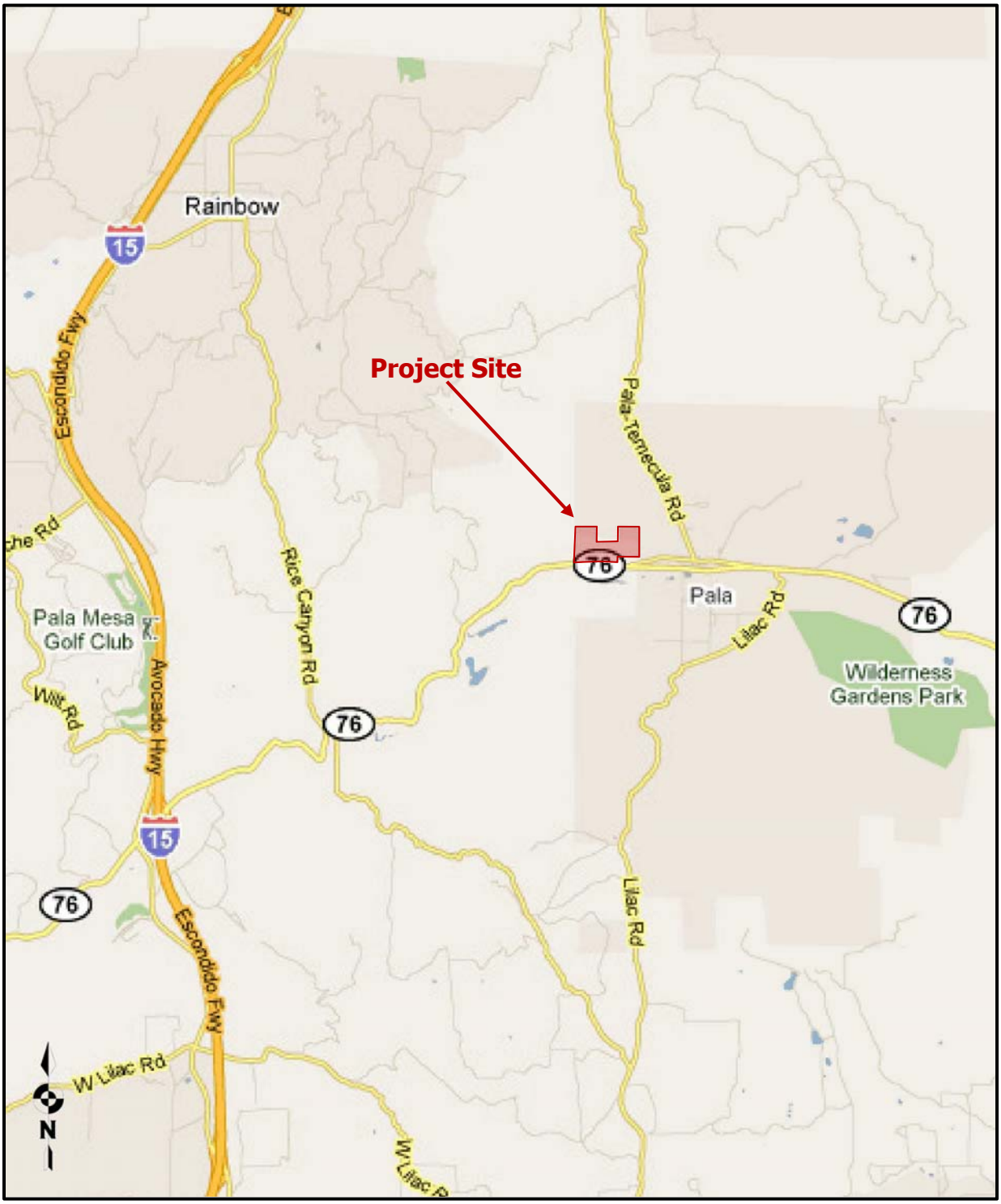
1.2 Project Location

The proposed development is located in the unincorporated County of San Diego in the Warner Ranch Specific Plan Area, approximately five miles east of Interstate 15. The Project is adjacent to State Route 76 (SR 76) just west of Pala Temecula Road. Access to the Project site is provided by SR 76. SR 76 and Pala Temecula Road are arterials that connect the Project to other arterials. Interstate 15 provides regional access to the Project site. A general project vicinity map is shown in Figure 1–A on the following page.

1.3 Project Description

The proposed Warner Ranch Project will provide a range of workforce housing opportunities consistent with the Job/Housing Balance goals and policies of the San Diego County General Plan. The recently adopted General Plan and associated Pala/Pauma Community Plan designated this 513-acre property as a Special Study Area (SSA). The applicant was required to prepare specific studies relative to Job/Housing Balance, Infrastructure, and Community Compatibility to determine whether modification to the General Plan for this area would be desirable because of its adjacency to the existing Pala Village, Casino, Resort and Spa and proximity to several tribal casinos within the SR 76 corridor. Overall, these studies evaluated whether the project's proximity to existing employment centers could accommodate existing and future employees based upon income levels of the employees and proximity to these employment centers. Consistent with the SSA requirements, the Warner Ranch Project proposes General Plan Amendment (GPA), Specific Plan, Rezone, and Vesting Tentative Map to develop 513 acres with 780 residential units and associated public and private facilities and services.

Figure 1-A: Project Vicinity Map



Source: (Google 2011, n.d.)

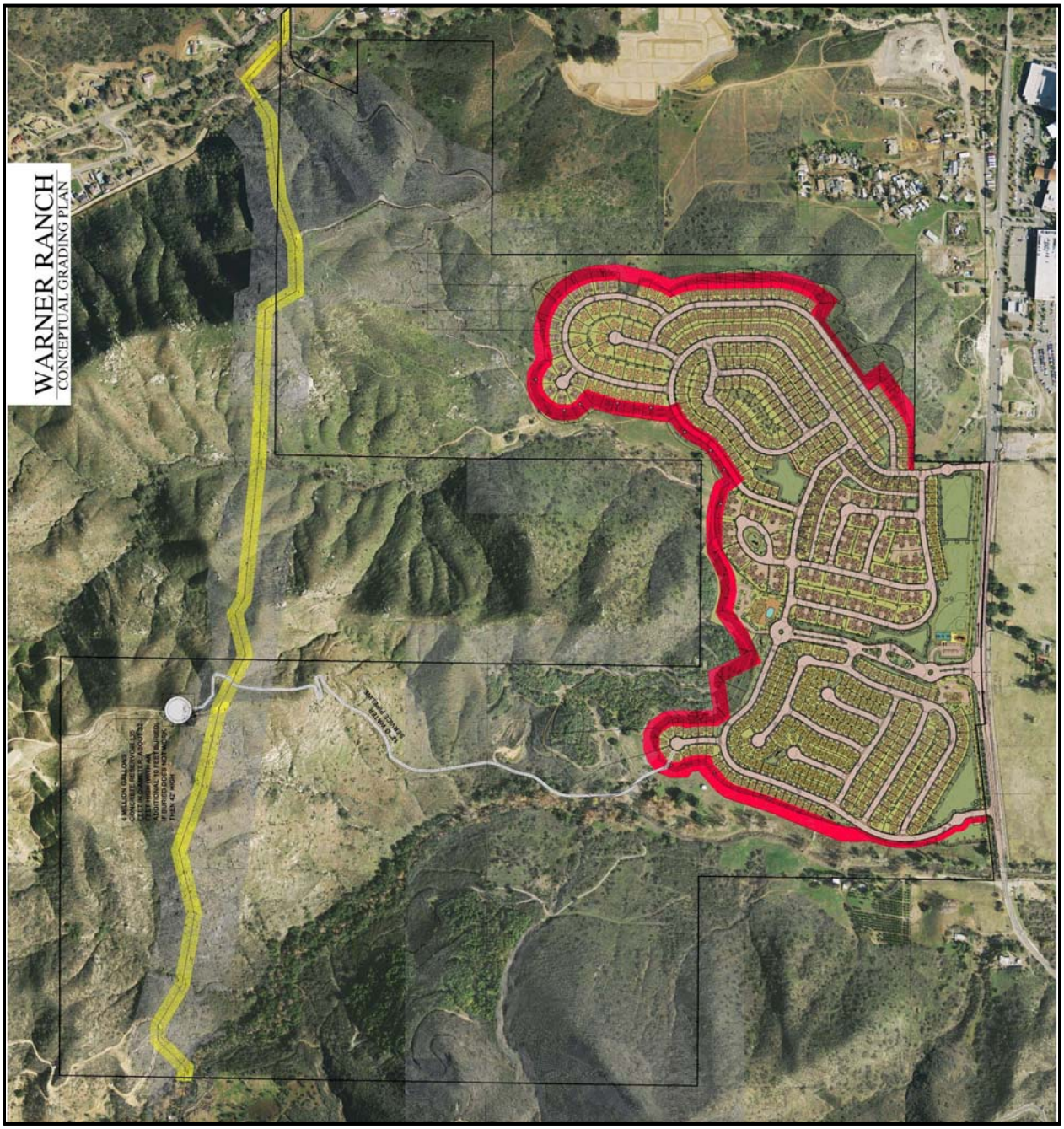
The proposed project will provide 534 Single-Family homes and 246 Multi-Family attached townhomes, 11.93 acres of park and recreation areas with 4.23 acres of that area opened to the public. Furthermore, the project would permanently create 358.77 acres of preserved open space. Also, a 10,000 SF fire station will be built onsite. The project area is within County Service Area (CSA) 135, and the fire station would be constructed on-site fronting SR 76. To meet fire safety requirements, two emergency access roads would be on the eastern and western site boundaries, also accessible from SR 76. Another secondary access road would link the property to Pala/Temecula Road to the east. The 28-foot wide road bed and associated fuel modification zone would be aligned along an existing dirt road which runs through the northeastern portion of the site to Pala/Temecula Road. Fuel modification zones will also be included adjacent to the development areas, outside of the biological open space to be preserved.

Preparation of the site for development would involve the mass grading of approximately 175 acres which would be expected to require approximately 2.3 Million Cubic Yards (CY) of onsite material movement of which approximately 1,283,423 CY would be developed from onsite blasting. The Project grading would be expected to take approximately 27 months to complete with trenching and finish grading lasting an additional 3 months. After the 30-month grading period, the Project applicant would begin paving and building the fire station and residential units. The residential units will be phased in accordance with necessary infrastructure improvements to support the units. The entire build out of the Project would be expected no sooner than 2025. The proposed site development plan is shown in Figure 1–B.

The Project proposes to both utilize existing alternative transportation conveniences as well as implement new bike and pedestrian walkways throughout the Project. North County Transit District (NCTD) provides Route 389 that services the Pala community. The routes last scheduled bus stop is at the Pala Casino just across the street from the Project frontage. Also, a Class II bike lane is proposed in accordance with the San Diego County General Plan Mobility Element along the Project frontage. Also, as a design feature of this project, the HOA manager will work with the major nearby employment centers to establish a shuttle program.

The HOA manager will coordinate with the employment centers to provide identification and GIS information for participating households, as well as scheduling needs. The shuttle would provide direct door to door access from each participating household to the employment center. However, GHG reduction credit for this service was not considered within this analysis. Sewer water service will also be provided by Rainbow Municipal Water District (RMWD). As such, the applicant would install a 4 million gallon water tank and construct and provide improvements necessary to provide for the project's sewer needs which will include the construction of an underground pump station located at the southwestern edge of the property connecting to an existing 8 inch force main sewer line. As a conditions of this project, all units shall have ceiling fans installed and Energy Star appliances included.

Figure 1-B: Proposed Project Site Plan



Source: (Shapouri & Associates, February, 2013)

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 simplify 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 Existing Setting

The Project site lies in the northern portion of San Diego County five miles east of Interstate 15, approximately 40 miles north of the City of San Diego, north of Pala Road (State Route 76) and west of Pala Temecula Road. The Pala Band of Mission Indians Reservation lies north, south and east of the proposed Warner Ranch development. The existing use of the Project site is residential and agricultural. The Warner Ranch specific plan area is generally represented by a diverse topography with elevations ranging from 350 feet to 1,000 feet above mean sea level. The northern portion of the SPA is generally depicted as moderately to steep sloped with a steep mountainous area along the eastern edge and a major river valley and tributary canyon to the south.

Currently, the 513-acre site consists of both undeveloped and improved areas. The undeveloped areas are located in the northern and eastern portions of the site while the improved areas are more centrally located to the south and west. The developed ranch facilities include "Warner Ranch" Quarter Horses equestrian facility, stables, equipment and

feed garages, an arena, an office and residences. Agricultural areas include pastures, two citrus orchards and two avocado orchards. In addition, asphalt roads extend throughout the ranch and orchards.

Land uses directly surrounding the SPA to the west and south is agricultural and undeveloped lands. Land uses to the north, east and southeast of the project site consist of the Pala Band of Mission Indians Reservation. The Pala Band of Mission Indians has been funding and building homes exclusively for tribal members located within the Reservation. In early 2004, a new tribal department called the Pala Housing Authority was formed in order to provide continued housing and assisted loan programs. That same year, the Pala Housing Authority began designing new home plans, ranging from 3-bedroom to 5-bedroom homes and measuring approximately 3,000 square feet in size. Several new homes have been completed since then.

In addition, the Pala Housing Authority has begun the planning and building of small master-planned communities in an attempt to ultimately ensure housing for every Tribe member. The Pala community also includes schools, commercial uses and facilities and services that are open to the public, such as a convenience store and gas station, the Pala Learning Center, Cupa Cultural Center and Pala Casino Resort and Spa.

The Pala Casino Resort and Spa is located southeast of the Project site and contains on-site facilities for numerous amenities such as shopping, a day spa, golfing, dining, entertainment, a resort hotel, and a small commercial center. The Pala Resort also includes roughly 589 multi-family units ranging from approximately 500 to 1,000 square feet in size. The Pala Casino Resort and Spa facilities have recently undergone a major renovation and expansion, which created parking structures further to the west, towards the SPA. Other existing and planned uses located in the surrounding area include Pala Raceway, Pala Wastewater Treatment Plant, Pala Shooting Range, proposed Gregory Canyon Landfill, proposed Rosemary's Quarry and proposed SDG&E Substation Expansion.

The project site is currently vacant of development and is thus not a source of anthropogenic GHG emissions. Therefore for purposes of establishing the existing environmental conditions on the project site in accordance with CEQA Guidelines section 15125, GHG emissions on the project site are conservatively assumed to be zero.

2.3 Climate and Meteorology

Climate within the San Diego Air Basin (SDAB) area often varies dramatically over short geographical distances. Most of southern California is dominated by high-pressure systems for much of the year, which keeps San Diego mostly sunny and warm. Typically, during the

winter months, the high pressure system drops to the south and brings cooler, moister weather from the north.

It is common for inversion layers to develop within high-pressure areas, which mostly define pressure patterns over the SDAB. These inversions are caused when a thin layer of the atmosphere increases in temperature with height. An inversion acts like a lid preventing vertical mixing of air through convective overturning.

Meteorological trends within the Pala area generally are very similar to that of nearby Bonsall where daytime highs typically range between 68ºF in the winter to approximately 83ºF in the summer with August usually being the hottest month. Median temperatures range from approximately 56ºF in the winter to approximately 73ºF in the summer. The average humidity is approximately 65% in the winter and about 73% in the summer. (City-Data, 2016).

3.0 CLIMATE CHANGE REGULATORY ENVIRONMENT

3.1 Regulatory Standards (Assembly Bill 32)

The Global Warming Solutions Act of 2006 (AB 32), requires that by 2020 the state's greenhouse gas emissions be reduced to 1990 levels or roughly a 28.3% reduction. Significance thresholds have not been adopted but are currently being discussed. AB 32 is specific as to when thresholds shall be defined. The pertinent Sections are referenced within Part 4 of AB 32 Titled *Greenhouse Gas Emissions Reductions* are shown below:

Section 38560.5 (b) states:

On or before January 1, 2010, the state board shall adopt regulations to implement the measures identified on the list published pursuant to subdivision (a).

Section 38562 states:

(A) On or before January 1, 2011, the state board shall adopt greenhouse gas emission limits and emission reduction measures by regulation to achieve the maximum technologically feasible and cost-effective reductions in greenhouse gas emissions in furtherance of achieving the statewide greenhouse gas emissions limit, to become operative beginning on January 1, 2012.

(B) In adopting regulations pursuant to this Section and Part 5 (commencing with Section (38570), to the extent feasible and in furtherance of achieving the statewide greenhouse gas emissions limit, the state board shall do all of the following:

1. *Design the regulations, including distribution of emissions allowances where appropriate, in a manner that is equitable, seeks to minimize costs and maximize the total benefits to California, and encourages early action to reduce greenhouse gas emissions.*
2. *Ensure that activities undertaken to comply with the regulations do not disproportionately impact low-income communities.*
3. *Ensure that entities that have voluntarily reduced their greenhouse gas emissions prior to the implementation of this Section receive appropriate credit for early voluntary reductions.*
4. *Ensure that activities undertaken pursuant to the regulations complement, and do not interfere with, efforts to achieve and maintain federal and state ambient air quality standards and to reduce toxic air contaminant emissions.*
5. *Consider cost-effectiveness of these regulations.*
6. *Consider overall societal benefits, including reductions in other air pollutants, diversification of energy sources, and other benefits to the economy, environment, and public health.*
7. *Minimize the administrative burden of implementing and complying with these regulations.*
8. *Minimize leakage.*
9. *Consider the significance of the contribution of each source or category of sources to statewide emissions of greenhouse gases.*

(C) In furtherance of achieving the statewide greenhouse gas emissions limit, by January 1, 2011, the state board may adopt a regulation that establishes a system of market-based declining annual aggregate emission limits for sources or categories of sources that emit greenhouse gas emissions, applicable from January 1, 2012, to December 31, 2020, inclusive, that the state board determines will achieve the maximum technologically feasible and cost-effective reductions in greenhouse gas emissions, in the aggregate, from those sources or categories of sources.

(D) Any regulation adopted by the state board pursuant to this part or Part 5 (commencing with Section 38570) shall ensure all of the following:

1. *The greenhouse gas emission reductions achieved are real, permanent, quantifiable, verifiable, and enforceable by the state board.*
2. *For regulations pursuant to Part 5 (commencing with Section 38570), the reduction is in addition to any greenhouse gas emission reduction otherwise required by law or regulation, and any other greenhouse gas emission reduction that otherwise would occur.*
3. *If applicable, the greenhouse gas emission reduction occurs over the same time period and is equivalent in amount to any direct emission reduction required pursuant to this division.*

3.2 Regulatory Standards (Assembly Bill 341)

This bill makes a legislative declaration that it is the policy goal of the state that not less than 75% of solid waste generated be source reduced, recycled, or composted by the year 2020, and would require the California Department of Resources Recycling and Recovery (CalRecycle), by January 1, 2014, to provide a report to the Legislature that provides strategies to achieve that policy goal and also includes other specified information and recommendations.

This bill will increase diversion requirements by an additional 25% over Business as Usual as was defined under AB 939 and SB 1322 which were signed into law as the Integrated Waste Management Act of 1989, which as of the year 2000 only required 50 percent diversion.

3.3 Regulatory Standards (Senate Bill 97)

SB 97 requires the Office of Planning and Research (OPR) to prepare and transmit to the Resources Agency, guidelines and directed amendments to the CEQA statute specifically for the mitigation of greenhouse gas emissions or the effects of greenhouse gas emissions.

3.4 AB 1493 (Pavley Standards)

AB 1493 regulations are similar to CAFE Standards however are expected to produce a Greenhouse Gas Benefit greater to that of the CAFE Standard and would be expected to double the amount of GHGs saved under CAFE. The Pavley rules or also referred to as California Standards are designed to regulate GHG emissions while the federal standards are aimed at reducing the nation's fuel consumption.

Under Pavley starting with vehicles produced in 2009, manufactures have the flexibility in meeting California standards through a combination of reducing tailpipe emissions of Carbon Dioxide, Nitrous Oxide, Methane and hydrofluorocarbons from vehicle air conditions systems. Furthermore, the California standards are estimated to increase fuel efficiency to 35.7 miles per gallon by (California Air Resourrce Board, 2013).

3.5 Advanced Clean Car Program

Pavley II along with other low-Emission Vehicle (LEV) regulations including new approaches to increase zero emission vehicles and hybrids have since been combined into a single effort program termed Advanced Clean Cars (California Air Resource Board, 2014). The new effort uses a number of emission control programs to control smog, soot and global warming and would be in effect from 2017 to 2025. This program is estimated to reduce GHGs by 4.0 Million or roughly 2.4% beyond that of Pavley I (California Air Resource Board, 2011). It should be noted that the 2.4% reductions would only be applied to the passenger cars and light duty trucks which account for roughly 78% of the vehicles used onsite. Given this, the expected reduction would be only 1.87%.

3.6 Vehicle Efficiency Measures

Additional vehicle efficiency measures within the Scoping Plan include Low Friction Oil, Tire Pressure Regulation, Tire Tread Program, and Solar Reflective Automotive Paint and specialized window glazing and according to the scooping plan will reduce GHGs by 4.5 MMTCO2e in 2020. To date however, some of the reduction measures under Vehicle Efficacy are still under review with the exception of the Tire Pressure Regulations which estimate to remove 0.6 MMTCO2e by 2020.

3.7 Energy Independence and Security Act of 2007

The Energy Independence and Security Act of 2007 (P.L. 110-140, H.R. 6) is an energy policy law adopted by congress which consists mainly of provisions designed to increase energy efficiency and the availability of renewable energy. The law will require automakers to boost

fleet wide gas mileage averages from the current 25 miles per gallon (mpg) to 35 mpg by 2020. The rule was updated in 2010 which required fleet-wide fuel economy standard to be set at 34.1 mpg by 2016 and affect cars built in 2012 through 2016. Also, in October 2012, the rules were further changed to 54.5 mpg for cars and light-duty trucks by Model Year 2025. This fleet wide average is known as the Corporate Average Fuel Economy (CAFE) standard.

3.8 Executive Order S-3-05

Executive Order S-3-05 was signed by Governor Arnold Schwarzenegger in June 2005. That the following greenhouse gas emission reduction targets are hereby established for California: by 2010, reduce GHG emissions to 2000 levels; by 2020, reduce GHG emissions to 1990 levels; by 2050, reduce GHG emissions to 80 percent below 1990 levels.

3.9 Executive Order S-01-07

Executive Order S-01-07 was signed by Governor Arnold Schwarzenegger in January 2007 and is effectively known as the Low Carbon Fuel Standard or LCFS. The executive order seeks to reduce the carbon intensity of California's passenger vehicle fuels by at least 10% by 2020. The LCFS will require fuel providers in California to ensure that the mix of fuel they sell into the California market meet, on average, a declining standard for GHG emissions measured in CO_2e grams per unit of fuel energy sold.

3.10 Executive Order B-30-15

Governor Jerry Brown issued an executive order (EO) which established an interim GHG reduction target in support of targets previously established under S-3-05 and AB 32. Executive Order B-30-15 set an interim target goal of reducing GHG emissions to 40 percent below 1990 levels by 2030. The interim target was established to ensure California would effectively continue its trajectory toward meeting or exceeding the long-term emission reduction target goal of reducing GHG emissions to 80 percent below 1990 levels by 2050 as set forth in S-3-05. B-30-15 calls for an update to CARB's Scoping Plan which provides information on how the state will reduce GHG emissions in various sectors and industries, and calls for state agencies to continue to develop and implement GHG emission reduction programs in support of these target goals. Additionally, sector-specific agencies in transportation, energy, water and forestry will be required to prepare GHG reduction plans by September 2015, followed by a report on actions taken in relation to these plans in June 2016.

As discussed below, SB 32 was signed into law by Governor Brown on September 8, 2016 which codified into law the 2030 horizon-year goal. However, the Legislature did not adopt the 2050 horizon-year goal from EO S-3-05.

3.11 Senate Bill 32

In September 2016, the Governor signed SB 32 (Pavley California Global Warming Solutions Act of 2006: emissions limit) into law. SB 32 would require that the State Air Resources Board ensure that statewide greenhouse gas emissions are reduced to 40% below the 1990 level by 2030, thereby codifying the attainment of the 2030 reduction goal identified in EOs B-30-15 and S-3-05. However, currently there are no proposed or adopted significance thresholds for analyzing post-2020 emissions for development projects in California, there are no adopted statewide or local plans to reduce emissions 40% below 1990 levels by 2030 and the regulatory framework to achieve the 2030 target is in its infancy.

3.12 Executive Order S-14-08

Executive Order S-14-08 was signed by Governor Arnold Schwarzenegger and is effectively known as the Renewable Portfolio Standard (RPS). According to S-14-08, the RPS will require that all retail sellers of electricity shall serve 33 percent of their load with renewable energy by 2020. State government agencies are hereby directed to take all appropriate actions to implement this target in all regulatory proceedings, including siting, permitting, and procurement for renewable energy power plants and transmission lines. It should be noted that Governor Jerry Brown is committed to increasing this regulation such that the renewable portfolio in 2030 would be at least 50%. This commitment was entered into agreement with multiple international states signed on May 19, 2015 by California. (Subnational Global Climate Leadership Memorandum of Understanding, 2015). For purposes of the post-2020 analysis, the emission reduction benefits of achieving a 50 percent RPS by 2030 has been quantified as a 17 percent increase over RPS in 2020 or 30 percent over the 20% which has already been achieved in the baseline year.

3.13 Title 24 Standards

The California Energy Code, or Title 24, Part 6 of the California Code of Regulations, also titled The Energy Efficiency Standards for Residential and Nonresidential Buildings, were established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods (California Energy Code, 2015)

The Energy Commission adopted the 2008 changes to the Building Energy Efficiency Standards for some of the following reasons and would reduce both Natural Gas and Electrical demand:

1. *To provide California with an adequate, reasonably-priced, and environmentally-sound supply of energy.*

2. *To respond to Assembly Bill 32, the Global Warming Solutions Act of 2006, which mandates that California must reduce its greenhouse gas emissions to 1990 levels by 2020.*
3. *To pursue California energy policy that energy efficiency is the resource of first choice for meeting California's energy needs.*
4. *To act on the findings of California's Integrated Energy Policy Report (IEPR) that Standards are the most cost effective means to achieve energy efficiency, expects the Building Energy Efficiency Standards to continue to be upgraded over time to reduce electricity and peak demand, and recognizes the role of the Standards in reducing energy related to meeting California's water needs and in reducing greenhouse gas emissions.*
5. *To meet the West Coast Governors' Global Warming Initiative commitment to include aggressive energy efficiency measures into updates of state building codes.*
6. *To meet the Executive Order in the Green Building Initiative to improve the energy efficiency of nonresidential buildings through aggressive standards.*

Title 24 2008 has been found reduce single family electrical emissions by 22.7% when comparing residential buildings built to the minimum standards in 2005 and then comparing the prototypes within duplicate models built to standards in 2008. (Architectural Energy Corporation for California Energy Commission, November 7, 2007)

Title 24 2010 incorporated Cal Green standards and added a voluntary tiered approach which compared efficiency over Title 24 2008 (California Building Standards Commission, June 2010).

The latest standards are Title 24 2013 and are effective as of July 1, 2014. Looking at the entire construction outlook for low-rise single-family detached homes, electricity use is reduced by 36.4 percent and 23.3 percent for multi-family uses and natural gas consumption is reduced by 6.5 percent for single family developments and 3.8% for multi-family structures (Architectural Energy Corporation (AEC), 2013). Nonresidential Newly Constructed Buildings would have a reduction from the 2008 Standards of 21.8 percent for electricity and 16.8 percent for natural gas. It should be noted that these reductions would be for Title 24 energy sources such as heating and cooling and were updated within the CalEEMod Title 24 energy sources numbers.

In addition, the CEC currently anticipates adopting the 2016 Title 24 standards in 2015, and assigning those standards with an effective date of January 1, 2017 Further, both the CEC and CPUC remain committed to their goal that all new residential construction in California achieves zero net energy standards by 2020 It is likely that a subsequent, more rigorous iteration of the Title 24 standards will apply to the project at the time of building permit issuance. The GHG emission and energy savings associated with those standards have not been quantified at this time because the savings are unknown.

3.14 California Environmental Quality Act (CEQA) Requirements

As directed by SB 97, the Natural Resources Agency adopted Amendments to Title 14 Division 6 Chapter 3 CEQA Guidelines for greenhouse gas emissions on December 30, 2009. On February 16, 2010, the Office of Administrative Law approved the Amendments, and filed them with the Secretary of State for inclusion in the California Code of Regulations. The amendments became effective on March 18, 2010. The pertinent Sections are shown below:

Section 15064.4 - Determining the Significance of Impacts from Greenhouse Gas

(A) The determination of the significance of greenhouse gas emissions calls for a careful judgment by the lead agency consistent with the provisions in Section 15064. A lead agency should make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project. A lead agency shall have discretion to determine, in the context of a particular project, whether to:

1. *Use a model or methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use. The lead agency has discretion to select the model or methodology it considers most appropriate provided it supports its decision with substantial evidence. The lead agency should explain the limitations of the particular model or methodology selected for use; and/or*
2. *Rely on a qualitative analysis or performance-based standards.*

(B) A lead agency should consider the following factors, among others, when assessing the significance of impacts from greenhouse gas emissions on the environment:

1. *The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting;*
2. *Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.*
3. *The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions. Such requirements must be adopted by the relevant public agency through a public review process and must reduce or mitigate the project's incremental contribution of greenhouse gas emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project.*

General Questions recommended within the environmental checklist are:

(a) Will the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

(b) Will the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

3.15 CARB Scoping Plan Measures

In response to AB 32, California Air Resource Board (CARB) developed the Climate Change Scoping Plan. In that plan, ARB developed GHG emission reduction strategies which expanded energy efficiency programs, increased utility renewable energy requirements, developed clean car standards and LCFS, developed the cap-and-trade program, and identified adopted discretionary measures to assist the state in meeting the 2020 limits established by AB 32.

In May 2014, the CARB adopted the first update to the original Scoping Plan which was necessary to establish long-term GHG policies to put the state on track to make deep GHG emission reductions to achieve an 80% reduction below 1990 levels by 2050. The update includes key recommendations for six key economic sectors (energy, transportation, agriculture, water, waste management, and natural and working lands) as well as short-lived climate pollutants, green buildings, and the Cap-and-Trade Program. The findings largely affect regulatory measures that will indirectly reduce GHG emissions and generate a need to update local policies. The 2014 Scoping Plan indicates that 2020 emissions would equal approximately 509 Million Metric Tons (MMT) CO_2e under 2020 Business as Usual (BAU) conditions. BAU is the level of emissions that would have occurred in the absence of regulatory emissions reductions, design considerations, or updated standards (e.g. 2008 Title 24 standards). The 2014 Scoping Plan also determined that in order to meet the 2020 GHG reduction target per Executive Order S-3-05, total GHG emissions state-wide would need to be reduced to 431 MMT CO_2e by 2020, representing a reduction of approximately 16% below 2020 BAU emission levels. It should be noted that this data is provided for informational purposes only and was not used in the determination of the project's significance under CEQA, rather the following efficiency metric was used for this purpose.

CARB has identified the overall reduction trajectory needed to achieve 2030 and 2050 targets in the 2030 Target Scoping Plan Workshop Slides dated October 1, 2015. Projects can use this information to develop the GHG efficiency metric for a Project with a buildout year between 2020 and 2050. CARB's Scoping Plan Workshop Slides indicate that an average statewide GHG reduction of 5.2 percent in emissions per year between 2020 and 2050 would be necessary to achieve the 2030 and 2050 targets, as embodied in SB 32 and S-3-05, respectively. Therefore, a project that is fully operational after the year 2020 would need to comply with a GHG efficiency metric that is developed based on an average 5.2% reduction per year to the underlying emissions used to develop the 4.9 MT/SP efficiency metric for 2020. This would equate to 4.7 for the year 2021, and continue to decrease each year.

It should be noted, CARB has expressed optimism with regard to both the 2030 and 2050 goals. It states in the First Update to the Climate Change Scoping Plan that "California is on track to meet the near-term 2020 greenhouse gas limit and is well positioned to maintain and continue reductions beyond 2020 as required by AB 32." (see First Update to Scoping Plan, p. ES2.) With regard to the 2050 target for reducing GHG emissions to 80 percent below 1990 levels, the First Update to the Climate Change Scoping Plan states:

"This level of reduction is achievable in California. In fact, if California realizes the expected benefits of existing policy goals (such as 12,000 megawatts [MW] of renewable distributed generation by 2020, net zero energy homes after 2020, existing building retrofits under AB 758, and others) it could reduce emissions by 2030 to levels squarely in line with those needed in the developed world and to stay on track to reduce emissions to 80 percent below 1990 levels by 2050. Additional measures, including locally driven measures and those necessary to meet federal air quality standards in 2032, could lead to even greater emission reductions." In other words, the experts at CARB attest the State is on a trajectory to meet the 2020, 2030 and 2050 GHG reduction targets set forth in AB 32, Senate Bill 32 and Executive Order S-3-05.

3.16 Project Specific Guidelines

For projects that exceed the CAPCOA threshold of 900 MT CO_2e, CARB recommends that CEQA Lead Agencies "…quantify the GHG emissions, apportion the forecast emissions to relevant source categories, and develop GHG mitigation measures to reduce their emissions" the California Air Pollution Control Officers Association (CAPCOA) for determining the need for additional analysis and mitigation for GHG-related impacts under CEQA. The CAPCOA white paper recommends a 900 MT CO_2e/year screening level to determine the size of projects that would be likely to have a less than considerable contribution to the cumulative impact of climate change. Project exceeding this would require further analysis and mitigation, as necessary (California Air Pollution Control Officers Association, 2008).

A number of air districts in the State of California have recommended or adopted efficiency metric or "service population" thresholds as a method for analyzing cumulative GHG emissions and significance of impacts under CEQA. A project's "service population" refers to a project's residents plus employees that would be generated by the proposed project's development. This efficiency metric is expressed as MT CO_2e per service population per year (MT CO_2e/year/service population).

The Efficiency Metric assesses the GHG efficiency of a project on a "service population (SP)" basis (Efficiency Metric = project emissions divided by the sum of the number of jobs and the number of residents provided by a project). The metric represents the rate of emissions

needed to achieve a fair share of the State's emissions mandate embodied in AB 32. The use of "fair share" in this instance indicates the GHG efficiency level that, if applied statewide, would meet the AB 32 emissions target and support efforts to reduce emissions beyond 2020. With a reduced rate of emissions per service population, California can accommodate expected population growth and achieve economic development objectives, while also abiding by AB 32's emissions target and supporting efforts to reduce emissions beyond 2020.

The Efficiency Metric is based on the AB 32 GHG reduction target and GHG emissions inventory prepared for ARB's 2008 Scoping Plan. To develop the efficiency metric for 2020, land-use driven sectors in ARB's 1990 GHG inventory were identified and separated to tailor the inventory to land use projects, which total 286.7 MMT CO2e (see Table 3.1 below). This process removes emission sources not applicable to land use projects. The land-use driven sector inventory for 1990 was divided by the service population projections for California in 2020 (total of 59,130,546 SP). The resultant GHG efficiency metric applicable to the project would be 4.9 MT CO2e/service population/year for the year 2020. The Efficiency Metric allows the threshold to be applied evenly to most project types and employs an emissions inventory comprised only of emission sources from land-use related sectors. The Efficiency Metric allows lead agencies to assess whether any given project or plan would accommodate population and employment growth in a way that is consistent with the emissions limit established under AB 32. Table 3.1 details the project efficiency metric.

Table 3.1: Project Specific Efficiency Metric

Warner Ranch GHG Efficiency Metric	
California Service Population in 2020	
2020 Population Projection[1]	40,619,346
2020 Employment Projection[2]	18,511,200
2020 Service Population	59,130,546
California Air Resources Board 1990 California GHG Inventory	
1990 Total Emissions	431 MMT CO2e
1990 Non-land Use Emissions	144.3 MMT CO2e
1990 Land Use Emissions	286.7 MMT CO2e
1 California Department of Finance, Demographic Research Unit. Report P-2, State and County Population Projections by Race/Ethnicity and Age (5-year groups) 2010 through 2060 (as of July 1); December 15, 2014. 2 California Department of Finance, Employment Development Department. Industry Employment Projections, labor Market Information Division, 2010-2020; May 23, 2012	

During preparation of the County's General Plan, the University of San Diego's Energy Policy Initiatives Center (EPIC) calculated GHG emissions for the County for both community-wide sectors and County government operations for the years 1990 and 2006, with emissions

projections for 2020. The 2005 GHG Inventory concluded that total emissions in the County of San Diego in 2005 comprised approximately 4,512,580 MT of carbon dioxide equivalent (CO_2e) (University of San Diego's Energy Policy Initiatives Center (EPIC), 2008). Accordingly, and based on the Scoping Plan's recommendation, a 15% reduction from the baseline year GHG emissions in the County of San Diego would have totaled approximately 3,835,693 MT CO_2e/year. Thus, the total 2020 GHG emission target for the County would be 3,835,693 MT CO_2e/year. It should be noted that data presented in the General Plan represents preliminary estimates. The County is in the process of preparing a Climate Action Plan where refined emissions inventories based on more recent data are being included.

According to the San Diego Association of Governments (SANDAG), the unincorporated County of San Diego is estimated to have a total 2020 population of 545,451 with approximately 114,338 jobs. Thus, the 2020 service population for the County would be 659,789 (SANDAG, 2016). In order to achieve the County emission level of 3,835,693 MT CO_2e based on the General Plan, the required efficiency target in 2020 would be approximately 5.8 MT CO_2e per service population. (SANDAG, 2016).

However, to be conservative and use more current data, the project has decided to utilize a standard based upon the State average efficiency ratio of 4.9 MT CO_2e/year/service population for the year 2020 and apply the 5.2 percent per year reduction to the emissions would lower the efficiency metric for projects that will have a full buildout year post 2020. The 5.2 percent per year between 2020 and 2050 is necessary to achieve the 2030 and 2050 emissions reduction goals of Executive Orders B-30-15 (now Senate Bill 32) and S-3-05 according to CARB's Scoping Plan Workshop Slides.

Given the fact that regulatory emission reductions will continue to improve well beyond what is known at this time, it is expected that a Project's emissions in 2030 and 2050 would also decrease from increased renewables, better vehicle emissions, reductions is water and waste along with increased building efficiencies and technologies. Given this, the project's GHG emissions will decrease with time as the state's existing and planned regulatory objectives are implemented and achieved. Also, as statewide regulatory initiatives, including those identified by CARB in the Scoping Plan are implemented, and other technological innovations occur, it is reasonable to assume that the statewide and the proposed project's GHG emissions levels would be reduced further.

4.0 METHODOLOGY

4.1 Construction CO_2e Emissions Calculation Methodology

The Project grading would be expected to take approximately 27 months and would be expected to require significant blasting operations. It's expected that blasting operations will occur for six months long during the 27 month grading period. During blasting operations, grading operations would stop and it's expected that each blast operation would be expected to require between 10,000 - 14,000 lbs of Ammonium Nitrate for any given blast operation. The area of each blast is expected occur within a 20,000 sq-ft or (100-foot x 200-foot) area.

After rough grading is complete trenching and finish grading operations would take an additional three months which would be sufficient time to complete infrastructure earthwork including the underground sewage pumps. After the 30-month earthwork phase, the Project applicant would begin paving the site and building the fire station and residential units.

The residential units will be phased in accordance with necessary infrastructure improvements to support the residential units. The entire build out of the Project would be expected no sooner than 2025. Table 4.1 on the following page shows the expected timeframes for the construction processes for all the project infrastructure, facilities, improvements and residential structures at the proposed project location. GHG impacts related to construction will be calculated using the latest CalEEMod 2013.2.2 air quality model which was developed by ENVIRON International Corporation for South Coast Air Quality Management District (SCAQMD) which has been approved by the San Diego Air Pollution Control District (SDAPCD) and the County for GHG emission calculations.

Blasting operations usually require a chemical material that is capable of extremely rapid combustion resulting in an explosion or detonation. These materials are usually mixtures of several ingredients but are often oxygen deficient as combustion reactions takes place which causes a formation of carbon monoxide and also to a lesser extent nitrogen oxides. For ammonium nitrate and fuel oil (ANFO) mixtures it is expected that carbon monoxide would be generated in quantities of 67 lbs per every ton of explosives and nitrogen oxides would be generated at 17 lbs per the same quantity (EPA, 1995).

The proposed project is expected to use about 6 tons of explosives each day and if blasting occurred every day for 554 days or during every day of the mass grading period we would add an additional 28.25 tons of NOx. In terms of CO_2E we would multiply it by 310 to yield approximately 8,758.74 tons of CO_2e.

Table 4.1: Expected Construction Equipment

Equipment Identification	Proposed Dates	Quantity
Demolition	8/1/2017– 8/15/2017	
Excavator		3
Rubber Tired Dozer		2
Concrete Saw		1
Mass Site Grading	8/16/2017 – 9/30/2019	
Rubber Tired Dozers		5
Scrapers		4
Tractors/Loaders/Backhoes		4
Bore/Drill Rigs		2
Graders		2
Water Trucks		2
Trenching	10/1/2019– 11/28/2019	
Excavator		2
Other General Industrial Equipment		1
Tractor/Loader/Backhoes		1
Fine Site Grading	11/29/2019 – 1/30/2020	
Grader		2
Water Trucks		2
Dozer		1
Tractor/Loader/Backhoes		1
Paving	2/3/2020 – 4/7/2020	
Paving Equipment		2
Rollers		2
Pavers		1
Building Construction	2/2/2020 – 1/31/2025	
Forklift		3
Tractor/loader/backhoe		3
Crane		1
Generator		1
Welders		1
Architectural Coating	4/23/2020 – 1/31/2025	
This equipment list is based upon equipment inventory within CalEEMod. The quantity and types are based upon assumptions from Projects of similar size and scope in the County of San Diego.		

Additionally, CO_2e emissions generated from blasting will be added to the CalEEMod output. CalEEMod incorporates emission factors from the EMFAC2011 model for on-road vehicle emissions (i.e. construction worker trips) 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 20-year period.

4.2 Operational Vehicular Emissions Calculation Methodology

Once construction is completed the proposed project would generate air pollutant 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 fireplaces, 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 emissions and GHGs through the use of carbon fuel burning vehicles for transportation. The annual CalEEMod inputs are shown in ***Attachments A*** at the end of this report.

Operational emissions produced by the development can be reduced through reducing Project related Vehicle Miles Traveled (VMT). As a design feature, the project applicant proposes constructing affordable multi-family units to service the imbalance of affordable housing and workforce housing needs which was identified in the Pala CMA Jobs/Housing Market Analysis prepared by Market Point Realty Advisors in November 2011.

The analysis looked at the Pala Competitive Market Area (CMA), which encompasses the communities of Pala, Pauma Valley and Valley Center and concluded that the CMA does not have sufficient workforce housing resulting in many workers being forced to travel from outside the CMA. Based on the analysis, the proposed project would create 246 six-plex multi-family units which would be considered affordable workforce units.

Furthermore, The HOA manager will work with the major nearby employment centers to establish a shuttle program. The HOA manager will coordinate with the employment centers to provide identification and GIS information for participating households, as well as scheduling needs. The shuttle would provide direct door to door access from each participating household to the employment center. It should be noted that no credit will be taken from this service but would still be a condition of this project.

4.3 CalEEMod Area Calculations

The area source module is used to calculate direct sources of air emissions located at the project site. This includes hearths, consumer product use, architectural coatings, and landscape maintenance equipment. This does not include the emissions associated with natural gas usage in space heating, water heating, and stoves as these are calculated in the building energy use module (CAPCOA, 2013). For this analysis, it was assumed that all residential units would include a hearth option based on CalEEMod default assumptions.

4.4 CalEEMod Electricity Usage Modifications

Electricity consumption for both single-family and multi-family residential units were based on CalEEMod default settings, however, CalEEMod does not have energy data for Fire Stations and parks and was estimated as follows.

A good approximation of fire stations was done for the Washington DC area for 21 fire stations (Energystar.gov, 2011). From this study, the national average Energy Use Intensity (EUI) or energy per square-foot is identified at 146 kBtu/SF. If we assume that 90% of the usage is from electricity and 10 percent is from natural gas we find that Fire Stations demand roughly 131.4 kBtu/SF per year. Given 1 kBtu is equivalent to 0.293 kWh, the Fire Station would demand 131.4*0.293 per SF/Year or 38.5 kWh/SF/Year. The proposed fire station is expected to be 10,000 SF which will consume 385,005 kWh per year.

Electricity usage for the Park would be minimal and would only be for nighttime lighting. It is estimated that the park would need approximately 45 light fixtures for the entire park. Typically, either metal halide or high pressure sodium lights are used for low temperature lighting as required for night sky ordinances. Typically, these light bulbs are rated at 400 Watts (Everlast Lighting, 2015). CalEEMod was updated to reflect these consumption variables.

4.5 CalEEMod Natural Gas Usage Modifications

Natural Gas consumption for both single-family and multi-family residential units were based on CalEEMod default settings. However, CalEEMod does not have energy data for Fire Stations and parks and the proposed park would not utilize any natural gas so default settings of zero were not modified for parks. Emission factors for Fire Stations are assumed to be 10 percent of the national average EUI of 146.6 kBtu/SF or 14.6 kBtu/SF/Year. CalEEMod was adjusted to meet these requirements.

4.6 CalEEMod Sold Waste Usage Modifications

Solid Waste Generation consumption for single-family, multi-family and parks were based on CalEEMod default settings. However, CalEEMod does not have solid waste data for Fire Stations. It was assumed that solid waste generation would however resemble that of multi-family residential which CalEEMod estimates would be 113.16 tons for the 246 multi-family units or 0.46 tons per unit. According to the US Census, each household consists of an average of 2.91 residents. Therefore, since the fire station is assumed to house 10 firefighters, it is expected to generate 3.43 times more or 10/2.91=3.43x. Given this, the firehouse would likely generate 1.58 tons of waste each year.

4.7 Water Use Emission Calculation Methodology

Water and wastewater consumption for single-family and multi-family were based on CalEEMod default settings, however, CalEEMod does not have water data for Fire Stations. The fire station is estimated to have at most 10 firefighters staying onsite at any given time. Similar to that for solid waste, water usage was estimated based on 3.43 times that of multifamily residential consumption. Each multi-family residential unit is estimated to require 65,154.02 Gallons for indoor water use and 41,075.36 gallons/year for outdoor use. Given this, the firehouse was assumed to use 223,478 gallons indoor and 140,888 gallons outdoor for the firefighter needs.

The water requirements for parks are best defined using California Department of Water Resources (CDWR) 2009 Model Water Efficient Landscape Ordinance methodology. The water usage for 4.3 acre (187,308 SF) site is assumed based on a worst case assumption that 100% of the park is turf without special landscaped areas, can be determined through the California Department of Water Resources (CDWR) Model Water Efficient Landscape Ordinance methodology (State of California, 2009) utilizing the equation below:

$$Water_{baseline} = MAWA = ET0 \times 0.62 \times (0.7 \times LA) = 54.2 \times 0.62 \times 0.7 \times 4.3 \text{ acres} \times 43{,}560 \text{ SF/acre} = =4{,}406{,}008 \text{ GPY}$$

Where:

$Water_{baseline}$ = Volume of water required to support the baseline lawn (gallons/year)
MAWA = Maximum Applied Water Allowance (gallons/year)
ET0 = 54.2 for Escondido (Annual Reference Evapotranspiration31 from Appendix A of CDWR 2009 (inches per year))
LA = Landscape Area (square feet)

Furthermore, the project would be installing a sewage pump that pumps the water into an 8-inch pressurized sewage line which will transport it to the wastewater treatment plant. It's assumed that this usage would be within the estimates of assumptions already within the analysis for conveyance and treatment and was not further analyzed.

The best way to reduce GHGs from household water use would be to install low flow fixtures. In fact, installing low flow fixtures can have an effectiveness of 20.2% for residential uses. (CAPCOA, 2010). The total water estimates as modeled are shown within the project models attached to this report.

Finally, the project's post-2020 emissions estimates assume an additional 17 percent reduction based on an increased RPS of 50 percent by 2030.

4.8 2030 and 2050 Methodology

In accordance with CEQA Guidelines section 15064.4(b)(3), this section evaluates whether the project's post-buildout GHG emissions trajectory would impede the attainment of the 2030 and 2050 GHG reduction goals identified in EOs B-30-15 and S-3-05. The 2030 reduction target in EO B-30-15 was codified through SB 32. There has been no legislative action to adopt the EO S-3-05 GHG reduction target for 2050 at this time.

Senate Bill 32 has been issued and set a target of reducing statewide GHG emissions to 40% below 1990 levels by 2030. The SB 32 target was established to ensure California would effectively continue its trajectory toward meeting or exceeding the long-term emission reduction goal of reducing GHG emissions to 80% below 1990 levels by 2050 as set forth in Executive Order S-3-05.

No statutes or regulations have been adopted to translate these goals into emission reduction targets. No agency with subject matter expertise has adopted regulations to achieve these statewide goals at the project level. Nonetheless, this analysis renders a determination as to whether the project would conflict with the interpolated statewide reduction goals. As described above, the interpolated reduction goals are established based on the trajectory needed to meet the goals of EO B-30-15 for 2030 and by EO S-3-05 for 2050. In this case a project would not be considered cumulatively considerable if it does not conflict with the CARB programs.

Guidelines section 15144, this analysis "use[s] its best efforts to find out and disclose all it reasonably can" by relying on policy declarations and planning documents of the state's executive and legislative branches in order to forecast the project's potential emissions in future years. It should be noted that while the state has established the goal of securing reductions in GHG emissions, the California Legislature and relevant regulatory agencies, most particularly CARB is still in the process of determining how these 2030 and 2050 statewide reduction goals will be achieved. Further, due to the technological shifts anticipated and the unknown parameters of the regulatory framework in 2030 and 2050, available GHG models and the corresponding technical analyses are subject to limitations for purposes of quantitatively estimating the project's emissions in 2030 and 2050.

It should be noted, CARB has expressed optimism with regard to both the 2030 and 2050 goals. It states in the First Update to the Climate Change Scoping Plan that "California is on track to meet the near-term 2020 greenhouse gas limit and is well positioned to maintain and continue reductions beyond 2020 as required by AB 32." (see First Update to Scoping Plan, p. ES2.) With regard to the 2050 target for reducing GHG emissions to 80 percent below 1990 levels, the First Update to the Climate Change Scoping Plan states:

5.0 FINDINGS

5.1 Project Related Construction Emissions

Utilizing the CALEEMOD 2013.2.2 inputs for the model as shown in Table 4.1 above, we find that grading and construction of the project will produce approximately 9,385.17 metric tons of CO_2e and adding the additional 8,758.74 metric tons from blasting brings the total GHG emission generation up to 18,143.91 metric tons over the construction life of the project for an annual average of 907.20 MT. The CALEEMOD model outputs are provided as ***Attachment A***. Given the fact that the total emissions will ultimately contribute to cumulative levels, it is acceptable to average the total construction emission over a 20 year period. A summary of the construction emissions is shown in Table 5.1 below.

Table 5.1: Expected Annual Construction CO_2e Emissions Summary

Year	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e (MT)
2017	0.00	712.54	712.54	0.21	0.00	717.01
2018	0.00	1,811.31	1,811.31	0.55	0.00	1,822.89
2019	0.00	1,413.81	1,413.81	0.44	0.00	1,422.99
2020	0.00	1,055.94	1,055.94	0.12	0.00	1,058.39
2021	0.00	1,077.49	1,077.49	0.10	0.00	1,079.54
2022	0.00	1,065.82	1,065.82	0.10	0.00	1,067.83
2023	0.00	1,058.69	1,058.69	0.09	0.00	1,060.67
2024	0.00	1,061.00	1,061.00	0.09	0.00	1,062.97
2025	0.00	92.70	92.70	0.01	0.00	92.87
Total	**0.00**	**9,349.30**	**9,349.30**	**1.71**	**0.00**	**9,385.17**
Blasting Emissions (Metric Tons)						**8,758.74**
Total (Blasting + Cumulative Construction Total)						**18,143.91**
Yearly Average Construction Emissions (Metric Tons/year over 20 years)						**907.20**

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. The program is largely based on recommended settings which are automatically populated throughout the model based on the inputted land use. Some uses like the fire station and the park do not have recommended settings and

were revised as stated above in Section 4 of this report. Statewide averages for utility emissions were utilized for the calculations throughout the model. Also, the emissions from LCFS are included in these operations emission numbers. The calculated operational emissions are identified in Table 5.2.

Table 5.2: Expected Unmitigated Operational Emissions Summary MT/Year

Year 2020	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e (MT/Yr)
Area	805.71	347.36	1,153.07	0.75	0.06	1,188.52
Energy	0.00	2,720.32	2,720.32	0.09	0.03	2,732.24
Mobile	0.00	10,425.23	10,425.23	0.40	0.00	10,433.56
Waste	150.45	0.00	150.45	8.89	0.00	337.17
Water	16.19	350.05	366.24	1.68	0.04	414.54
					Total (MT/Yr)	**15,106.03**
					Amortized Construction Emissions (Table 5.1 above)	907.20
					LCFS Emissions (Removed by CalEEMod)	1,043.36
					Total Operations (MT/Year)	**17,056.58**
Data is presented in decimal format and may have rounding errors.						

5.3 Regulatory, Mitigation and Design Feature Reductions

Offsite Vehicular Reductions

Due to the fact that the State of California will require vehicle manufactures to cut emissions of vehicles under the Advanced Clean Cars program (formerly known as Pavley and LEV III) rules, vehicular emissions are expected to be reduced through 2020 and beyond. Based off CARB recommended reduction measures, the proposed Project would expect to see related emissions reduced by 1.87% from Advanced Clean Cars, 10% from LCFS and a further 0.6% from the tire pressure regulation program under vehicle efficiency measures (California Air Resource Board, 2011). With the Exception of LCFS, CalEEMod doesn't provide direct calculation algorithms to apply these reductions. Given this, the reductions are post processed to avoid confusion. Advanced Clean Cars and the tire pressure program would remove a combined 2.47% or 257.709 MT. Furthermore, the effects of LCFS would reduce emissions by 10% or 1,043.356 MT.

Affordable Housing to reduce regional workforce trips

The Market Study identifies that the project will create 246 workforce housing six-plexes in the multi-family category. These units are identified as being in the likely price range for a

typical employee within the Competitive Market Area (CMA). The major employers in the CMA are as follows: Pala Casino which is ~0.5 miles from site, Pauma Casino ~7 miles, Harrah's Casino ~11 miles, Valley View Casino ~16 miles and the Valley Center area is approximately 17 miles. Assuming an equal amount of people from the project site are employed within each casino/employment center, the average home-work trip length would be modified to 10.3 miles.

Therefore, these 246 units would generate 1,968 trips daily and out of those trips 32.9% or roughly 647 trips would be work based only. Given this, a regional VMT reduction from 16.8 to 10.3 miles can be expected or 6.5 miles per trip producing an annual reduction of 1,039,516 VMT from the project. Since the project would produce 23,790,000 trips total the regional benefit could be calculated as 1,039,516/23,790,000 or 4.4%. It's estimated that the regional benefit will reduce GHG emissions by up to 504.98 Metric Tons.

Additionally, as a mitigation measure, the project will include electric vehicle charging stations for 3% of the total off street parking spaces required. A cabinet, box or enclosure connected to a conduit linking the parking spaces with the electrical service will be provided for the installation of electric vehicle supply equipment to provide electric vehicle charging stations. GHG reduction credits for the charging stations were not considered within this analysis.

Indirect Electricity and Natural Gas Reductions

The County of San Diego will require the contractor to utilize the most current building code at the time building permits are issued. The analysis within this report assumes that the proposed project would be required to utilize Title 24 (2013). This improvement would reduce energy emissions by 129.45 metric tons. Calculations were conducted using CalEEMod by incorporating Title 24 reductions as discussed in section 3.12 above. Also, as a condition of this project all units shall have ceiling fans installed and high efficiency appliances. Given the phasing projections for the project, it is likely that a subsequent, more rigorous iteration of the Title 24 standards will apply to the project at the time of building permit issuance. The expected timeframes for the construction will begin in 2017 and ending in 2025 which means that the project's residential units will be subject to the 2016 Title 24 standards which will further reduce emissions.

Electrical Utility Reduction Measures

The goals of SDG&E (the proposed projects energy provider) are suggesting that 33% of the energy supplied to their customers would be from renewable sources by 2020 which is required under S-14-08. It is assumed that 20% of the RPS has been achieved leaving an additional 13% by 2020. Given this, a reduction of 227.427 MT from RPS would be expected

from the 13% reduction. CalEEMod doesn't provide direct calculation algorithms to apply these reductions, so they are post processed and shown in the final mitigation table below.

Project Installed Solar Panels

As a mitigation measure the project applicant would install solar panels onsite to produce 4,756,002 kW hours of electricity per year on average. Under current technology, this equates to up to 9,605 solar panels or an average of 12 solar panels on each single family home and 100 solar panels on the clubhouse and fire station with each solar panel, having an estimated rating of 285 watts. Based on these reductions in electrical generation, this mitigation measure would reduce emissions by 1,559.63 MT per year. CalEEMod outputs for the solar panel emission reductions are shown in ***Attachment B***. Also, calculations on estimated solar energy production is shown in ***Attachment C***.

Water Reductions

The project will be required to install all water fixtures compliant with the 2010 California Green Building Standards codes. As such according to CAPCOA WUW-1 and WUW-2, CalEEMod was updated to include a 20% water conservation strategy for both indoor and outdoor water uses and would require the project to install low flow bathroom faucets, kitchen faucets, toilets and showerheads. The landscaping plan includes measures to show a 20% reduction in water use as required by the County of San Diego.

GHG Emissions from water and wastewater are calculated directly within CalEEMod and are a function of the quantity of water and the electrical intensity or kilowatt-hours per unit of water. Emission reductions from these features would be 88.961 metric tons. Offsite effects of RPS requirements for utility providers would further reduce GHG emissions from water sources by 53.89 MT

Project Related Solid Waste Emissions Gas Usage Reductions

Under AB 341, the Project would ultimately be required to increase diversion of waste from landfills to recycling centers by 75% or 25% more than requirements set forth under the Integrated Waste Management Act of 1989 which was considered BAU. As part of this Project, the Project would provide separate waste containers to allow for simpler material separations or would pay for a waste collection service that recycles the materials in accordance with AB 341. All green waste from parks and residential areas will be diverted from landfills and recycled as mulch in accordance with AB 341. For purposes of this analysis, a 25% reduction in GHGs was applied as a reduction calculation approach. This would reduce GHG emissions by 84.293 metric tons as calculated in CalEEMod.

Area Source Reductions

The project would be required to only utilize natural gas hearth options, thus eliminating fireplace usage. This effort would reduce GHG emissions by 622.574 MT as calculated in CalEEMod.

5.4 2020 "Business as Usual" Analysis

Combining regulatory reductions such as Advanced Clean Cars, Low Carbon Fuel Standards, Utility renewable portfolio requirements, installation of 9,605 solar panels, construction of 246 workforce housing units, implementing Title 24 (2013) and reducing water through a low flow design (All fixtures) would reduce emissions by 4,172.27 metric tons. A reduction of this size would reduce the projects emissions by 24.46%. A reduction of this size would meet and exceed the requirements of the Scoping Plan's estimates of 16% from business as usual (BAU) 2020 conditions. This is provided for informational purposes only and was not used in the determination of the project's significance under CEQA. Table 5.3 on the following page summarizes these reductions.

5.5 2020 Efficiency Metric Analysis of Significance

During preparation of the County's General Plan, the University of San Diego's Energy Policy Initiatives Center (EPIC) calculated GHG emissions for the County for both community-wide sectors and County government operations for the years 1990 and 2006, with emissions projections for 2020. The 2005 GHG Inventory concluded that total emissions in the County of San Diego in 2005 comprised approximately 4,512,580 MT of carbon dioxide equivalent (CO_2e) (University of San Diego's Energy Policy Initiatives Center (EPIC), 2008). Accordingly, and based on the Scoping Plan's recommendation, a 15% reduction from the baseline year GHG emissions in the County of San Diego would have totaled approximately 3,835,693 MT CO_2e/year. Thus, the total 2020 GHG emission target for the County would be 3,835,693 MT CO_2e/year. It should be noted that data presented in the General Plan represents preliminary estimates. The County is in the process of preparing a Climate Action Plan where refined emissions inventories based on more recent data are being included.

According to the San Diego Association of Governments (SANDAG), the unincorporated County of San Diego is estimated to have a total 2020 population of 545,451 with approximately 114,338 jobs. Thus, the 2020 service population for the County would be 659,789 (SANDAG, 2016). In order to achieve the County emission level of 3,835,693 MT CO_2e based on the General Plan, the required efficiency target in 2020 would be approximately 5.8 MT CO_2e per service population. (SANDAG, 2016).

Table 5.3: Year 2020 Unmitigated and Mitigated GHG Emissions

CO_2e Generator (Unmitigated)	Total Project CO_2e Emissions (Metric Tons)
Area (Project)	1,188.524
Electricity Single Family	1,247.559
Electricity Multi Family	349.642
Electricity Commercial	126.253
Electricity Park	25.982
Natural Gas Single Family	792.817
Natural Gas Multi-Family	182.144
Natural Gas Commercial	7.839
Mobile (Emissions including LCFS as reported from CalEEMod)	10,433.556
Mobile (LCFS Corrections - CalEEMod includes 10% reduction)	1,043.356
Waste	337.170
Water	414.543
Construction (Amortized over 20 years)	907.195
Total	**17,056.578**
CO_2e Mitigation and Reductions Methodology	**CO_2e Reduction (Metric Tons)**
Area - Mitigation Measures - wood burning hearths shall not be used. The project will be conditioned to only include natural gas burning hearth options – (Calculated in CalEEMod)	-622.574
Energy - Electricity - Single Family - Project will be required to implement Title 24 2013 standards) - 36.4% reduction for Residential Uses	-67.715
Energy - Electricity - Multi- Family - Project will be required to implement Title 24 2013 standards) - 23.3% reduction for Residential Uses	-15.629
Energy - Electricity – Renewable Portfolio will reduce emissions by 13%	-227.427
Energy – Natural Gas - Single Family - Project will be required to implement Title 24 2013 standards) – 6.5% reduction for Single Family Homes	-40.689
Energy – Natural Gas - Multi Family - Project will be required to implement Title 24 2013 standards) – 3.8% reduction for Single Family Homes	-5.415
9,605 Panels (285W) - Solar Installation	-1,559.630
Mobile – LCFS reduce emissions by 10%	-1,043.356
Mobile - Pavley II Plus Tire Pressure Regulations - 2.47% combined reduction	-257.709
Mobile - reduction in workforce trips - Reduction of 4.4% mobile emissions	-504.984
Waste – Project would install recycling bins to and would increase recycling to 75% diversion. – Reduction factor of 25% applied – (Calculated in CalEEMod)	-84.293
Water – Project would install low flow water fixtures for interior use (Calculated in CalEEMod)	-88.961
Water – Renewable Portfolio will reduce energy usage for water supply, treatment and distribution by 13%	-53.89
Mitigation and Reductions Total	**-4,172.27**
Total Unmitigated GHG Emissions	**17,056.58**
Combined Total with Mitigation and Reductions	**12,884.31**
2020 Mitigation CO_2e Reduction (%)	**24.46%**

However, to be conservative and use more current data, the project has decided to utilize a standard based upon the State average efficiency ratio of 4.9 MT CO_2e/year/service population for the year 2020 and apply the 5.2 percent per year reduction to the emissions would lower the efficiency metric for projects that will have a full buildout year post 2020. The 5.2 percent per year between 2020 and 2050 is necessary to achieve the 2030 and 2050 emissions reduction goals of Senate Bill 32 and Executive Order S-3-05 according to CARB's Scoping Plan Workshop Slides.

The proposed project would be developed to include 246 multi-family and 534 single family residential units and a fire station. It is anticipated that each residential unit will have 3.01 people per the Project's Market Analysis (MarketPointe Realty Advisors, 2015), the fire station is anticipated to have 10-12 employees on any given day. Therefore, the service population of the project would be 2,358 (3.01*780 + 10).

The proposed project would generate approximately 17,056.58 Metric Tons of CO2e each year. After implementation of all emission reductions, the project's reduced levels of GHGs of 12,884.31 Metric Tons of CO_2e and a service population of 2,358, the project would have an efficiency ratio of 5.46 MT CO_2e/year/service population. Therefore, based upon the 2020 target efficiency ratio, the project's efficiency ratio is above the required 4.9 MT CO_2e/year/service population. Therefore, the project's GHG emissions could potentially be cumulatively considerable without additional mitigation or reductions. These additional reduction strategies are described below.

The Project is anticipated to be fully operational in the year 2025 and therefore applying a 5.2 percent reduction to each year after 2020, the Project would need to achieve an efficiency metric of approximately 3.6 MT CO_2e/year/service population. Modeling for the project was conducted within CalEEMod for the year 2025 and only accounts for the anticipated increase in RPS, which was assumed to achieve a linear increase from 33% in 2020 to 50% in 2030 or an additional 8.5% in 2025. The modeling also accounts for reductions in transportation related emissions as calculated by CalEEMod. The results are provided in Table 5-4 and the modeling is provided in ***Attachment D***.

The modeling demonstrates that the project's total rate of GHG emissions would continue to decrease due to improvements in fuel efficiency and fleet turnover related to the project's transportation. Additional reductions in the energy sector, and water relative to the degree water emissions would be affected by the de-carbonization of the electrical grid, are due to the continuing effects of RPS. The modeling does not account for any additional reductions due to technological advancements in building efficiency, lighting, waste or increased regulations. Table 5.3 summarizes these reductions.

As a condition to this project, the HOA manager for the project will be directed to work with the major nearby employment centers to establish a shuttle program. The HOA manager will coordinate with the employment centers to provide identification and GIS information for participating households, as well as scheduling needs. The shuttle would provide direct door to door access from each participating household to the employment center. GHG reduction credits for this service was not considered within this analysis. Additionally, the project will include electric vehicle charging stations for 3% of the total off street parking spaces required. A cabinet, box or enclosure connected to a conduit linking the parking spaces with the electrical service will be provided for the installation of electric vehicle supply equipment to provide electric vehicle charging stations. GHG reduction credits for the charging stations were not considered within this analysis.

It was determined from the modeling that the Project's GHG emissions would be reduced to 11,809.4 Metric Tons of CO2e in the year 2025. Thus, the project would have an efficiency ratio of slightly less than 5.0 MT CO_2e/year/service population in the year 2025. Therefore, because the project's efficiency ratio is above the required 3.6 MT CO_2e/year/service population needed, the Project's mitigated GHG emissions could potentially be cumulatively considerable without additional mitigation or reductions. In order for the project to avoid a cumulatively considerable impact the GHG emissions would need to be reduced to 8,488.8 MT CO_2e/year (3.6 x 2,358).

After analyzing and requiring all reasonable and feasible on-site mitigation measures for avoiding or reducing greenhouse gas-related impacts, (see ***Attachment E***, CAPCOA mitigation evaluation), the lead agency has determined that additional off-site mitigation measures can further reduce impacts from GHG emissions to a less-than-significant level, through the purchase of carbon offset credits to achieve the requisite reductions standards described below.

The carbon credits shall be purchased through any one of the following verifiable entities/registries: California Air Resources Board, Climate Action Reserve, California Air Pollution Control Officer's Association, or any California Air Pollution Control District (APCD) or Air Quality Management District (AQMD), or an equivalent verifiable registry. One example registry program is the California Air Pollution Control Officers Association (CAPCOA) GHG Reduction Exchange (GHG Rx). GHG Rx is a registry and information exchange designed specifically to benefit the state of California. Participating air districts will only quantify credits for projects in California that follow protocols approved by the CAPCOA Board.

Table 5.4: Year 2025 Unmitigated and Mitigated GHG Emissions

CO_2e Generator (Unmitigated)	Total Project CO_2e Emissions (Metric Tons)
Area (Project)	1,188.520
Electricity Single Family	1,247.559
Electricity Multi Family	349.642
Electricity Commercial	126.253
Electricity Park	25.982
Natural Gas Single Family	792.817
Natural Gas Multi-Family	182.144
Natural Gas Commercial	7.839
Mobile (Emissions including LCFS as reported from CalEEMod)	9,903.829
Mobile (LCFS Corrections - CalEEMod includes 10% reduction)	990.383
Waste	337.170
Water	414.543
Construction (Amortized over 20 years)	907.195
Total	**16,473.876**
CO_2e Mitigation and Reductions Methodology	**CO_2e Reduction (Metric Tons)**
Area - Mitigation Measures - wood burning hearths shall not be used. The project will be conditioned to only include natural gas burning hearth options – (Calculated within CalEEMod)	-622.574
Energy - Electricity - Single Family - Project will be required to implement Title 24 2013 standards) - 36.4% reduction for Residential Uses	-67.715
Energy - Electricity - Multi- Family - Project will be required to implement Title 24 2013 standards) - 23.3% reduction for Residential Uses	-15.629
Energy - Electricity – RPS Using a linear assumption on RPS, 50%-33% from 2020 to 2030 is 1.7% per year or 8.5% added to 33% or 20% assumed per County so 13% +8.5% = 21.5%	-376.129
Energy – Natural Gas - Single Family - Project will be required to implement Title 24 2013 standards) – 6.5% reduction for Single Family Homes	-40.689
Energy – Natural Gas - Multi Family - Project will be required to implement Title 24 2013 standards) – 3.8% reduction for Single Family Homes	-5.415
9,605 Panels (285W) - Solar Installation	-1,559.630
Mobile – LCFS reduce emissions by 10%	-990.38
Mobile - Pavley II Plus Tire Pressure Regulations - 2.47% combined reduction	-244.625
Mobile - reduction in workforce trips - Reduction of 2.98% mobile emissions	-479.345
Waste – Project would install recycling bins to and would increase recycling to 75% diversion. – Reduction factor of 25% applied – (Mitigation calculated within CalEEMod)	-84.293
Water – Project would install low flow water fixtures for interior use (Mitigation calculated within CalEEMod)	-88.961
Water – RPS Using a linear assumption on RPS, 50%-33% from 2020 to 2030 is 1.7% per year or 8.5% added to 33% or 20% assumed per County so 13% +8.5% = 21.5%	-89.13
Mitigation and Reductions Total	**-4,664.51**
Total Unmitigated GHG Emissions	**16,473.88**
Combined Total with Mitigation and Reductions	**11,809.36**
2025 Mitigation CO_2e Reduction (%)	**-28.31%**

Carbon Offsets – Construction Emissions: To ensure the project would result in less than significant construction-related GHG emissions, the project applicant shall complete the following:

Prior to issuance of the first grading permit, the applicant shall provide evidence to the County of San Diego (County) Planning & Development Services (PDS) that they have obtained a one-time purchase of carbon credits in the amount of 18,144 MT CO2e (note: this number reflects the additional construction-related GHG impacts after applying all other mitigation and reductions), which would reduce the construction-related GHG emissions to a level less than significant (see Table 5.1 above). Construction emissions include all grading, site preparation, building construction and architectural coatings related emissions.

Carbon Offsets – Operational Emissions: To ensure the project would result in less than significant operational-related GHG emissions, the project applicant shall complete one of the following two options. (Note: the project's operational emissions would be 10,902 MT CO2e in the year 2025 at the time of full buildout; see Table 5.5). Therefore, to achieve an efficiency ratio of 3.6 MT CO2e/year/service population and maintain a less than significant level of GHG emissions, the project may only generate up to 8,489 MT CO2e annually. Therefore, the project will need to reduce the annual emissions by 2,413 MT CO2e until the year 2050. Executive Order (EO) S-3-05 established the goals that GHG emissions should be reduced to 2000 levels by 2010, to 1990 levels by 2020, and to 80% below 1990 levels by 2050. Therefore, the project needs to mitigate GHG emissions to the year 2050. At this time, there are no regulations pertaining to GHG emission goals post 2050.

It should be noted: as new federal, state and local regulations are adopted or increases in technology occur (for example, solar), this could reduce the amount of carbon credits needed to maintain a level of less than significant.

(1) Prior to the recordation of the first final map, the applicant shall provide evidence to County PDS that they have obtained carbon credits in the amount of 2,413 MTCO2E per year multiplied by the number of years from the commencement of the operational aspects of the project (conservatively calculated for this purpose from the date of the first Final Map approval) until the year 2050.

Evidence shall consist of documentation from a County approved third party verifier that the carbon credits have been obtained and meet the requirements stated herein. The amount of GHG credits may be reduced at the time of first final map issuance if the applicant can demonstrate with substantial evidence that changes in State regulation or law, or other increased building efficiencies have reduced the total MTCO2E emitted by the project. This will require approval from the County Director of PDS.

Table 5.5: Year 2025 GHG Emissions and Carbon Offsets per Land Use

CO_2e Generator (Unmitigated)	Single Family CO_2e Emissions (Metric Tons)	Multi Family CO_2e Emissions (Metric Tons)	Fire Station CO_2e Emissions (Metric Tons)	Park CO_2e Emissions (Metric Tons)
Area (Project)	813.679	374.841		
Electricity Single Family	1,247.559			
Electricity Multi Family		349.667		
Electricity Commercial			126.253	
Electricity Park				25.982
Natural Gas Single Family	792.817			
Natural Gas Multi-Family		182.144		
Natural Gas Commercial			7.839	
Mobile (Emissions including LCFS)	7,068.935	2,605.181	229.713	
Mobile (LCFS Corrections)	706.894	260.518	22.971	
Waste	284.809	51.478	0.883	
Water	271.619	125.135	17.789	
Total	**11,186.31**	**3,948.96**	**405.45**	**25.98**
CO_2e Mitigation and Reductions (Metric Tons)				
Area - Mitigation Measures	-426.224	-196.350		
Energy - Electricity - Single Family	-67.715			
Energy - Electricity - Multi- Family		-15.629		
Energy - Electricity – RPS	-268.225	-75.178	-27.144	-5.586
Energy – Natural Gas - Single Family	-40.689			
Energy – Natural Gas - Multi Family		-5.415		
9,605 Solar Panels (285W)	-1076.396	-464.073	-6.495	-12.665
Mobile – LCFS reduce emissions by 10%	-706.894	-260.518	-22.971	
Mobile - Pavley II Plus Tire Pressure	-174.603	-64.348	-5.674	
Mobile – 4.4% VMT Reduction		-479.345		
Waste – Install recycling bins	-71.202	-12.870	-0.111	-0.111
Water – Install low flow water fixtures	-58.449	-26.928	-3.585	
Water – RPS	-58.40	-26.904	-3.825	
Mitigation and Reductions Total	**-2,948.79**	**-1,627.56**	**-69.80**	**-18.36**
Total with Mitigation and Reductions	**8,237.52**	**2,321.41**	**335.64**	**7.62**
Percent of Emissions and Carbon Offset	**75.56%**	**21.29%**	**3.08%**	**0.07%**
Carbon Offset Needed (Total 2,413)	**1,823.51**	**513.88**	**74.30**	**1.69**
Number of Units	**534**	**246**	**1**	**1**
Carbon Offset per Unit or Use	**3.41**	**2.09**	**74.30**	**1.69**

(2) Prior to recordation of each Final Map, the applicant shall obtain the amount of carbon offset credits required for each Final Map based upon the uses contained within that Final Map, in accordance with Table 5.5. Each Final Map shall include as an attachment a tracking table that identifies any previous offsets purchased, and the amount remaining.

The amount of GHG credits may be reduced at the time of each final map issuance if the applicant can demonstrate with substantial evidence that changes in State regulation or law, or other increased building efficiencies have reduced the total MTCO2E emitted by the project. This will be included in the tabulation and will require approval from the County Director of PDS.

Evidence shall consist of documentation from a County approved third party verifier that the carbon credits have been obtained and meet the requirements stated herein. The amount of GHG credits may be reduced at the time of first final map issuance if the applicant can demonstrate with substantial evidence that changes in State regulation or law, or other increased building efficiencies have reduced the total MTCO2E emitted by the project. This will require approval from the County Director of PDS.

5.6 Horizon Year 2030 and 2050

The project's progress towards achieving the GHG reduction goals for mid-term year (2030) and horizon-year (2050) must be evaluated, as set forth in in SB 32 and EO S-3-05, respectively. There is an ongoing debate regarding the need to assess a project's consistency with EOs in order to comply with CEQA and this issue is currently pending before the California Supreme Court.[2] Therefore, in an exercise of caution, this report evaluates the project's progress towards achieving the GHG reduction goals identified in both EO B-30-15 and EO S-3-05 for 2050.

SB 32 set an interim target goal of reducing GHG emissions to 40 percent below 1990 levels by 2030. The interim target was established to ensure California would effectively continue its trajectory toward meeting or exceeding the long-term emission reduction statewide goal of reducing GHG emissions to 80 percent below 1990 levels by 2050 as set forth in Executive Order S-3-05.

In accordance with CEQA Guidelines Section 15064.4(b)(3), this section evaluates whether the project's post-buildout GHG emissions trajectory would impede the attainment of the 2030 and 2050 GHG reduction goals identified in SB 32 and S-3-05. Although SB 32 codifies the

[2] See case information webpage for California Supreme Court's consideration of *Cleveland Nat'l Forest Foundation v. SANDAG* (Case No. S223603), available at http://appellatecases.courtinfo.ca.gov/search/case/mainCaseScreen.cfm?dist=0&doc_id =2096944&doc_no=S223603 and accessed May 29, 2015.

2030 GHG reduction goal, there has been no legislative action to adopt the 2030 or 2050 GHG reduction targets.

Executive Order B-30-15 has been issued and set an interim target goal of reducing GHG emissions to 40 percent below 1990 levels by 2030. The Executive Order B-30-15 interim target was established to ensure California would effectively continue its trajectory toward meeting or exceeding the long-term emission reduction goal of reducing GHG emissions to 80 percent below 1990 levels by 2050 as set forth in Executive Order S-3-05.

No statutes or regulations have been adopted to translate these goals into emission reduction targets. No agency with subject matter expertise has adopted regulations to achieve these statewide goals at the project level, and available models cannot currently quantify all project-related emissions in those future years. Nonetheless, this analysis renders a determination as to whether the project would conflict with the interpolated statewide reduction goals. As described above, the interpolated reduction goals are established based on the trajectory needed to meet the goals of SB 32 for 2030 and by EO S-3-05 for 2050. In this case a project would not be considered cumulatively considerable if it does not conflict with the CARB programs.

It should be noted, CARB has expressed optimism with regard to both the 2030 and 2050 goals. It states in the First Update to the Climate Change Scoping Plan that "California is on track to meet the near-term 2020 greenhouse gas limit and is well positioned to maintain and continue reductions beyond 2020 as required by AB 32." (see First Update to Scoping Plan, p. ES2.) With regard to the 2050 target for reducing GHG emissions to 80 percent below 1990 levels, the First Update to the Climate Change Scoping Plan states:

"This level of reduction is achievable in California. In fact, if California realizes the expected benefits of existing policy goals (such as 12,000 megawatts [MW] of renewable distributed generation by 2020, net zero energy homes after 2020, existing building retrofits under AB 758, and others) it could reduce emissions by 2030 to levels squarely in line with those needed in the developed world and to stay on track to reduce emissions to 80 percent below 1990 levels by 2050. Additional measures, including locally driven measures and those necessary to meet federal air quality standards in 2032, could lead to even greater emission reductions."

In other words, the experts at CARB attest the State is on a trajectory to meet the 2020, 2030 and 2050 GHG reduction targets set forth in AB 32, Executive Order B-30-15 and Executive Order S-3-05. CARB also states that regional and local action will be key towards meeting these long-term goals with sustainable development practices and planning. The following evaluates whether the project would interfere with the four main programs CARB identified to support is conclusions that the state is on a trajectory to meet the 2030 and 2050 GHG

targets: (1) initiative to install 12,000 megawatts [MW] of renewable distributed energy by 2020; (2) California Building Commission mandate to construct net zero energy homes after 2020; (3) existing building retrofits under AB 758; and (4) California's Cap-and-Trade Regulations.

State's Goal to Install 12,000 MW of Renewable Distributed Generation Systems by 2020:

The project does not interfere with the State's goal to install 12,000 MW of renewable distributed generation systems by 2020. The project includes a mitigation measure to install solar panels onsite to produce 4,756,002 kW hours of electricity per year on average. Under current technology, this equates to up to 9,605 solar panels or an average of 12 solar panels on each single family home, 78 solar panels on the clubhouse and 40 Panels on the fire station. Each solar panel will have an estimated rating of 285 watts. Based on these reductions in electrical generation, this would reduce the electricity. The actual capacity and/or conversion efficiency of the photovoltaic panels may alter the actual number of roofs or non-residential roof space requirements to meet the annual 4,756,002 kW-h requirement at project build out. Therefore, the project would not interfere or conflict with the state's goal of 12,000 MW of renewable distributed generation by 2020.

Non-interference with Construction of Net-Zero Energy Homes after 2020:

The project does not interfere with the ability of the California Building Commission to mandate constructing net-zero energy homes after 2020. The proposed project is anticipated to start in 2017 with construction and opening of the first buildings sometime in 2020 and full buildout in 2025. The project will be required to construct homes in conformance with the then-existing California Building Commission mandates for net-zero energy homes because the County does not issue occupancy permits for projects that do not comply with the California Building Code in effect at that time.

Non-interference with AB 758's Existing Buildings Energy Efficiency Action Plan:

The project will not interfere with the state's implementation of building retrofits to further energy efficiency for existing buildings under AB 758. AB 758, (Comprehensive Energy Efficiency in Existing Buildings Law). The California Energy Commission ("CEC") is tasked with developing and implementing a comprehensive program to increase energy efficiency in existing residential and nonresidential buildings that "fall significantly below the current standards in Title 24." (Pub. Resources Code, section 25943(a)(1).) The project will be constructed in compliance with the applicable Title 24 standards and therefore will not interfere with CEC or other initiatives implemented to increase energy efficiency and reduce GHG emissions associated with buildings that do not adhere to Title 24 standards.

Other State Programs – Cap-and-Trade:

The 2008 Scoping Plan identified cap-and-trade as a strategy for helping California reduce its GHG emissions (CARB 2008). A cap-and-trade program sets the total amount of GHG emissions allowable for facilities under the cap and allows covered sources, including producers and consumers of energy, to determine the least expensive strategies to comply. AB 32 required CARB to adopt the cap-and-trade regulation by January 1, 2011, and the program itself began in November 2012. The Cap-and-Trade Regulation is being implemented in two stages. Electric generating utilities, electricity importers, and large industrial facilities became subject to the program beginning in 2013, and fuel distributors are brought under the cap in 2015. The project does not interfere with the state's implementation of this GHG reducing program because it is not an electric generating utility, electricity importer, large industrial facility, or fuel distributor. Rather, the project, like all consumers of energy and fuel from the sources regulated by Cap-and- Trade will have the related GHG emissions reduced from these resources as the generators must invest heavily in GHG reducing technologies in order to comply with the ever decreasing cap. In this sense, like all consumers paying for the use of fuel and electricity resources, the project and its residents will contribute financially toward these GHG reducing technologies.

Given the fact that regulatory emission reductions will continue to improve well beyond what is known at this time, it is expected that a Project's emissions in 2030 and 2050 would also decrease from increased renewables, better vehicle emissions, reductions is water and waste along with increased building efficiencies and technologies. Given this, the project's GHG emissions will decrease with time as the state's existing and planned regulatory objectives are implemented and achieved. Also, as statewide regulatory initiatives, including those identified by CARB in the Scoping Plan are implemented, and other technological innovations occur, it is reasonable to assume that the statewide and the proposed project's GHG emissions levels would be reduced further.

Based on the foregoing, the project is not anticipated to interfere with the state's implementation of SB 32's target of reducing statewide GHG emissions to 40 percent below 1990 levels by 2030 or EO S-3-05's target of reducing statewide GHG emission to 80 percent below 1990 levels by 2050 because it does not interfere with the state's implementation of GHG emission reduction measures described in CARB's First Update to the Scoping Plan, including the state providing for 12,000 MW of renewable distributed generation by 2020, the California Building Commission mandating new zero energy homes in the building code after 2020, existing building retrofits under AB 758, and Cap-and-Trade Regulations. CARB identified these programs to reduce emissions by 2030 to levels squarely in line with those needed in the developed world and to stay on track to reduce emissions to 80 percent below 1990 levels by 2050.

5.7 Conclusion

2020 "Business as Usual" Analysis

Combining regulatory reductions such as Advanced Clean Cars, Low Carbon Fuel Standards, Utility renewable portfolio requirements, installation of 9,605 solar panels, construction of 246 workforce housing units, implementing Title 24 (2013) and reducing water through a low flow design (All fixtures) would reduce emissions by 4,172.27 metric tons. A reduction of this size would reduce the projects emissions by 24.46%. A reduction of this size would meet and exceed the requirements of the scoping plan's estimates of 16% from business as usual (BAU) 2020 conditions. This is provided for informational purposes only and was not used in the determination of the project's significance under CEQA.

Efficiency Metric Analysis of Significance

During preparation of the County's General Plan, the University of San Diego's Energy Policy Initiatives Center (EPIC) calculated GHG emissions for the County for both community-wide sectors and County government operations for the years 1990 and 2006, with emissions projections for 2020. The 2005 GHG Inventory concluded that total emissions in the County of San Diego in 2005 comprised approximately 4,512,580 MT of carbon dioxide equivalent (CO_2e) (University of San Diego's Energy Policy Initiatives Center (EPIC), 2008). Accordingly, and based on the Scoping Plan's recommendation, a 15% reduction from the baseline year GHG emissions in the County of San Diego would have totaled approximately 3,835,693 MT CO_2e/year. Thus, the total 2020 GHG emission target for the County would be 3,835,693 MT CO_2e/year. It should be noted that data presented in the General Plan represents preliminary estimates. The County is in the process of preparing a Climate Action Plan where refined emissions inventories based on more recent data are being included.

According to the San Diego Association of Governments (SANDAG), the unincorporated County of San Diego is estimated to have a total 2020 population of 545,451 with approximately 114,338 jobs. Thus, the 2020 service population for the County would be 659,789 (SANDAG, 2016). In order to achieve the County emission level of 3,835,693 MT CO_2e based on the General Plan, the required efficiency target in 2020 would be approximately 5.8 MT CO_2e per service population. (SANDAG, 2016).

However, to be conservative and use more current data, the project has decided to utilize a standard based upon the State average efficiency ratio of 4.9 MT CO_2e/year/service population for the year 2020 and apply the 5.2 percent per year reduction to the emissions would lower the efficiency metric for projects that will have a full buildout year post 2020.

The proposed project would be developed to include 246 multi-family and 534 single family residential units and a fire station. It is anticipated that each residential unit will have 3.01 people per the Project's Market Analysis (MarketPointe Realty Advisors, 2015), the fire station is anticipated to have 10-12 employees on any given day. Therefore, the service population of the project would be 2,358 (3.01*780 + 10).

The proposed project would generate approximately 17,056.58 Metric Tons of CO2e each year. After implementation of all emission reductions, the project's reduced levels of GHGs of 12,884.31 Metric Tons of CO_2e and a service population of 2,358, the project would have an efficiency ratio of 5.46 MT CO_2e/year/service population. Therefore, based upon the 2020 target efficiency ratio, the project's efficiency ratio is above the required 4.9 MT CO_2e/year/service population. Therefore, the project's GHG emissions could potentially be cumulatively considerable without additional mitigation or reductions. These additional reduction strategies are described below.

The Project is anticipated to be fully operational in the year 2025 and therefore applying a 5.2 percent reduction to each year after 2020, the Project would need to achieve an efficiency metric of approximately 3.6 MT CO_2e/year/service population. Modeling for the project was conducted within CalEEMod for the year 2025 and only accounts for the anticipated increase in RPS, which was assumed to achieve a linear increase from 33% in 2020 to 50% in 2030 or an additional 8.5% in 2025. The modeling also accounts for reductions in transportation related emissions as calculated by CalEEMod. The modeling demonstrates that the project's total rate of GHG emissions would continue to decrease due to improvements in fuel efficiency and fleet turnover related to the project's transportation. Additional reductions in the energy sector, and water relative to the degree water emissions would be affected by the de-carbonization of the electrical grid, are due to the continuing effects of RPS. The modeling does not account for any additional reductions due to technological advancements in building efficiency, lighting, waste or increased regulations.

It was determined from the modeling that the Project's GHG emissions would be reduced to 11,809.36 Metric Tons of CO2e in the year 2025. Thus, the project would have an efficiency ratio of 5.0 MT CO_2e/year/service population in the year 2025. Therefore, because the project's efficiency ratio is above the required 3.6 MT CO_2e/year/service population needed, the Project's mitigated GHG emissions could potentially be cumulatively considerable without additional mitigation or reductions. These additional reduction strategies are described below.

After analyzing and requiring all reasonable and feasible on-site mitigation measures for avoiding or reducing greenhouse gas-related impacts, (see Attachment E, CAPCOA mitigation evaluation), the lead agency has determined that additional off-site mitigation measures can further reduce impacts from GHG emissions to a less-than-significant level, through the

purchase of carbon offset credits to achieve the requisite reductions standards described below.

The carbon credits shall be purchased through any one of the following verifiable entities/registries: California Air Resources Board, Climate Action Reserve, California Air Pollution Control Officer's Association, or any California Air Pollution Control District (APCD) or Air Quality Management District (AQMD), or an equivalent verifiable registry. One example registry program is the California Air Pollution Control Officers Association (CAPCOA) GHG Reduction Exchange (GHG Rx). GHG Rx is a registry and information exchange designed specifically to benefit the state of California. Participating air districts will only quantify credits for projects in California that follow protocols approved by the CAPCOA Board.

Carbon Offsets – Construction Emissions: To ensure the project would result in less than significant construction-related GHG emissions, the project applicant shall complete the following:

> Prior to issuance of the first grading permit, the applicant shall provide evidence to the County of San Diego (County) Planning & Development Services (PDS) that they have obtained a one-time purchase of carbon credits in the amount of 18,144 MT CO2e (note: this number reflects the additional construction-related GHG impacts after applying all other mitigation and reductions), which would reduce the construction-related GHG emissions to a level less than significant (see Table 5.1 above). Construction emissions include all grading, site preparation, building construction and architectural coatings related emissions.

Carbon Offsets – Operational Emissions: To ensure the project would result in less than significant operational-related GHG emissions, the project applicant shall complete one of the following two options. (Note: the project's operational emissions would be 10,902 MT CO2e in the year 2025 at the time of full buildout; see Table 5.5 above). Therefore, to achieve an efficiency ratio of 3.6 MT CO2e/year/service population and maintain a less than significant level of GHG emissions, the project may only generate up to 8,489 MT CO2e annually. Therefore, the project will need to reduce the annual emissions by 2,413 MT CO2e until the year 2050. Executive Order (EO) S-3-05 established the goals that GHG emissions should be reduced to 2000 levels by 2010, to 1990 levels by 2020, and to 80% below 1990 levels by 2050. Therefore, the project needs to mitigate GHG emissions to the year 2050. At this time, there are no regulations pertaining to GHG emission goals post 2050.

It should be noted: as new federal, state and local regulations are adopted or increases in technology occur (for example, solar), this could reduce the amount of carbon credits needed to maintain a level of less than significant.

(1) Prior to the recordation of the first final map, the applicant shall provide evidence to County PDS that they have obtained carbon credits in the amount of 2,413 MTCO2E per year multiplied by the number of years from the commencement of the operational aspects of the project (conservatively calculated for this purpose from the date of the first Final Map approval) until the year 2050.

Evidence shall consist of documentation from a County approved third party verifier that the carbon credits have been obtained and meet the requirements stated herein. The amount of GHG credits may be reduced at the time of first final map issuance if the applicant can demonstrate with substantial evidence that changes in State regulation or law, or other increased building efficiencies have reduced the total MTCO2E emitted by the project. This will require approval from the County Director of PDS.

(2) Prior to recordation of each Final Map, the applicant shall obtain the amount of carbon offset credits required for each Final Map based upon the uses contained within that Final Map. Each Final Map shall include as an attachment a tracking table that identifies any previous offsets purchased, and the amount remaining.

The amount of GHG credits may be reduced at the time of each final map issuance if the applicant can demonstrate with substantial evidence that changes in State regulation or law, or other increased building efficiencies have reduced the total MTCO2E emitted by the project. This will be included in the tabulation and will require approval from the County Director of PDS.

Evidence shall consist of documentation from a County approved third party verifier that the carbon credits have been obtained and meet the requirements stated herein. The amount of GHG credits may be reduced at the time of first final map issuance if the applicant can demonstrate with substantial evidence that changes in State regulation or law, or other increased building efficiencies have reduced the total MTCO2E emitted by the project. This will require approval from the County Director of PDS.

2030 and 2050 Reduction Targets

In accordance with CEQA Guidelines section 15064.4(b)(3), this section evaluates whether the project's post-buildout GHG emissions trajectory would impede the attainment of the 2030 and 2050 GHG reduction goals identified in EOs B-30-15 and S-3-05. The 2030 target has been codified through SB 32. There has been no legislative action to adopt the EO S-3-05 GHG reduction target for 2050 at this time.

Senate Bill 32 has been issued and set a target of reducing statewide GHG emissions to 40% below 1990 levels by 2030. The SB 32 target was established to ensure California would effectively continue its trajectory toward meeting or exceeding the long-term emission reduction goal of reducing GHG emissions to 80% below 1990 levels by 2050 as set forth in Executive Order S-3-05.

No statutes or regulations have been adopted to translate these goals into comparable, scientifically-based emission reduction targets. No agency with subject matter expertise has adopted regulations to achieve these statewide goals at the project level. Nonetheless, this analysis renders a determination as to whether the project would conflict with the interpolated statewide reduction goals. As described above, the interpolated reduction goals are established based on the trajectory needed to meet the goals of SB 32 for 2030 and by EO S-3-05 for 2050. In this case a project would not be considered cumulatively considerable if it does not conflict with the CARB programs.

It should be noted, CARB has expressed optimism with regard to both the 2030 and 2050 goals. It states in the First Update to the Climate Change Scoping Plan that "California is on track to meet the near-term 2020 greenhouse gas limit and is well positioned to maintain and continue reductions beyond 2020 as required by AB 32." (see First Update to Scoping Plan, p. ES2.) With regard to the 2050 target for reducing GHG emissions to 80 percent below 1990 levels, the First Update to the Climate Change Scoping Plan states:

"This level of reduction is achievable in California. In fact, if California realizes the expected benefits of existing policy goals (such as 12,000 megawatts [MW] of renewable distributed generation by 2020, net zero energy homes after 2020, existing building retrofits under AB 758, and others) it could reduce emissions by 2030 to levels squarely in line with those needed in the developed world and to stay on track to reduce emissions to 80 percent below 1990 levels by 2050. Additional measures, including locally driven measures and those necessary to meet federal air quality standards in 2032, could lead to even greater emission reductions."

In other words, the experts at CARB attest the State is on a trajectory to meet the 2020, 2030 and 2050 GHG reduction targets set forth in AB 32, Executive Order B-30-15 and Executive Order S-3-05. Carb also states that regional and local action will be key towards meeting these long-term goals with sustainable development practices and planning. The following evaluates whether the project would interfere with the four main programs CARB identified to support is conclusions that the state is on a trajectory to meet the 2030 and 2050 GHG targets: (1) initiative to install 12,000 megawatts [MW] of renewable distributed energy by 2020; (2) California Building Commission mandate to construct net zero energy homes after 2020; (3) existing building retrofits under AB 758; and (4) California's Cap-and-Trade Regulations.

State's Goal to Install 12,000 MW of Renewable Distributed Generation Systems by 2020:

The project does not interfere with the State's goal to install 12,000 MW of renewable distributed generation systems by 2020. The project includes a mitigation measure to install solar panels onsite to produce 4,756,002 kWh hours of electricity per year on average. Under current technology, this equates to up to 9,605 solar panels or an average of 12 solar panels on each single family home, 78 solar panels on the clubhouse and 40 Panels on the fire station. Each solar panel will have an estimated rating of 285 watts. Based on these reductions in electrical generation, this would reduce the electricity usage emissions by approximately 60%. The actual capacity and/or conversion efficiency of the photovoltaic panels may alter the actual number of roofs or non-residential roof space requirements to meet the annual 4,756,002 kWh requirement at project build out. Therefore, the project would not interfere or conflict with the state's goal of 12,000 MW of renewable distributed generation by 2020.

Non-interference with Construction of Net-Zero Energy Homes after 2020:

The project does not interfere with the ability of the California Building Commission to mandate constructing net-zero energy homes after 2020. The proposed project is anticipated to start in 2017 with construction and opening of the first buildings sometime in 2020 and full buildout in 2025. The project will be required to construct homes in conformance with the then-existing California Building Commission mandates for net-zero energy homes because the County does not issue occupancy permits for projects that do not comply with the California Building Code in effect at that time.

Non-interference with AB 758's Existing Buildings Energy Efficiency Action Plan:

The project will not interfere with the state's implementation of building retrofits to further energy efficiency for existing buildings under AB 758. AB 758, (Comprehensive Energy Efficiency in Existing Buildings Law). The California Energy Commission ("CEC") is tasked with developing and implementing a comprehensive program to increase energy efficiency in existing residential and nonresidential buildings that "fall significantly below the current standards in Title 24." (Pub. Resources Code, section 25943(a)(1).) The project will be constructed in compliance with the applicable Title 24 standards and therefore will not interfere with CEC or other initiatives implemented to increase energy efficiency and reduce GHG emissions associated with buildings that do not adhere to Title 24 standards.

Other State Programs – Cap-and-Trade:

The 2008 Scoping Plan identified cap-and-trade as a strategy for helping California reduce its GHG emissions (CARB 2008). A cap-and-trade program sets the total amount of GHG emissions allowable for facilities under the cap and allows covered sources, including

producers and consumers of energy, to determine the least expensive strategies to comply. AB 32 required CARB to adopt the cap-and-trade regulation by January 1, 2011, and the program itself began in November 2012. The Cap-and-Trade Regulation is being implemented in two stages. Electric generating utilities, electricity importers, and large industrial facilities became subject to the program beginning in 2013, and fuel distributors are brought under the cap in 2015. The project does not interfere with the state's implementation of this GHG reducing program because it is not an electric generating utility, electricity importer, large industrial facility, or fuel distributor. Rather, the project, like all consumers of energy and fuel from the sources regulated by Cap-and- Trade will have the related GHG emissions reduced from these resources as the generators must invest heavily in GHG reducing technologies in order to comply with the ever decreasing cap. In this sense, like all consumers paying for the use of fuel and electricity resources, the project and its residents will contribute financially toward these GHG reducing technologies.

Given the fact that regulatory emission reductions will continue to improve well beyond what is known at this time, it is expected that a Project's emissions in 2030 and 2050 would also decrease from increased renewables, better vehicle emissions, reductions is water and waste along with increased building efficiencies and technologies. Given this, the project's GHG emissions will decrease with time as the state's existing and planned regulatory objectives are implemented and achieved. Also, as statewide regulatory initiatives, including those identified by CARB in the Scoping Plan are implemented, and other technological innovations occur, it is reasonable to assume that the statewide and the proposed project's GHG emissions levels would be reduced further.

Based on the foregoing, the project is not anticipated to interfere with the state's implementation of EO B-30-15's target of reducing statewide GHG emissions to 40 percent below 1990 levels by 2030 or EO S-3-05's target of reducing statewide GHG emission to 80 percent below 1990 levels by 2050 because it does not interfere with the state's implementation of GHG emission reduction measures described in CARB's First Update to the Scoping Plan, including the state providing for 12,000 MW of renewable distributed generation by 2020, the California Building Commission mandating new zero energy homes in the building code after 2020, existing building retrofits under AB 758, and Cap-and-Trade Regulations. CARB identified these programs to reduce emissions by 2030 to levels squarely in line with those needed in the developed world and to stay on track to reduce emissions to 80 percent below 1990 levels by 2050.

6.0 References

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7.0 CERTIFICATIONS

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

DRAFT

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Date November 30, 2016

ATTACHMENT A

CALEEMOD 2013.2.2 - Annual (2020)

Warner Ranch Residential Development (Unmitigated)

San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Commercial	1.00	User Defined Unit	1.00	10,000.00	10
City Park	4.23	Acre	4.23	184,258.80	0
Condo/Townhouse	246.00	Dwelling Unit	11.77	246,000.00	704
Single Family Housing	534.00	Dwelling Unit	159.00	961,200.00	1527

1.2 Other Project Characteristics

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

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Per Project Specifications

Land Use - Per project description

Construction Phase - Estimates per project description

Off-road Equipment -

Off-road Equipment - Estimates per project description

Off-road Equipment - Estimates per project description

Off-road Equipment - Off-Highway Trucks represent Water Trucks as required per project description.

Off-road Equipment - Per project description

Off-road Equipment - Off-Highway trucks represent Water Trucks needed per project description.

Off-road Equipment - Estimates per Project requirements

Off-road Equipment - Estimates per project description.

Trips and VMT - Estimates per project description

Demolition -

Architectural Coating - Estimates per project description

Vehicle Trips - Updated per traffic study

Vechicle Emission Factors -

Vechicle Emission Factors -

Vechicle Emission Factors -

Area Coating -

Energy Use - User defined subtype represents project's proposed Fire Station.

Water And Wastewater - User Defined water usage refers to project's Fire House. City park water use was derived using California Department of Water Resources 2009 model per equation in report (4,406,008 GPY)

Solid Waste - User Defined Commercial is for the Firehouse. It's estimated that 2.91 residents per multi-family unit and since 10 firefighters are assumed to live in the firehouse, 10/2.91=3.43x the waste of multi-family is 0.46 tons/year.

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation - 13% additional beyond the 20% already assumed by the County.

Water Mitigation -

Waste Mitigation -

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tblArchitecturalCoating	EF_Residential_Interior	250.00	150.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150

tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	150	250
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tblConstructionPhase	PhaseStartDate	4/8/2020	4/23/2020
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tblConstructionPhase	PhaseStartDate	2/1/2025	2/3/2020
tblEnergyUse	LightingElect	0.00	0.43
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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					
2017	0.7308	8.3069	5.4519	7.7400e-003	7.4128	0.3726	7.7853	4.0274	0.3429	4.3703	0.0000	712.5386	712.5386	0.2127	0.0000	717.0056
2018	1.6655	18.6165	12.5345	0.0200	7.4463	0.8217	8.2679	4.0363	0.7559	4.7923	0.0000	1,811.3092	1,811.3092	0.5514	0.0000	1,822.8875
2019	1.2295	13.3991	9.4107	0.0159	7.6649	0.5921	8.2569	4.1183	0.5447	4.6629	0.0000	1,414.0381	1,414.0381	0.4372	0.0000	1,423.2190
2020	2.4526	4.1211	6.1729	0.0138	0.8191	0.1921	1.0112	0.2433	0.1803	0.4236	0.0000	1,056.1536	1,056.1536	0.1166	0.0000	1,058.6025
2021	3.2179	3.4288	6.0595	0.0144	0.6627	0.1541	0.8168	0.1781	0.1453	0.3234	0.0000	1,077.4924	1,077.4924	0.0976	0.0000	1,079.5426
2022	3.1659	3.0628	5.8308	0.0143	0.6602	0.1324	0.7925	0.1774	0.1248	0.3022	0.0000	1,065.8171	1,065.8171	0.0959	0.0000	1,067.8304
2023	3.1325	2.7942	5.6491	0.0143	0.6602	0.1165	0.7767	0.1774	0.1098	0.2873	0.0000	1,058.6924	1,058.6924	0.0944	0.0000	1,060.6739
2024	3.1289	2.6649	5.5140	0.0144	0.6653	0.1049	0.7701	0.1788	0.0988	0.2776	0.0000	1,060.9997	1,060.9997	0.0939	0.0000	1,062.9720
2025	0.2726	0.2208	0.4735	1.2700e-003	0.0584	8.1200e-003	0.0665	0.0157	7.6500e-003	0.0233	0.0000	92.7032	92.7032	8.1600e-003	0.0000	92.8745
Total	**18.9962**	**56.6151**	**57.0970**	**0.1161**	**26.0498**	**2.4943**	**28.5441**	**13.1527**	**2.3103**	**15.4629**	**0.0000**	**9,349.7442**	**9,349.7442**	**1.7078**	**0.0000**	**9,385.6079**

2.1 Overall Construction

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					
2017	0.1035	2.5778	4.1107	7.7400e-003	7.4128	0.0976	7.5103	4.0274	0.1023	4.1296	0.0000	712.5378	712.5378	0.2127	0.0000	717.0048
2018	0.3063	7.1771	10.8766	0.0200	7.4463	0.2735	7.7197	4.0363	0.2835	4.3198	0.0000	1,811.3071	1,811.3071	0.5514	0.0000	1,822.8854
2019	0.2588	5.9547	8.8564	0.0159	7.6649	0.2301	7.8950	4.1183	0.2373	4.3555	0.0000	1,414.0365	1,414.0365	0.4372	0.0000	1,423.2173
2020	2.1812	1.8738	6.3269	0.0138	0.8191	0.0513	0.8704	0.2433	0.0500	0.2933	0.0000	1,056.1531	1,056.1531	0.1166	0.0000	1,058.6021
2021	2.9927	1.4346	6.1754	0.0144	0.6627	0.0349	0.6977	0.1781	0.0336	0.2117	0.0000	1,077.4920	1,077.4920	0.0976	0.0000	1,079.5422
2022	2.9686	1.3261	5.9741	0.0143	0.6602	0.0346	0.6948	0.1774	0.0333	0.2107	0.0000	1,065.8167	1,065.8167	0.0959	0.0000	1,067.8300
2023	2.9541	1.2304	5.8081	0.0143	0.6602	0.0344	0.6945	0.1774	0.0330	0.2105	0.0000	1,058.6920	1,058.6920	0.0944	0.0000	1,060.6735
2024	2.9638	1.2225	5.6843	0.0144	0.6653	0.0347	0.7000	0.1788	0.0334	0.2121	0.0000	1,060.9993	1,060.9993	0.0939	0.0000	1,062.9716
2025	0.2594	0.1061	0.4894	1.2700e-003	0.0584	3.0500e-003	0.0615	0.0157	2.9400e-003	0.0186	0.0000	92.7031	92.7031	8.1600e-003	0.0000	92.8745
Total	**14.9885**	**22.9031**	**54.3020**	**0.1161**	**26.0498**	**0.7941**	**26.8438**	**13.1527**	**0.8092**	**13.9619**	**0.0000**	**9,349.7375**	**9,349.7375**	**1.7078**	**0.0000**	**9,385.6012**

	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	**21.10**	**59.55**	**4.90**	**0.00**	**0.00**	**68.16**	**5.96**	**0.00**	**64.97**	**9.71**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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	56.6834	0.7312	66.1022	0.0239		8.5025	8.5025		8.5023	8.5023	805.7070	347.3623	1,153.0693	0.7528	0.0634	1,188.5235
Energy	0.0987	0.8439	0.3621	5.3800e-003		0.0682	0.0682		0.0682	0.0682	0.0000	2,720.3154	2,720.3154	0.0889	0.0324	2,732.2350
Mobile	4.5210	11.2716	51.0090	0.1502	10.4080	0.1700	10.5780	2.7836	0.1569	2.9405	0.0000	10,425.2331	10,425.2331	0.3963	0.0000	10,433.5555
Waste						0.0000	0.0000		0.0000	0.0000	150.4508	0.0000	150.4508	8.8914	0.0000	337.1700
Water						0.0000	0.0000		0.0000	0.0000	16.1938	350.0468	366.2406	1.6774	0.0422	414.5432
Total	**61.3031**	**12.8468**	**117.4733**	**0.1794**	**10.4080**	**8.7407**	**19.1488**	**2.7836**	**8.7273**	**11.5110**	**972.3516**	**13,842.9577**	**14,815.3093**	**11.8067**	**0.1380**	**15,106.0271**

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	56.6834	0.7312	66.1022	0.0239		8.5025	8.5025		8.5023	8.5023	805.7070	347.3623	1,153.0693	0.7528	0.0634	1,188.5235
Energy	0.0987	0.8439	0.3621	5.3800e-003		0.0682	0.0682		0.0682	0.0682	0.0000	2,720.3154	2,720.3154	0.0889	0.0324	2,732.2350
Mobile	4.5210	11.2716	51.0090	0.1502	10.4080	0.1700	10.5780	2.7836	0.1569	2.9405	0.0000	10,425.2331	10,425.2331	0.3963	0.0000	10,433.5555
Waste						0.0000	0.0000		0.0000	0.0000	150.4508	0.0000	150.4508	8.8914	0.0000	337.1700
Water						0.0000	0.0000		0.0000	0.0000	16.1938	350.0468	366.2406	1.6770	0.0421	414.5174
Total	**61.3031**	**12.8468**	**117.4733**	**0.1794**	**10.4080**	**8.7407**	**19.1488**	**2.7836**	**8.7273**	**11.5110**	**972.3516**	**13,842.9577**	**14,815.3093**	**11.8064**	**0.1379**	**15,106.0013**

	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**	**0.04**	**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	Demolition	Demolition	8/1/2017	8/15/2017	5	11	
2	Mass Grading	Grading	8/16/2017	9/30/2019	5	554	
3	Trenching	Trenching	10/1/2019	11/28/2019	5	43	
4	Fine Grading	Grading	11/29/2019	1/30/2020	5	45	
5	Building Construction	Building Construction	2/3/2020	1/31/2025	5	1305	
6	Paving	Paving	2/3/2020	4/7/2020	5	47	
7	Architectural Coating	Architectural Coating	4/23/2020	1/31/2025	5	1247	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 2,444,580; Residential Outdoor: 814,860; Non-Residential Indoor: 291,388; Non-Residential Outdoor: 97,129 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Mass Grading	Bore/Drill Rigs	2	7.00	205	0.50
Mass Grading	Graders	2	7.00	174	0.41
Mass Grading	Off-Highway Trucks	2	7.00	400	0.38
Mass Grading	Rubber Tired Dozers	5	7.00	255	0.40
Mass Grading	Scrapers	4	7.00	361	0.48
Mass Grading	Tractors/Loaders/Backhoes	4	5.00	97	0.37
Trenching	Excavators	2	8.00	162	0.38
Trenching	Other General Industrial Equipment	1	8.00	87	0.34
Trenching	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Fine Grading	Graders	2	6.00	174	0.41
Fine Grading	Off-Highway Trucks	2	8.00	400	0.38
Fine Grading	Rubber Tired Dozers	1	8.00	255	0.40
Fine Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	7.00	226	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
Paving	Pavers	1	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
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
Demolition	6	15.00	0.00	4.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Mass Grading	19	53.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Fine Grading	6	28.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	450.00	115.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	90.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

3.2 Demolition - 2017

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					4.5000e-004	0.0000	4.5000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0223	0.2348	0.1864	2.2000e-004		0.0117	0.0117		0.0109	0.0109	0.0000	20.1400	20.1400	5.5200e-003	0.0000	20.2560
Total	**0.0223**	**0.2348**	**0.1864**	**2.2000e-004**	**4.5000e-004**	**0.0117**	**0.0121**	**7.0000e-005**	**0.0109**	**0.0110**	**0.0000**	**20.1400**	**20.1400**	**5.5200e-003**	**0.0000**	**20.2560**

3.2 Demolition - 2017

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	4.0000e-005	5.2000e-004	4.6000e-004	0.0000	3.0000e-005	1.0000e-005	4.0000e-005	1.0000e-005	1.0000e-005	2.0000e-005	0.0000	0.1343	0.1343	0.0000	0.0000	0.1343
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e-004	3.4000e-004	3.2100e-003	1.0000e-005	6.6000e-004	0.0000	6.7000e-004	1.8000e-004	0.0000	1.8000e-004	0.0000	0.5927	0.5927	3.0000e-005	0.0000	0.5933
Total	**3.0000e-004**	**8.6000e-004**	**3.6700e-003**	**1.0000e-005**	**6.9000e-004**	**1.0000e-005**	**7.1000e-004**	**1.9000e-004**	**1.0000e-005**	**2.0000e-004**	**0.0000**	**0.7270**	**0.7270**	**3.0000e-005**	**0.0000**	**0.7276**

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					4.5000e-004	0.0000	4.5000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1500e-003	0.0834	0.1468	2.2000e-004		3.8500e-003	3.8500e-003		4.0500e-003	4.0500e-003	0.0000	20.1400	20.1400	5.5200e-003	0.0000	20.2560
Total	**2.1500e-003**	**0.0834**	**0.1468**	**2.2000e-004**	**4.5000e-004**	**3.8500e-003**	**4.3000e-003**	**7.0000e-005**	**4.0500e-003**	**4.1200e-003**	**0.0000**	**20.1400**	**20.1400**	**5.5200e-003**	**0.0000**	**20.2560**

3.2 Demolition - 2017

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	4.0000e-005	5.2000e-004	4.6000e-004	0.0000	3.0000e-005	1.0000e-005	4.0000e-005	1.0000e-005	1.0000e-005	2.0000e-005	0.0000	0.1343	0.1343	0.0000	0.0000	0.1343
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e-004	3.4000e-004	3.2100e-003	1.0000e-005	6.6000e-004	0.0000	6.7000e-004	1.8000e-004	0.0000	1.8000e-004	0.0000	0.5927	0.5927	3.0000e-005	0.0000	0.5933
Total	**3.0000e-004**	**8.6000e-004**	**3.6700e-003**	**1.0000e-005**	**6.9000e-004**	**1.0000e-005**	**7.1000e-004**	**1.9000e-004**	**1.0000e-005**	**2.0000e-004**	**0.0000**	**0.7270**	**0.7270**	**3.0000e-005**	**0.0000**	**0.7276**

3.3 Mass Grading - 2017

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					7.3908	0.0000	7.3908	4.0216	0.0000	4.0216	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.7001	8.0606	5.1607	7.2500e-003		0.3607	0.3607		0.3319	0.3319	0.0000	673.0138	673.0138	0.2062	0.0000	677.3442
Total	**0.7001**	**8.0606**	**5.1607**	**7.2500e-003**	**7.3908**	**0.3607**	**7.7515**	**4.0216**	**0.3319**	**4.3535**	**0.0000**	**673.0138**	**673.0138**	**0.2062**	**0.0000**	**677.3442**

3.3 Mass Grading - 2017

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	8.0700e-003	0.0107	0.1011	2.6000e-004	0.0208	1.6000e-004	0.0210	5.5300e-003	1.4000e-004	5.6800e-003	0.0000	18.6578	18.6578	9.5000e-004	0.0000	18.6777
Total	**8.0700e-003**	**0.0107**	**0.1011**	**2.6000e-004**	**0.0208**	**1.6000e-004**	**0.0210**	**5.5300e-003**	**1.4000e-004**	**5.6800e-003**	**0.0000**	**18.6578**	**18.6578**	**9.5000e-004**	**0.0000**	**18.6777**

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					7.3908	0.0000	7.3908	4.0216	0.0000	4.0216	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0930	2.4828	3.8591	7.2500e-003		0.0936	0.0936		0.0980	0.0980	0.0000	673.0130	673.0130	0.2062	0.0000	677.3434
Total	**0.0930**	**2.4828**	**3.8591**	**7.2500e-003**	**7.3908**	**0.0936**	**7.4844**	**4.0216**	**0.0980**	**4.1196**	**0.0000**	**673.0130**	**673.0130**	**0.2062**	**0.0000**	**677.3434**

3.3 Mass Grading - 2017

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	8.0700e-003	0.0107	0.1011	2.6000e-004	0.0208	1.6000e-004	0.0210	5.5300e-003	1.4000e-004	5.6800e-003	0.0000	18.6578	18.6578	9.5000e-004	0.0000	18.6777
Total	**8.0700e-003**	**0.0107**	**0.1011**	**2.6000e-004**	**0.0208**	**1.6000e-004**	**0.0210**	**5.5300e-003**	**1.4000e-004**	**5.6800e-003**	**0.0000**	**18.6578**	**18.6578**	**9.5000e-004**	**0.0000**	**18.6777**

3.3 Mass Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					7.3908	0.0000	7.3908	4.0216	0.0000	4.0216	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.6460	18.5905	12.2910	0.0193		0.8213	0.8213		0.7556	0.7556	0.0000	1,763.4845	1,763.4845	0.5490	0.0000	1,775.0135
Total	**1.6460**	**18.5905**	**12.2910**	**0.0193**	**7.3908**	**0.8213**	**8.2121**	**4.0216**	**0.7556**	**4.7772**	**0.0000**	**1,763.4845**	**1,763.4845**	**0.5490**	**0.0000**	**1,775.0135**

3.3 Mass Grading - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0195	0.0260	0.2436	6.8000e-004	0.0555	4.1000e-004	0.0559	0.0147	3.8000e-004	0.0151	0.0000	47.8247	47.8247	2.3500e-003	0.0000	47.8740
Total	**0.0195**	**0.0260**	**0.2436**	**6.8000e-004**	**0.0555**	**4.1000e-004**	**0.0559**	**0.0147**	**3.8000e-004**	**0.0151**	**0.0000**	**47.8247**	**47.8247**	**2.3500e-003**	**0.0000**	**47.8740**

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					7.3908	0.0000	7.3908	4.0216	0.0000	4.0216	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2868	7.1511	10.6331	0.0193		0.2731	0.2731		0.2831	0.2831	0.0000	1,763.4824	1,763.4824	0.5490	0.0000	1,775.0113
Total	**0.2868**	**7.1511**	**10.6331**	**0.0193**	**7.3908**	**0.2731**	**7.6639**	**4.0216**	**0.2831**	**4.3047**	**0.0000**	**1,763.4824**	**1,763.4824**	**0.5490**	**0.0000**	**1,775.0113**

3.3 Mass Grading - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0195	0.0260	0.2436	6.8000e-004	0.0555	4.1000e-004	0.0559	0.0147	3.8000e-004	0.0151	0.0000	47.8247	47.8247	2.3500e-003	0.0000	47.8740
Total	**0.0195**	**0.0260**	**0.2436**	**6.8000e-004**	**0.0555**	**4.1000e-004**	**0.0559**	**0.0147**	**3.8000e-004**	**0.0151**	**0.0000**	**47.8247**	**47.8247**	**2.3500e-003**	**0.0000**	**47.8740**

3.3 Mass Grading - 2019

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					7.3908	0.0000	7.3908	4.0216	0.0000	4.0216	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.1488	12.7147	8.6975	0.0144		0.5581	0.5581		0.5135	0.5135	0.0000	1,295.9000	1,295.9000	0.4100	0.0000	1,304.5101
Total	**1.1488**	**12.7147**	**8.6975**	**0.0144**	**7.3908**	**0.5581**	**7.9489**	**4.0216**	**0.5135**	**4.5351**	**0.0000**	**1,295.9000**	**1,295.9000**	**0.4100**	**0.0000**	**1,304.5101**

3.3 Mass Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0135	0.0179	0.1674	5.1000e-004	0.0414	3.0000e-004	0.0417	0.0110	2.8000e-004	0.0113	0.0000	34.4385	34.4385	1.6500e-003	0.0000	34.4731
Total	**0.0135**	**0.0179**	**0.1674**	**5.1000e-004**	**0.0414**	**3.0000e-004**	**0.0417**	**0.0110**	**2.8000e-004**	**0.0113**	**0.0000**	**34.4385**	**34.4385**	**1.6500e-003**	**0.0000**	**34.4731**

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					7.3908	0.0000	7.3908	4.0216	0.0000	4.0216	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2279	5.5572	8.0660	0.0144		0.2129	0.2129		0.2197	0.2197	0.0000	1,295.8984	1,295.8984	0.4100	0.0000	1,304.5086
Total	**0.2279**	**5.5572**	**8.0660**	**0.0144**	**7.3908**	**0.2129**	**7.6038**	**4.0216**	**0.2197**	**4.2413**	**0.0000**	**1,295.8984**	**1,295.8984**	**0.4100**	**0.0000**	**1,304.5086**

3.3 Mass Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0135	0.0179	0.1674	5.1000e-004	0.0414	3.0000e-004	0.0417	0.0110	2.8000e-004	0.0113	0.0000	34.4385	34.4385	1.6500e-003	0.0000	34.4731
Total	**0.0135**	**0.0179**	**0.1674**	**5.1000e-004**	**0.0414**	**3.0000e-004**	**0.0417**	**0.0110**	**2.8000e-004**	**0.0113**	**0.0000**	**34.4385**	**34.4385**	**1.6500e-003**	**0.0000**	**34.4731**

3.4 Trenching - 2019

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	0.0221	0.2189	0.2362	3.5000e-004		0.0129	0.0129		0.0119	0.0119	0.0000	31.3305	31.3305	9.9100e-003	0.0000	31.5386
Total	**0.0221**	**0.2189**	**0.2362**	**3.5000e-004**		**0.0129**	**0.0129**		**0.0119**	**0.0119**	**0.0000**	**31.3305**	**31.3305**	**9.9100e-003**	**0.0000**	**31.5386**

3.4 Trenching - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.6000e-004	7.5000e-004	6.9600e-003	2.0000e-005	1.7200e-003	1.0000e-005	1.7400e-003	4.6000e-004	1.0000e-005	4.7000e-004	0.0000	1.4329	1.4329	7.0000e-005	0.0000	1.4343
Total	**5.6000e-004**	**7.5000e-004**	**6.9600e-003**	**2.0000e-005**	**1.7200e-003**	**1.0000e-005**	**1.7400e-003**	**4.6000e-004**	**1.0000e-005**	**4.7000e-004**	**0.0000**	**1.4329**	**1.4329**	**7.0000e-005**	**0.0000**	**1.4343**

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	3.0500e-003	0.1346	0.2877	3.5000e-004		7.1100e-003	7.1100e-003		7.4800e-003	7.4800e-003	0.0000	31.3304	31.3304	9.9100e-003	0.0000	31.5386
Total	**3.0500e-003**	**0.1346**	**0.2877**	**3.5000e-004**		**7.1100e-003**	**7.1100e-003**		**7.4800e-003**	**7.4800e-003**	**0.0000**	**31.3304**	**31.3304**	**9.9100e-003**	**0.0000**	**31.5386**

3.4 Trenching - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.6000e-004	7.5000e-004	6.9600e-003	2.0000e-005	1.7200e-003	1.0000e-005	1.7400e-003	4.6000e-004	1.0000e-005	4.7000e-004	0.0000	1.4329	1.4329	7.0000e-005	0.0000	1.4343
Total	**5.6000e-004**	**7.5000e-004**	**6.9600e-003**	**2.0000e-005**	**1.7200e-003**	**1.0000e-005**	**1.7400e-003**	**4.6000e-004**	**1.0000e-005**	**4.7000e-004**	**0.0000**	**1.4329**	**1.4329**	**7.0000e-005**	**0.0000**	**1.4343**

3.5 Fine Grading - 2019

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					0.2283	0.0000	0.2283	0.0845	0.0000	0.0845	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0436	0.4457	0.2921	5.4000e-004		0.0207	0.0207		0.0191	0.0191	0.0000	48.7905	48.7905	0.0154	0.0000	49.1146
Total	**0.0436**	**0.4457**	**0.2921**	**5.4000e-004**	**0.2283**	**0.0207**	**0.2490**	**0.0845**	**0.0191**	**0.1036**	**0.0000**	**48.7905**	**48.7905**	**0.0154**	**0.0000**	**49.1146**

3.5 Fine Grading - 2019

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	8.4000e-004	1.1200e-003	0.0104	3.0000e-005	2.5800e-003	2.0000e-005	2.6000e-003	6.9000e-004	2.0000e-005	7.0000e-004	0.0000	2.1460	2.1460	1.0000e-004	0.0000	2.1481
Total	**8.4000e-004**	**1.1200e-003**	**0.0104**	**3.0000e-005**	**2.5800e-003**	**2.0000e-005**	**2.6000e-003**	**6.9000e-004**	**2.0000e-005**	**7.0000e-004**	**0.0000**	**2.1460**	**2.1460**	**1.0000e-004**	**0.0000**	**2.1481**

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					0.2283	0.0000	0.2283	0.0845	0.0000	0.0845	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0129	0.2431	0.3180	5.4000e-004		9.7300e-003	9.7300e-003		9.7300e-003	9.7300e-003	0.0000	48.7904	48.7904	0.0154	0.0000	49.1146
Total	**0.0129**	**0.2431**	**0.3180**	**5.4000e-004**	**0.2283**	**9.7300e-003**	**0.2380**	**0.0845**	**9.7300e-003**	**0.0942**	**0.0000**	**48.7904**	**48.7904**	**0.0154**	**0.0000**	**49.1146**

3.5 Fine Grading - 2019

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	8.4000e-004	1.1200e-003	0.0104	3.0000e-005	2.5800e-003	2.0000e-005	2.6000e-003	6.9000e-004	2.0000e-005	7.0000e-004	0.0000	2.1460	2.1460	1.0000e-004	0.0000	2.1481
Total	**8.4000e-004**	**1.1200e-003**	**0.0104**	**3.0000e-005**	**2.5800e-003**	**2.0000e-005**	**2.6000e-003**	**6.9000e-004**	**2.0000e-005**	**7.0000e-004**	**0.0000**	**2.1460**	**2.1460**	**1.0000e-004**	**0.0000**	**2.1481**

3.5 Fine Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2283	0.0000	0.2283	0.0845	0.0000	0.0845	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0389	0.3851	0.2678	5.2000e-004		0.0179	0.0179		0.0164	0.0164	0.0000	45.6340	45.6340	0.0148	0.0000	45.9439
Total	**0.0389**	**0.3851**	**0.2678**	**5.2000e-004**	**0.2283**	**0.0179**	**0.2462**	**0.0845**	**0.0164**	**0.1009**	**0.0000**	**45.6340**	**45.6340**	**0.0148**	**0.0000**	**45.9439**

3.5 Fine Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.6000e-004	1.0000e-003	9.3200e-003	3.0000e-005	2.4700e-003	2.0000e-005	2.4900e-003	6.6000e-004	2.0000e-005	6.7000e-004	0.0000	1.9699	1.9699	9.0000e-005	0.0000	1.9719
Total	**7.6000e-004**	**1.0000e-003**	**9.3200e-003**	**3.0000e-005**	**2.4700e-003**	**2.0000e-005**	**2.4900e-003**	**6.6000e-004**	**2.0000e-005**	**6.7000e-004**	**0.0000**	**1.9699**	**1.9699**	**9.0000e-005**	**0.0000**	**1.9719**

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					0.2283	0.0000	0.2283	0.0845	0.0000	0.0845	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0123	0.2325	0.3042	5.2000e-004		9.3100e-003	9.3100e-003		9.3100e-003	9.3100e-003	0.0000	45.6339	45.6339	0.0148	0.0000	45.9438
Total	**0.0123**	**0.2325**	**0.3042**	**5.2000e-004**	**0.2283**	**9.3100e-003**	**0.2376**	**0.0845**	**9.3100e-003**	**0.0938**	**0.0000**	**45.6339**	**45.6339**	**0.0148**	**0.0000**	**45.9438**

3.5 Fine Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.6000e-004	1.0000e-003	9.3200e-003	3.0000e-005	2.4700e-003	2.0000e-005	2.4900e-003	6.6000e-004	2.0000e-005	6.7000e-004	0.0000	1.9699	1.9699	9.0000e-005	0.0000	1.9719
Total	**7.6000e-004**	**1.0000e-003**	**9.3200e-003**	**3.0000e-005**	**2.4700e-003**	**2.0000e-005**	**2.4900e-003**	**6.6000e-004**	**2.0000e-005**	**6.7000e-004**	**0.0000**	**1.9699**	**1.9699**	**9.0000e-005**	**0.0000**	**1.9719**

3.6 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2523	2.2805	2.0086	3.2000e-003		0.1330	0.1330		0.1251	0.1251	0.0000	275.6266	275.6266	0.0672	0.0000	277.0368
Total	**0.2523**	**2.2805**	**2.0086**	**3.2000e-003**		**0.1330**	**0.1330**		**0.1251**	**0.1251**	**0.0000**	**275.6266**	**275.6266**	**0.0672**	**0.0000**	**277.0368**

3.6 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1186	0.8398	1.5660	3.2400e-003	0.0894	0.0133	0.1027	0.0256	0.0122	0.0378	0.0000	275.0968	275.0968	2.0400e-003	0.0000	275.1395
Worker	0.1333	0.1744	1.6279	5.3000e-003	0.4312	3.1300e-003	0.4344	0.1146	2.9100e-003	0.1175	0.0000	343.9386	343.9386	0.0163	0.0000	344.2818
Total	**0.2518**	**1.0142**	**3.1938**	**8.5400e-003**	**0.5206**	**0.0164**	**0.5370**	**0.1402**	**0.0151**	**0.1553**	**0.0000**	**619.0354**	**619.0354**	**0.0184**	**0.0000**	**619.4213**

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	0.0390	0.2664	2.0806	3.2000e-003		4.8500e-003	4.8500e-003		4.8500e-003	4.8500e-003	0.0000	275.6263	275.6263	0.0672	0.0000	277.0365
Total	**0.0390**	**0.2664**	**2.0806**	**3.2000e-003**		**4.8500e-003**	**4.8500e-003**		**4.8500e-003**	**4.8500e-003**	**0.0000**	**275.6263**	**275.6263**	**0.0672**	**0.0000**	**277.0365**

3.6 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1186	0.8398	1.5660	3.2400e-003	0.0894	0.0133	0.1027	0.0256	0.0122	0.0378	0.0000	275.0968	275.0968	2.0400e-003	0.0000	275.1395
Worker	0.1333	0.1744	1.6279	5.3000e-003	0.4312	3.1300e-003	0.4344	0.1146	2.9100e-003	0.1175	0.0000	343.9386	343.9386	0.0163	0.0000	344.2818
Total	**0.2518**	**1.0142**	**3.1938**	**8.5400e-003**	**0.5206**	**0.0164**	**0.5370**	**0.1402**	**0.0151**	**0.1553**	**0.0000**	**619.0354**	**619.0354**	**0.0184**	**0.0000**	**619.4213**

3.6 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	0.2471	2.2629	2.1582	3.5000e-003		0.1246	0.1246		0.1172	0.1172	0.0000	301.0339	301.0339	0.0725	0.0000	302.5568
Total	**0.2471**	**2.2629**	**2.1582**	**3.5000e-003**		**0.1246**	**0.1246**		**0.1172**	**0.1172**	**0.0000**	**301.0339**	**301.0339**	**0.0725**	**0.0000**	**302.5568**

3.6 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	0.1219	0.7520	1.6418	3.5400e-003	0.0976	0.0131	0.1107	0.0279	0.0120	0.0399	0.0000	299.9401	299.9401	2.2100e-003	0.0000	299.9866
Worker	0.1386	0.1788	1.6853	5.8000e-003	0.4709	3.4800e-003	0.4744	0.1251	3.2200e-003	0.1284	0.0000	369.3321	369.3321	0.0172	0.0000	369.6927
Total	**0.2604**	**0.9308**	**3.3271**	**9.3400e-003**	**0.5685**	**0.0165**	**0.5851**	**0.1531**	**0.0152**	**0.1683**	**0.0000**	**669.2721**	**669.2721**	**0.0194**	**0.0000**	**669.6793**

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	0.0426	0.2909	2.2721	3.5000e-003		5.3000e-003	5.3000e-003		5.3000e-003	5.3000e-003	0.0000	301.0335	301.0335	0.0725	0.0000	302.5565
Total	**0.0426**	**0.2909**	**2.2721**	**3.5000e-003**		**5.3000e-003**	**5.3000e-003**		**5.3000e-003**	**5.3000e-003**	**0.0000**	**301.0335**	**301.0335**	**0.0725**	**0.0000**	**302.5565**

3.6 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	0.1219	0.7520	1.6418	3.5400e-003	0.0976	0.0131	0.1107	0.0279	0.0120	0.0399	0.0000	299.9401	299.9401	2.2100e-003	0.0000	299.9866
Worker	0.1386	0.1788	1.6853	5.8000e-003	0.4709	3.4800e-003	0.4744	0.1251	3.2200e-003	0.1284	0.0000	369.3321	369.3321	0.0172	0.0000	369.6927
Total	**0.2604**	**0.9308**	**3.3271**	**9.3400e-003**	**0.5685**	**0.0165**	**0.5851**	**0.1531**	**0.0152**	**0.1683**	**0.0000**	**669.2721**	**669.2721**	**0.0194**	**0.0000**	**669.6793**

3.6 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	0.2209	2.0197	2.1226	3.4900e-003		0.1047	0.1047		0.0986	0.0986	0.0000	299.9946	299.9946	0.0718	0.0000	301.5017
Total	**0.2209**	**2.0197**	**2.1226**	**3.4900e-003**		**0.1047**	**0.1047**		**0.0986**	**0.0986**	**0.0000**	**299.9946**	**299.9946**	**0.0718**	**0.0000**	**301.5017**

3.6 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	0.1166	0.6580	1.5713	3.5200e-003	0.0972	0.0128	0.1100	0.0278	0.0118	0.0396	0.0000	298.4820	298.4820	2.2500e-003	0.0000	298.5293
Worker	0.1315	0.1683	1.5843	5.7800e-003	0.4691	3.4900e-003	0.4726	0.1247	3.2300e-003	0.1279	0.0000	361.7902	361.7902	0.0164	0.0000	362.1348
Total	**0.2481**	**0.8263**	**3.1556**	**9.3000e-003**	**0.5664**	**0.0163**	**0.5826**	**0.1525**	**0.0150**	**0.1675**	**0.0000**	**660.2721**	**660.2721**	**0.0187**	**0.0000**	**660.6640**

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	0.0424	0.2898	2.2634	3.4900e-003		5.2800e-003	5.2800e-003		5.2800e-003	5.2800e-003	0.0000	299.9943	299.9943	0.0718	0.0000	301.5013
Total	**0.0424**	**0.2898**	**2.2634**	**3.4900e-003**		**5.2800e-003**	**5.2800e-003**		**5.2800e-003**	**5.2800e-003**	**0.0000**	**299.9943**	**299.9943**	**0.0718**	**0.0000**	**301.5013**

3.6 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	0.1166	0.6580	1.5713	3.5200e-003	0.0972	0.0128	0.1100	0.0278	0.0118	0.0396	0.0000	298.4820	298.4820	2.2500e-003	0.0000	298.5293
Worker	0.1315	0.1683	1.5843	5.7800e-003	0.4691	3.4900e-003	0.4726	0.1247	3.2300e-003	0.1279	0.0000	361.7902	361.7902	0.0164	0.0000	362.1348
Total	**0.2481**	**0.8263**	**3.1556**	**9.3000e-003**	**0.5664**	**0.0163**	**0.5826**	**0.1525**	**0.0150**	**0.1675**	**0.0000**	**660.2721**	**660.2721**	**0.0187**	**0.0000**	**660.6640**

3.6 Building Construction - 2023

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	0.2036	1.8606	2.1072	3.4900e-003		0.0906	0.0906		0.0852	0.0852	0.0000	300.0980	300.0980	0.0713	0.0000	301.5949
Total	**0.2036**	**1.8606**	**2.1072**	**3.4900e-003**		**0.0906**	**0.0906**		**0.0852**	**0.0852**	**0.0000**	**300.0980**	**300.0980**	**0.0713**	**0.0000**	**301.5949**

3.6 Building Construction - 2023

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	0.1093	0.5727	1.5070	3.5100e-003	0.0972	0.0125	0.1097	0.0278	0.0115	0.0393	0.0000	297.8136	297.8136	2.1100e-003	0.0000	297.8581
Worker	0.1255	0.1596	1.4995	5.7800e-003	0.4691	3.5100e-003	0.4726	0.1247	3.2600e-003	0.1279	0.0000	356.3237	356.3237	0.0158	0.0000	356.6558
Total	**0.2348**	**0.7323**	**3.0065**	**9.2900e-003**	**0.5664**	**0.0160**	**0.5824**	**0.1525**	**0.0148**	**0.1672**	**0.0000**	**654.1374**	**654.1374**	**0.0179**	**0.0000**	**654.5138**

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	0.0424	0.2898	2.2634	3.4900e-003		5.2800e-003	5.2800e-003		5.2800e-003	5.2800e-003	0.0000	300.0976	300.0976	0.0713	0.0000	301.5946
Total	**0.0424**	**0.2898**	**2.2634**	**3.4900e-003**		**5.2800e-003**	**5.2800e-003**		**5.2800e-003**	**5.2800e-003**	**0.0000**	**300.0976**	**300.0976**	**0.0713**	**0.0000**	**301.5946**

3.6 Building Construction - 2023

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	0.1093	0.5727	1.5070	3.5100e-003	0.0972	0.0125	0.1097	0.0278	0.0115	0.0393	0.0000	297.8136	297.8136	2.1100e-003	0.0000	297.8581
Worker	0.1255	0.1596	1.4995	5.7800e-003	0.4691	3.5100e-003	0.4726	0.1247	3.2600e-003	0.1279	0.0000	356.3237	356.3237	0.0158	0.0000	356.6558
Total	**0.2348**	**0.7323**	**3.0065**	**9.2900e-003**	**0.5664**	**0.0160**	**0.5824**	**0.1525**	**0.0148**	**0.1672**	**0.0000**	**654.1374**	**654.1374**	**0.0179**	**0.0000**	**654.5138**

3.6 Building Construction - 2024

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	0.1920	1.7524	2.1135	3.5200e-003		0.0800	0.0800		0.0752	0.0752	0.0000	302.4646	302.4646	0.0714	0.0000	303.9643
Total	**0.1920**	**1.7524**	**2.1135**	**3.5200e-003**		**0.0800**	**0.0800**		**0.0752**	**0.0752**	**0.0000**	**302.4646**	**302.4646**	**0.0714**	**0.0000**	**303.9643**

3.6 Building Construction - 2024

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	0.1037	0.5691	1.4366	3.5300e-003	0.0980	0.0126	0.1106	0.0280	0.0116	0.0397	0.0000	300.0852	300.0852	2.1400e-003	0.0000	300.1301
Worker	0.1210	0.1531	1.4391	5.8200e-003	0.4727	3.5700e-003	0.4763	0.1256	3.3100e-003	0.1289	0.0000	354.1686	354.1686	0.0154	0.0000	354.4920
Total	**0.2247**	**0.7222**	**2.8756**	**9.3500e-003**	**0.5707**	**0.0162**	**0.5869**	**0.1537**	**0.0149**	**0.1686**	**0.0000**	**654.2537**	**654.2537**	**0.0175**	**0.0000**	**654.6221**

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	0.0428	0.2920	2.2808	3.5200e-003		5.3200e-003	5.3200e-003		5.3200e-003	5.3200e-003	0.0000	302.4642	302.4642	0.0714	0.0000	303.9639
Total	**0.0428**	**0.2920**	**2.2808**	**3.5200e-003**		**5.3200e-003**	**5.3200e-003**		**5.3200e-003**	**5.3200e-003**	**0.0000**	**302.4642**	**302.4642**	**0.0714**	**0.0000**	**303.9639**

3.6 Building Construction - 2024

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	0.1037	0.5691	1.4366	3.5300e-003	0.0980	0.0126	0.1106	0.0280	0.0116	0.0397	0.0000	300.0852	300.0852	2.1400e-003	0.0000	300.1301
Worker	0.1210	0.1531	1.4391	5.8200e-003	0.4727	3.5700e-003	0.4763	0.1256	3.3100e-003	0.1289	0.0000	354.1686	354.1686	0.0154	0.0000	354.4920
Total	**0.2247**	**0.7222**	**2.8756**	**9.3500e-003**	**0.5707**	**0.0162**	**0.5869**	**0.1537**	**0.0149**	**0.1686**	**0.0000**	**654.2537**	**654.2537**	**0.0175**	**0.0000**	**654.6221**

3.6 Building Construction - 2025

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	0.0157	0.1427	0.1846	3.1000e-004		6.0400e-003	6.0400e-003		5.6800e-003	5.6800e-003	0.0000	26.5603	26.5603	6.2300e-003	0.0000	26.6912
Total	**0.0157**	**0.1427**	**0.1846**	**3.1000e-004**		**6.0400e-003**	**6.0400e-003**		**5.6800e-003**	**5.6800e-003**	**0.0000**	**26.5603**	**26.5603**	**6.2300e-003**	**0.0000**	**26.6912**

3.6 Building Construction - 2025

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	8.8500e-003	0.0494	0.1228	3.1000e-004	8.6000e-003	1.1100e-003	9.7200e-003	2.4600e-003	1.0200e-003	3.4800e-003	0.0000	26.3456	26.3456	1.9000e-004	0.0000	26.3495
Worker	0.0102	0.0129	0.1211	5.1000e-004	0.0415	3.2000e-004	0.0418	0.0110	2.9000e-004	0.0113	0.0000	30.7175	30.7175	1.3100e-003	0.0000	30.7451
Total	**0.0191**	**0.0623**	**0.2439**	**8.2000e-004**	**0.0501**	**1.4300e-003**	**0.0515**	**0.0135**	**1.3100e-003**	**0.0148**	**0.0000**	**57.0631**	**57.0631**	**1.5000e-003**	**0.0000**	**57.0946**

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	3.7500e-003	0.0256	0.2002	3.1000e-004		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	26.5603	26.5603	6.2300e-003	0.0000	26.6912
Total	**3.7500e-003**	**0.0256**	**0.2002**	**3.1000e-004**		**4.7000e-004**	**4.7000e-004**		**4.7000e-004**	**4.7000e-004**	**0.0000**	**26.5603**	**26.5603**	**6.2300e-003**	**0.0000**	**26.6912**

3.6 Building Construction - 2025

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	8.8500e-003	0.0494	0.1228	3.1000e-004	8.6000e-003	1.1100e-003	9.7200e-003	2.4600e-003	1.0200e-003	3.4800e-003	0.0000	26.3456	26.3456	1.9000e-004	0.0000	26.3495
Worker	0.0102	0.0129	0.1211	5.1000e-004	0.0415	3.2000e-004	0.0418	0.0110	2.9000e-004	0.0113	0.0000	30.7175	30.7175	1.3100e-003	0.0000	30.7451
Total	**0.0191**	**0.0623**	**0.2439**	**8.2000e-004**	**0.0501**	**1.4300e-003**	**0.0515**	**0.0135**	**1.3100e-003**	**0.0148**	**0.0000**	**57.0631**	**57.0631**	**1.5000e-003**	**0.0000**	**57.0946**

3.7 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0253	0.2604	0.2718	4.2000e-004		0.0143	0.0143		0.0131	0.0131	0.0000	36.7323	36.7323	0.0119	0.0000	36.9818
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0253**	**0.2604**	**0.2718**	**4.2000e-004**		**0.0143**	**0.0143**		**0.0131**	**0.0131**	**0.0000**	**36.7323**	**36.7323**	**0.0119**	**0.0000**	**36.9818**

3.7 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.6000e-004	9.9000e-004	9.2500e-003	3.0000e-005	2.4500e-003	2.0000e-005	2.4700e-003	6.5000e-004	2.0000e-005	6.7000e-004	0.0000	1.9539	1.9539	9.0000e-005	0.0000	1.9559
Total	**7.6000e-004**	**9.9000e-004**	**9.2500e-003**	**3.0000e-005**	**2.4500e-003**	**2.0000e-005**	**2.4700e-003**	**6.5000e-004**	**2.0000e-005**	**6.7000e-004**	**0.0000**	**1.9539**	**1.9539**	**9.0000e-005**	**0.0000**	**1.9559**

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	0.0103	0.2095	0.3173	4.2000e-004		0.0116	0.0116		0.0116	0.0116	0.0000	36.7322	36.7322	0.0119	0.0000	36.9817
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0103**	**0.2095**	**0.3173**	**4.2000e-004**		**0.0116**	**0.0116**		**0.0116**	**0.0116**	**0.0000**	**36.7322**	**36.7322**	**0.0119**	**0.0000**	**36.9817**

3.7 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.6000e-004	9.9000e-004	9.2500e-003	3.0000e-005	2.4500e-003	2.0000e-005	2.4700e-003	6.5000e-004	2.0000e-005	6.7000e-004	0.0000	1.9539	1.9539	9.0000e-005	0.0000	1.9559
Total	**7.6000e-004**	**9.9000e-004**	**9.2500e-003**	**3.0000e-005**	**2.4500e-003**	**2.0000e-005**	**2.4700e-003**	**6.5000e-004**	**2.0000e-005**	**6.7000e-004**	**0.0000**	**1.9539**	**1.9539**	**9.0000e-005**	**0.0000**	**1.9559**

3.8 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.8407					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0219	0.1524	0.1657	2.7000e-004		0.0100	0.0100		0.0100	0.0100	0.0000	23.1070	23.1070	1.7900e-003	0.0000	23.1445
Total	**1.8626**	**0.1524**	**0.1657**	**2.7000e-004**		**0.0100**	**0.0100**		**0.0100**	**0.0100**	**0.0000**	**23.1070**	**23.1070**	**1.7900e-003**	**0.0000**	**23.1445**

3.8 Architectural Coating - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0202	0.0264	0.2466	8.0000e-004	0.0653	4.7000e-004	0.0658	0.0174	4.4000e-004	0.0178	0.0000	52.0945	52.0945	2.4800e-003	0.0000	52.1464
Total	**0.0202**	**0.0264**	**0.2466**	**8.0000e-004**	**0.0653**	**4.7000e-004**	**0.0658**	**0.0174**	**4.4000e-004**	**0.0178**	**0.0000**	**52.0945**	**52.0945**	**2.4800e-003**	**0.0000**	**52.1464**

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	1.8407					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.3800e-003	0.1228	0.1658	2.7000e-004		8.6100e-003	8.6100e-003		8.6100e-003	8.6100e-003	0.0000	23.1069	23.1069	1.7900e-003	0.0000	23.1445
Total	**1.8460**	**0.1228**	**0.1658**	**2.7000e-004**		**8.6100e-003**	**8.6100e-003**		**8.6100e-003**	**8.6100e-003**	**0.0000**	**23.1069**	**23.1069**	**1.7900e-003**	**0.0000**	**23.1445**

3.8 Architectural Coating - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0202	0.0264	0.2466	8.0000e-004	0.0653	4.7000e-004	0.0658	0.0174	4.4000e-004	0.0178	0.0000	52.0945	52.0945	2.4800e-003	0.0000	52.1464
Total	**0.0202**	**0.0264**	**0.2466**	**8.0000e-004**	**0.0653**	**4.7000e-004**	**0.0658**	**0.0174**	**4.4000e-004**	**0.0178**	**0.0000**	**52.0945**	**52.0945**	**2.4800e-003**	**0.0000**	**52.1464**

3.8 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	2.6542					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0286	0.1993	0.2372	3.9000e-004		0.0123	0.0123		0.0123	0.0123	0.0000	33.3200	33.3200	2.2900e-003	0.0000	33.3680
Total	**2.6828**	**0.1993**	**0.2372**	**3.9000e-004**		**0.0123**	**0.0123**		**0.0123**	**0.0123**	**0.0000**	**33.3200**	**33.3200**	**2.2900e-003**	**0.0000**	**33.3680**

3.8 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0277	0.0358	0.3371	1.1600e-003	0.0942	7.0000e-004	0.0949	0.0250	6.4000e-004	0.0257	0.0000	73.8664	73.8664	3.4300e-003	0.0000	73.9385
Total	**0.0277**	**0.0358**	**0.3371**	**1.1600e-003**	**0.0942**	**7.0000e-004**	**0.0949**	**0.0250**	**6.4000e-004**	**0.0257**	**0.0000**	**73.8664**	**73.8664**	**3.4300e-003**	**0.0000**	**73.9385**

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	2.6542					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.7600e-003	0.1771	0.2391	3.9000e-004		0.0124	0.0124		0.0124	0.0124	0.0000	33.3199	33.3199	2.2900e-003	0.0000	33.3679
Total	**2.6620**	**0.1771**	**0.2391**	**3.9000e-004**		**0.0124**	**0.0124**		**0.0124**	**0.0124**	**0.0000**	**33.3199**	**33.3199**	**2.2900e-003**	**0.0000**	**33.3679**

3.8 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0277	0.0358	0.3371	1.1600e-003	0.0942	7.0000e-004	0.0949	0.0250	6.4000e-004	0.0257	0.0000	73.8664	73.8664	3.4300e-003	0.0000	73.9385
Total	**0.0277**	**0.0358**	**0.3371**	**1.1600e-003**	**0.0942**	**7.0000e-004**	**0.0949**	**0.0250**	**6.4000e-004**	**0.0257**	**0.0000**	**73.8664**	**73.8664**	**3.4300e-003**	**0.0000**	**73.9385**

3.8 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	2.6440					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0266	0.1831	0.2358	3.9000e-004		0.0106	0.0106		0.0106	0.0106	0.0000	33.1923	33.1923	2.1600e-003	0.0000	33.2377
Total	**2.6706**	**0.1831**	**0.2358**	**3.9000e-004**		**0.0106**	**0.0106**		**0.0106**	**0.0106**	**0.0000**	**33.1923**	**33.1923**	**2.1600e-003**	**0.0000**	**33.2377**

3.8 Architectural Coating - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0263	0.0337	0.3169	1.1600e-003	0.0938	7.0000e-004	0.0945	0.0249	6.5000e-004	0.0256	0.0000	72.3580	72.3580	3.2800e-003	0.0000	72.4270
Total	**0.0263**	**0.0337**	**0.3169**	**1.1600e-003**	**0.0938**	**7.0000e-004**	**0.0945**	**0.0249**	**6.5000e-004**	**0.0256**	**0.0000**	**72.3580**	**72.3580**	**3.2800e-003**	**0.0000**	**72.4270**

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	2.6440					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.7300e-003	0.1764	0.2382	3.9000e-004		0.0124	0.0124		0.0124	0.0124	0.0000	33.1923	33.1923	2.1600e-003	0.0000	33.2376
Total	**2.6518**	**0.1764**	**0.2382**	**3.9000e-004**		**0.0124**	**0.0124**		**0.0124**	**0.0124**	**0.0000**	**33.1923**	**33.1923**	**2.1600e-003**	**0.0000**	**33.2376**

3.8 Architectural Coating - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0263	0.0337	0.3169	1.1600e-003	0.0938	7.0000e-004	0.0945	0.0249	6.5000e-004	0.0256	0.0000	72.3580	72.3580	3.2800e-003	0.0000	72.4270
Total	**0.0263**	**0.0337**	**0.3169**	**1.1600e-003**	**0.0938**	**7.0000e-004**	**0.0945**	**0.0249**	**6.5000e-004**	**0.0256**	**0.0000**	**72.3580**	**72.3580**	**3.2800e-003**	**0.0000**	**72.4270**

3.8 Architectural Coating - 2023

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	2.6440					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0249	0.1694	0.2355	3.9000e-004		9.2100e-003	9.2100e-003		9.2100e-003	9.2100e-003	0.0000	33.1923	33.1923	1.9900e-003	0.0000	33.2340
Total	**2.6690**	**0.1694**	**0.2355**	**3.9000e-004**		**9.2100e-003**	**9.2100e-003**		**9.2100e-003**	**9.2100e-003**	**0.0000**	**33.1923**	**33.1923**	**1.9900e-003**	**0.0000**	**33.2340**

3.8 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0251	0.0319	0.2999	1.1600e-003	0.0938	7.0000e-004	0.0945	0.0249	6.5000e-004	0.0256	0.0000	71.2648	71.2648	3.1600e-003	0.0000	71.3312
Total	**0.0251**	**0.0319**	**0.2999**	**1.1600e-003**	**0.0938**	**7.0000e-004**	**0.0945**	**0.0249**	**6.5000e-004**	**0.0256**	**0.0000**	**71.2648**	**71.2648**	**3.1600e-003**	**0.0000**	**71.3312**

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	2.6440					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.7300e-003	0.1764	0.2382	3.9000e-004		0.0124	0.0124		0.0124	0.0124	0.0000	33.1923	33.1923	1.9900e-003	0.0000	33.2340
Total	**2.6518**	**0.1764**	**0.2382**	**3.9000e-004**		**0.0124**	**0.0124**		**0.0124**	**0.0124**	**0.0000**	**33.1923**	**33.1923**	**1.9900e-003**	**0.0000**	**33.2340**

3.8 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0251	0.0319	0.2999	1.1600e-003	0.0938	7.0000e-004	0.0945	0.0249	6.5000e-004	0.0256	0.0000	71.2648	71.2648	3.1600e-003	0.0000	71.3312
Total	**0.0251**	**0.0319**	**0.2999**	**1.1600e-003**	**0.0938**	**7.0000e-004**	**0.0945**	**0.0249**	**6.5000e-004**	**0.0256**	**0.0000**	**71.2648**	**71.2648**	**3.1600e-003**	**0.0000**	**71.3312**

3.8 Architectural Coating - 2024

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	2.6644					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0237	0.1597	0.2371	3.9000e-004		7.9800e-003	7.9800e-003		7.9800e-003	7.9800e-003	0.0000	33.4476	33.4476	1.8800e-003	0.0000	33.4872
Total	**2.6881**	**0.1597**	**0.2371**	**3.9000e-004**		**7.9800e-003**	**7.9800e-003**		**7.9800e-003**	**7.9800e-003**	**0.0000**	**33.4476**	**33.4476**	**1.8800e-003**	**0.0000**	**33.4872**

3.8 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0242	0.0306	0.2878	1.1600e-003	0.0946	7.1000e-004	0.0953	0.0251	6.6000e-004	0.0258	0.0000	70.8337	70.8337	3.0800e-003	0.0000	70.8984
Total	**0.0242**	**0.0306**	**0.2878**	**1.1600e-003**	**0.0946**	**7.1000e-004**	**0.0953**	**0.0251**	**6.6000e-004**	**0.0258**	**0.0000**	**70.8337**	**70.8337**	**3.0800e-003**	**0.0000**	**70.8984**

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	2.6644					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.7900e-003	0.1778	0.2401	3.9000e-004		0.0125	0.0125		0.0125	0.0125	0.0000	33.4476	33.4476	1.8800e-003	0.0000	33.4871
Total	**2.6722**	**0.1778**	**0.2401**	**3.9000e-004**		**0.0125**	**0.0125**		**0.0125**	**0.0125**	**0.0000**	**33.4476**	**33.4476**	**1.8800e-003**	**0.0000**	**33.4871**

3.8 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0242	0.0306	0.2878	1.1600e-003	0.0946	7.1000e-004	0.0953	0.0251	6.6000e-004	0.0258	0.0000	70.8337	70.8337	3.0800e-003	0.0000	70.8984
Total	**0.0242**	**0.0306**	**0.2878**	**1.1600e-003**	**0.0946**	**7.1000e-004**	**0.0953**	**0.0251**	**6.6000e-004**	**0.0258**	**0.0000**	**70.8337**	**70.8337**	**3.0800e-003**	**0.0000**	**70.8984**

3.8 Architectural Coating - 2025

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	0.2339					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9600e-003	0.0132	0.0208	3.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.0000	2.9362	2.9362	1.6000e-004	0.0000	2.9396
Total	**0.2359**	**0.0132**	**0.0208**	**3.0000e-005**		**5.9000e-004**	**5.9000e-004**		**5.9000e-004**	**5.9000e-004**	**0.0000**	**2.9362**	**2.9362**	**1.6000e-004**	**0.0000**	**2.9396**

3.8 Architectural Coating - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0400e-003	2.5800e-003	0.0242	1.0000e-004	8.3000e-003	6.0000e-005	8.3600e-003	2.2100e-003	6.0000e-005	2.2600e-003	0.0000	6.1435	6.1435	2.6000e-004	0.0000	6.1490
Total	**2.0400e-003**	**2.5800e-003**	**0.0242**	**1.0000e-004**	**8.3000e-003**	**6.0000e-005**	**8.3600e-003**	**2.2100e-003**	**6.0000e-005**	**2.2600e-003**	**0.0000**	**6.1435**	**6.1435**	**2.6000e-004**	**0.0000**	**6.1490**

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	0.2339					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.8000e-004	0.0156	0.0211	3.0000e-005		1.0900e-003	1.0900e-003		1.0900e-003	1.0900e-003	0.0000	2.9362	2.9362	1.6000e-004	0.0000	2.9396
Total	**0.2346**	**0.0156**	**0.0211**	**3.0000e-005**		**1.0900e-003**	**1.0900e-003**		**1.0900e-003**	**1.0900e-003**	**0.0000**	**2.9362**	**2.9362**	**1.6000e-004**	**0.0000**	**2.9396**

3.8 Architectural Coating - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0400e-003	2.5800e-003	0.0242	1.0000e-004	8.3000e-003	6.0000e-005	8.3600e-003	2.2100e-003	6.0000e-005	2.2600e-003	0.0000	6.1435	6.1435	2.6000e-004	0.0000	6.1490
Total	**2.0400e-003**	**2.5800e-003**	**0.0242**	**1.0000e-004**	**8.3000e-003**	**6.0000e-005**	**8.3600e-003**	**2.2100e-003**	**6.0000e-005**	**2.2600e-003**	**0.0000**	**6.1435**	**6.1435**	**2.6000e-004**	**0.0000**	**6.1490**

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	4.5210	11.2716	51.0090	0.1502	10.4080	0.1700	10.5780	2.7836	0.1569	2.9405	0.0000	10,425.2331	10,425.2331	0.3963	0.0000	10,433.5555
Unmitigated	4.5210	11.2716	51.0090	0.1502	10.4080	0.1700	10.5780	2.7836	0.1569	2.9405	0.0000	10,425.2331	10,425.2331	0.3963	0.0000	10,433.5555

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	211.50	211.50	211.50	521,602	521,602
Condo/Townhouse	1,968.00	1,968.00	1968.00	7,282,900	7,282,900
Single Family Housing	5,340.00	5,340.00	5340.00	19,761,528	19,761,528
User Defined Commercial	50.00	50.00	50.00	113,203	113,203
Total	7,569.50	7,569.50	7,569.50	27,679,233	27,679,233

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
City Park	14.70	6.60	6.60	33.00	48.00	19.00	66	28	6
Condo/Townhouse	16.80	7.10	7.90	41.60	18.80	39.60	86	11	3
Single Family Housing	16.80	7.10	7.90	41.60	18.80	39.60	86	11	3
User Defined Commercial	14.70	6.60	6.60	5.00	90.00	5.00	86	11	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.513300	0.073549	0.191092	0.130830	0.036094	0.005140	0.012550	0.022916	0.001871	0.002062	0.006564	0.000586	0.003446

4.4 Fleet Mix

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	1,743.4609	1,743.4609	0.0702	0.0145	1,749.4355
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,743.4609	1,743.4609	0.0702	0.0145	1,749.4355
NaturalGas Mitigated	0.0987	0.8439	0.3621	5.3800e-003		0.0682	0.0682		0.0682	0.0682	0.0000	976.8545	976.8545	0.0187	0.0179	982.7995
NaturalGas Unmitigated	0.0987	0.8439	0.3621	5.3800e-003		0.0682	0.0682		0.0682	0.0682	0.0000	976.8545	976.8545	0.0187	0.0179	982.7995

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					
City Park	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
Condo/Townhouse	3.3926e+006	0.0183	0.1563	0.0665	1.0000e-003		0.0126	0.0126		0.0126	0.0126	0.0000	181.0420	181.0420	3.4700e-003	3.3200e-003	182.1438
Single Family Housing	1.4767e+007	0.0796	0.6804	0.2896	4.3400e-003		0.0550	0.0550		0.0550	0.0550	0.0000	788.0214	788.0214	0.0151	0.0145	792.8172
User Defined Commercial	146000	7.9000e-004	7.1600e-003	6.0100e-003	4.0000e-005		5.4000e-004	5.4000e-004		5.4000e-004	5.4000e-004	0.0000	7.7911	7.7911	1.5000e-004	1.4000e-004	7.8385
Total		**0.0987**	**0.8439**	**0.3621**	**5.3800e-003**		**0.0682**	**0.0682**		**0.0682**	**0.0682**	**0.0000**	**976.8545**	**976.8545**	**0.0187**	**0.0179**	**982.7995**

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					
City Park	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
Condo/Townhouse	3.3926e+006	0.0183	0.1563	0.0665	1.0000e-003		0.0126	0.0126		0.0126	0.0126	0.0000	181.0420	181.0420	3.4700e-003	3.3200e-003	182.1438
Single Family Housing	1.4767e+007	0.0796	0.6804	0.2896	4.3400e-003		0.0550	0.0550		0.0550	0.0550	0.0000	788.0214	788.0214	0.0151	0.0145	792.8172
User Defined Commercial	146000	7.9000e-004	7.1600e-003	6.0100e-003	4.0000e-005		5.4000e-004	5.4000e-004		5.4000e-004	5.4000e-004	0.0000	7.7911	7.7911	1.5000e-004	1.4000e-004	7.8385
Total		**0.0987**	**0.8439**	**0.3621**	**5.3800e-003**		**0.0682**	**0.0682**		**0.0682**	**0.0682**	**0.0000**	**976.8545**	**976.8545**	**0.0187**	**0.0179**	**982.7995**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	79231.3	25.8935	1.0400e-003	2.2000e-004	25.9822
Condo/Townhouse	1.06621e+006	348.4478	0.0140	2.9000e-003	349.6419
Single Family Housing	3.80436e+006	1,243.2983	0.0500	0.0104	1,247.5588
User Defined Commercial	385000	125.8214	5.0600e-003	1.0500e-003	126.2525
Total		**1,743.4609**	**0.0702**	**0.0145**	**1,749.4355**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	79231.3	25.8935	1.0400e-003	2.2000e-004	25.9822
Condo/Townhouse	1.06621e+006	348.4478	0.0140	2.9000e-003	349.6419
Single Family Housing	3.80436e+006	1,243.2983	0.0500	0.0104	1,247.5588
User Defined Commercial	385000	125.8214	5.0600e-003	1.0500e-003	126.2525
Total		**1,743.4609**	**0.0702**	**0.0145**	**1,749.4355**

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	56.6834	0.7312	66.1022	0.0239		8.5025	8.5025		8.5023	8.5023	805.7070	347.3623	1,153.0693	0.7528	0.0634	1,188.5235
Unmitigated	56.6834	0.7312	66.1022	0.0239		8.5025	8.5025		8.5023	8.5023	805.7070	347.3623	1,153.0693	0.7528	0.0634	1,188.5235

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	2.0910					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	5.4734					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	48.9420	0.6640	60.2913	0.0236		8.4706	8.4706		8.4703	8.4703	805.7070	337.9018	1,143.6088	0.7435	0.0634	1,178.8692
Landscaping	0.1770	0.0672	5.8109	3.1000e-004		0.0320	0.0320		0.0320	0.0320	0.0000	9.4606	9.4606	9.2300e-003	0.0000	9.6543
Total	**56.6834**	**0.7312**	**66.1022**	**0.0239**		**8.5025**	**8.5025**		**8.5023**	**8.5023**	**805.7070**	**347.3623**	**1,153.0693**	**0.7528**	**0.0634**	**1,188.5235**

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	2.0910					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	5.4734					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	48.9420	0.6640	60.2913	0.0236		8.4706	8.4706		8.4703	8.4703	805.7070	337.9018	1,143.6088	0.7435	0.0634	1,178.8692
Landscaping	0.1770	0.0672	5.8109	3.1000e-004		0.0320	0.0320		0.0320	0.0320	0.0000	9.4606	9.4606	9.2300e-003	0.0000	9.6543
Total	**56.6834**	**0.7312**	**66.1022**	**0.0239**		**8.5025**	**8.5025**		**8.5023**	**8.5023**	**805.7070**	**347.3623**	**1,153.0693**	**0.7528**	**0.0634**	**1,188.5235**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	366.2406	1.6770	0.0421	414.5174
Unmitigated	366.2406	1.6774	0.0422	414.5432

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 4.40601	15.9975	6.4000e-004	1.3000e-004	16.0524
Condo/Townhouse	16.0279 / 10.1045	109.9777	0.5265	0.0132	125.1276
Single Family Housing	34.7922 / 21.9342	238.7320	1.1429	0.0287	271.6185
User Defined Commercial	0.223478 / 0.140889	1.5334	7.3400e-003	1.8000e-004	1.7447
Total		**366.2406**	**1.6773**	**0.0422**	**414.5432**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 4.40601	15.9975	6.4000e-004	1.3000e-004	16.0524
Condo/Townhouse	16.0279 / 10.1045	109.9777	0.5264	0.0132	125.1195
Single Family Housing	34.7922 / 21.9342	238.7320	1.1427	0.0286	271.6009
User Defined Commercial	0.223478 / 0.140889	1.5334	7.3400e-003	1.8000e-004	1.7446
Total		**366.2406**	**1.6770**	**0.0421**	**414.5173**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	150.4508	8.8914	0.0000	337.1700
Unmitigated	150.4508	8.8914	0.0000	337.1700

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.36	0.0731	4.3200e-003	0.0000	0.1638
Condo/Townhouse	113.16	22.9705	1.3575	0.0000	51.4783
Single Family Housing	626.07	127.0866	7.5106	0.0000	284.8092
User Defined Commercial	1.58	0.3207	0.0190	0.0000	0.7188
Total		**150.4508**	**8.8914**	**0.0000**	**337.1700**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.36	0.0731	4.3200e-003	0.0000	0.1638
Condo/Townhouse	113.16	22.9705	1.3575	0.0000	51.4783
Single Family Housing	626.07	127.0866	7.5106	0.0000	284.8092
User Defined Commercial	1.58	0.3207	0.0190	0.0000	0.7188
Total		**150.4508**	**8.8914**	**0.0000**	**337.1700**

9.0 Operational Offroad

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

10.0 Vegetation

Warner Ranch Residential Development (Mitigated)

San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Commercial	1.00	User Defined Unit	1.00	10,000.00	10
City Park	4.23	Acre	4.23	184,258.80	0
Condo/Townhouse	246.00	Dwelling Unit	11.77	246,000.00	704
Single Family Housing	534.00	Dwelling Unit	159.00	961,200.00	1527

1.2 Other Project Characteristics

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

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Per Project Specifications

Land Use - Per project description

Construction Phase - Estimates per project description

Off-road Equipment -

Off-road Equipment - Estimates per project description

Off-road Equipment - Estimates per project description

Off-road Equipment - Off-Highway Trucks represent Water Trucks as required per project description.

Off-road Equipment - Per project description

Off-road Equipment - Off-Highway trucks represent Water Trucks needed per project description.

Off-road Equipment - Estimates per Project requirements

Off-road Equipment - Estimates per project description.

Trips and VMT - Estimates per project description

Demolition -

Architectural Coating - Estimates per project description

Vehicle Trips - Updated per traffic study

Vechicle Emission Factors -

Vechicle Emission Factors -

Vechicle Emission Factors -

Area Coating - asdf

Energy Use - User defined subtype represents project's proposed Fire Station.
Title 24-13 reductions applied to Title 24 energy sections

Water And Wastewater - User Defined water usage refers to project's Fire House. City park water use was derived using California Department of Water Resources 2009 model per equation in report (4,406,008 GPY)

Solid Waste - User Defined Commercial is for the Firehouse. It's estimated that 2.91 residents per multi-family unit and since 10 firefighters are assumed to live in the firehouse, 10/2.91=3.43x the waste of multi-family is 0.46 tons/year.

Construction Off-road Equipment Mitigation - Proposed mitigation

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation - 13% additional beyond the 20% already assumed by the County.

Water Mitigation -

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	150.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150

tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	150	250
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	220.00	1,247.00
tblConstructionPhase	NumDays	3,100.00	1,305.00
tblConstructionPhase	NumDays	200.00	11.00
tblConstructionPhase	NumDays	310.00	554.00
tblConstructionPhase	NumDays	310.00	45.00
tblConstructionPhase	NumDays	220.00	47.00
tblConstructionPhase	PhaseEndDate	1/16/2025	1/31/2025
tblConstructionPhase	PhaseEndDate	1/30/2025	1/31/2025
tblConstructionPhase	PhaseEndDate	4/8/2025	4/7/2020
tblConstructionPhase	PhaseStartDate	4/8/2020	4/23/2020
tblConstructionPhase	PhaseStartDate	1/31/2020	2/3/2020
tblConstructionPhase	PhaseStartDate	2/1/2025	2/3/2020
tblEnergyUse	LightingElect	0.00	0.43
tblEnergyUse	NT24E	0.00	38.50
tblEnergyUse	NT24NG	0.00	14.60
tblEnergyUse	T24E	206.69	158.53
tblEnergyUse	T24E	425.62	270.69
tblEnergyUse	T24NG	10,789.48	10,379.48
tblEnergyUse	T24NG	21,834.49	20,415.25
tblGrading	AcresOfGrading	2,423.75	175.00
tblGrading	AcresOfGrading	33.75	175.00

tblLandUse	LandUseSquareFeet	0.00	10,000.00
tblLandUse	LotAcreage	0.00	1.00
tblLandUse	LotAcreage	15.38	11.77
tblLandUse	LotAcreage	173.38	159.00
tblLandUse	Population	0.00	10.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	5.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblProjectCharacteristics	OperationalYear	2014	2020
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	0.00	1.58
tblTripsAndVMT	VendorTripLength	6.60	7.30
tblTripsAndVMT	VendorTripLength	6.60	7.30
tblTripsAndVMT	VendorTripLength	6.60	7.30
tblTripsAndVMT	VendorTripLength	6.60	7.30
tblTripsAndVMT	VendorTripLength	6.60	7.30
tblTripsAndVMT	VendorTripLength	6.60	7.30
tblTripsAndVMT	VendorTripLength	6.60	7.30

tblTripsAndVMT	WorkerTripLength	16.80	10.80
tblTripsAndVMT	WorkerTripLength	16.80	10.80
tblTripsAndVMT	WorkerTripLength	16.80	10.80
tblTripsAndVMT	WorkerTripLength	16.80	10.80
tblTripsAndVMT	WorkerTripLength	16.80	10.80
tblTripsAndVMT	WorkerTripLength	16.80	10.80
tblTripsAndVMT	WorkerTripLength	16.80	10.80
tblTripsAndVMT	WorkerTripNumber	48.00	53.00
tblTripsAndVMT	WorkerTripNumber	15.00	28.00
tblVehicleTrips	CC_TTP	0.00	90.00
tblVehicleTrips	CNW_TTP	0.00	5.00
tblVehicleTrips	CW_TTP	0.00	5.00
tblVehicleTrips	DV_TP	0.00	11.00
tblVehicleTrips	PB_TP	0.00	3.00
tblVehicleTrips	PR_TP	0.00	86.00
tblVehicleTrips	ST_TR	1.59	50.00
tblVehicleTrips	ST_TR	7.16	8.00
tblVehicleTrips	ST_TR	10.08	10.00
tblVehicleTrips	ST_TR	0.00	50.00
tblVehicleTrips	SU_TR	1.59	50.00
tblVehicleTrips	SU_TR	6.07	8.00
tblVehicleTrips	SU_TR	8.77	10.00
tblVehicleTrips	SU_TR	0.00	50.00
tblVehicleTrips	WD_TR	1.59	50.00
tblVehicleTrips	WD_TR	6.59	8.00
tblVehicleTrips	WD_TR	9.57	10.00
tblVehicleTrips	WD_TR	0.00	50.00
tblWater	IndoorWaterUseRate	0.00	223,478.30

tblWater	OutdoorWaterUseRate	5,039,966.11	4,406,008.00
tblWater	OutdoorWaterUseRate	0.00	140,888.50

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					
2017	0.7308	8.3069	5.4519	7.7400e-003	7.4128	0.3726	7.7853	4.0274	0.3429	4.3703	0.0000	712.5386	712.5386	0.2127	0.0000	717.0056
2018	1.6655	18.6165	12.5345	0.0200	7.4463	0.8217	8.2679	4.0363	0.7559	4.7923	0.0000	1,811.3092	1,811.3092	0.5514	0.0000	1,822.8875
2019	1.2295	13.3991	9.4107	0.0159	7.6649	0.5921	8.2569	4.1183	0.5447	4.6629	0.0000	1,414.0381	1,414.0381	0.4372	0.0000	1,423.2190
2020	2.4526	4.1211	6.1729	0.0138	0.8191	0.1921	1.0112	0.2433	0.1803	0.4236	0.0000	1,056.1536	1,056.1536	0.1166	0.0000	1,058.6025
2021	3.2179	3.4288	6.0595	0.0144	0.6627	0.1541	0.8168	0.1781	0.1453	0.3234	0.0000	1,077.4924	1,077.4924	0.0976	0.0000	1,079.5426
2022	3.1659	3.0628	5.8308	0.0143	0.6602	0.1324	0.7925	0.1774	0.1248	0.3022	0.0000	1,065.8171	1,065.8171	0.0959	0.0000	1,067.8304
2023	3.1325	2.7942	5.6491	0.0143	0.6602	0.1165	0.7767	0.1774	0.1098	0.2873	0.0000	1,058.6924	1,058.6924	0.0944	0.0000	1,060.6739
2024	3.1289	2.6649	5.5140	0.0144	0.6653	0.1049	0.7701	0.1788	0.0988	0.2776	0.0000	1,060.9997	1,060.9997	0.0939	0.0000	1,062.9720
2025	0.2726	0.2208	0.4735	1.2700e-003	0.0584	8.1200e-003	0.0665	0.0157	7.6500e-003	0.0233	0.0000	92.7032	92.7032	8.1600e-003	0.0000	92.8745
Total	**18.9962**	**56.6151**	**57.0970**	**0.1161**	**26.0498**	**2.4943**	**28.5441**	**13.1527**	**2.3103**	**15.4629**	**0.0000**	**9,349.7442**	**9,349.7442**	**1.7078**	**0.0000**	**9,385.6079**

2.1 Overall Construction

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					
2017	0.1035	2.5778	4.1107	7.7400e-003	7.4128	0.0976	7.5103	4.0274	0.1023	4.1296	0.0000	712.5378	712.5378	0.2127	0.0000	717.0048
2018	0.3063	7.1771	10.8766	0.0200	7.4463	0.2735	7.7197	4.0363	0.2835	4.3198	0.0000	1,811.3071	1,811.3071	0.5514	0.0000	1,822.8854
2019	0.2588	5.9547	8.8564	0.0159	7.6649	0.2301	7.8950	4.1183	0.2373	4.3555	0.0000	1,414.0365	1,414.0365	0.4372	0.0000	1,423.2173
2020	2.1812	1.8738	6.3269	0.0138	0.8191	0.0513	0.8704	0.2433	0.0500	0.2933	0.0000	1,056.1531	1,056.1531	0.1166	0.0000	1,058.6021
2021	2.9927	1.4346	6.1754	0.0144	0.6627	0.0349	0.6977	0.1781	0.0336	0.2117	0.0000	1,077.4920	1,077.4920	0.0976	0.0000	1,079.5422
2022	2.9686	1.3261	5.9741	0.0143	0.6602	0.0346	0.6948	0.1774	0.0333	0.2107	0.0000	1,065.8167	1,065.8167	0.0959	0.0000	1,067.8300
2023	2.9541	1.2304	5.8081	0.0143	0.6602	0.0344	0.6945	0.1774	0.0330	0.2105	0.0000	1,058.6920	1,058.6920	0.0944	0.0000	1,060.6735
2024	2.9638	1.2225	5.6843	0.0144	0.6653	0.0347	0.7000	0.1788	0.0334	0.2121	0.0000	1,060.9993	1,060.9993	0.0939	0.0000	1,062.9716
2025	0.2594	0.1061	0.4894	1.2700e-003	0.0584	3.0500e-003	0.0615	0.0157	2.9400e-003	0.0186	0.0000	92.7031	92.7031	8.1600e-003	0.0000	92.8745
Total	**14.9885**	**22.9031**	**54.3020**	**0.1161**	**26.0498**	**0.7941**	**26.8438**	**13.1527**	**0.8092**	**13.9619**	**0.0000**	**9,349.7375**	**9,349.7375**	**1.7078**	**0.0000**	**9,385.6012**

	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	**21.10**	**59.55**	**4.90**	**0.00**	**0.00**	**68.16**	**5.96**	**0.00**	**64.97**	**9.71**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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	56.6834	0.7312	66.1022	0.0239		8.5025	8.5025		8.5023	8.5023	805.7070	347.3623	1,153.0693	0.7528	0.0634	1,188.5235
Energy	0.0941	0.8044	0.3452	5.1300e-003		0.0650	0.0650		0.0650	0.0650	0.0000	2,643.5805	2,643.5805	0.0868	0.0313	2,655.1153
Mobile	4.5210	11.2716	51.0090	0.1502	10.4080	0.1700	10.5780	2.7836	0.1569	2.9405	0.0000	10,425.2331	10,425.2331	0.3963	0.0000	10,433.5555
Waste						0.0000	0.0000		0.0000	0.0000	150.4508	0.0000	150.4508	8.8914	0.0000	337.1700
Water						0.0000	0.0000		0.0000	0.0000	16.1938	350.0468	366.2406	1.6774	0.0422	414.5432
Total	**61.2985**	**12.8072**	**117.4564**	**0.1792**	**10.4080**	**8.7375**	**19.1456**	**2.7836**	**8.7241**	**11.5078**	**972.3516**	**13,766.2228**	**14,738.5744**	**11.8046**	**0.1369**	**15,028.9074**

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	7.7972	0.0672	5.8139	3.1000e-004		0.0706	0.0706		0.0702	0.0702	0.0000	562.3907	562.3907	0.0198	0.0101	565.9495
Energy	0.0941	0.8044	0.3452	5.1300e-003		0.0650	0.0650		0.0650	0.0650	0.0000	2,591.4294	2,591.4294	0.0847	0.0309	2,602.7854
Mobile	4.5210	11.2716	51.0090	0.1502	10.4080	0.1700	10.5780	2.7836	0.1569	2.9405	0.0000	10,425.2331	10,425.2331	0.3963	0.0000	10,433.5555
Waste						0.0000	0.0000		0.0000	0.0000	112.8381	0.0000	112.8381	6.6685	0.0000	252.8775
Water						0.0000	0.0000		0.0000	0.0000	12.9550	274.0062	286.9613	1.3416	0.0337	325.5827
Total	**12.4123**	**12.1432**	**57.1682**	**0.1556**	**10.4080**	**0.3056**	**10.7136**	**2.7836**	**0.2920**	**3.0757**	**125.7931**	**13,853.0595**	**13,978.8526**	**8.5110**	**0.0747**	**14,180.7505**

	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	**79.75**	**5.18**	**51.33**	**13.15**	**0.00**	**96.50**	**44.04**	**0.00**	**96.65**	**73.27**	**87.06**	**-0.63**	**5.15**	**27.90**	**45.40**	**5.64**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	8/1/2017	8/15/2017	5	11	
2	Mass Grading	Grading	8/16/2017	9/30/2019	5	554	
3	Trenching	Trenching	10/1/2019	11/28/2019	5	43	
4	Fine Grading	Grading	11/29/2019	1/30/2020	5	45	
5	Building Construction	Building Construction	2/3/2020	1/31/2025	5	1305	
6	Paving	Paving	2/3/2020	4/7/2020	5	47	
7	Architectural Coating	Architectural Coating	4/23/2020	1/31/2025	5	1247	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 2,444,580; Residential Outdoor: 814,860; Non-Residential Indoor: 291,388; Non-Residential Outdoor: 97,129 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Mass Grading	Bore/Drill Rigs	2	7.00	205	0.50
Mass Grading	Graders	2	7.00	174	0.41
Mass Grading	Off-Highway Trucks	2	7.00	400	0.38
Mass Grading	Rubber Tired Dozers	5	7.00	255	0.40
Mass Grading	Scrapers	4	7.00	361	0.48
Mass Grading	Tractors/Loaders/Backhoes	4	5.00	97	0.37
Trenching	Excavators	2	8.00	162	0.38
Trenching	Other General Industrial Equipment	1	8.00	87	0.34
Trenching	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Fine Grading	Graders	2	6.00	174	0.41
Fine Grading	Off-Highway Trucks	2	8.00	400	0.38
Fine Grading	Rubber Tired Dozers	1	8.00	255	0.40
Fine Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	7.00	226	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
Paving	Pavers	1	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
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
Demolition	6	15.00	0.00	4.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Mass Grading	19	53.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Fine Grading	6	28.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	450.00	115.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	90.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

3.2 Demolition - 2017

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					4.5000e-004	0.0000	4.5000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0223	0.2348	0.1864	2.2000e-004		0.0117	0.0117		0.0109	0.0109	0.0000	20.1400	20.1400	5.5200e-003	0.0000	20.2560
Total	**0.0223**	**0.2348**	**0.1864**	**2.2000e-004**	**4.5000e-004**	**0.0117**	**0.0121**	**7.0000e-005**	**0.0109**	**0.0110**	**0.0000**	**20.1400**	**20.1400**	**5.5200e-003**	**0.0000**	**20.2560**

3.2 Demolition - 2017

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	4.0000e-005	5.2000e-004	4.6000e-004	0.0000	3.0000e-005	1.0000e-005	4.0000e-005	1.0000e-005	1.0000e-005	2.0000e-005	0.0000	0.1343	0.1343	0.0000	0.0000	0.1343
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e-004	3.4000e-004	3.2100e-003	1.0000e-005	6.6000e-004	0.0000	6.7000e-004	1.8000e-004	0.0000	1.8000e-004	0.0000	0.5927	0.5927	3.0000e-005	0.0000	0.5933
Total	**3.0000e-004**	**8.6000e-004**	**3.6700e-003**	**1.0000e-005**	**6.9000e-004**	**1.0000e-005**	**7.1000e-004**	**1.9000e-004**	**1.0000e-005**	**2.0000e-004**	**0.0000**	**0.7270**	**0.7270**	**3.0000e-005**	**0.0000**	**0.7276**

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					4.5000e-004	0.0000	4.5000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1500e-003	0.0834	0.1468	2.2000e-004		3.8500e-003	3.8500e-003		4.0500e-003	4.0500e-003	0.0000	20.1400	20.1400	5.5200e-003	0.0000	20.2560
Total	**2.1500e-003**	**0.0834**	**0.1468**	**2.2000e-004**	**4.5000e-004**	**3.8500e-003**	**4.3000e-003**	**7.0000e-005**	**4.0500e-003**	**4.1200e-003**	**0.0000**	**20.1400**	**20.1400**	**5.5200e-003**	**0.0000**	**20.2560**

3.2 Demolition - 2017

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	4.0000e-005	5.2000e-004	4.6000e-004	0.0000	3.0000e-005	1.0000e-005	4.0000e-005	1.0000e-005	1.0000e-005	2.0000e-005	0.0000	0.1343	0.1343	0.0000	0.0000	0.1343
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e-004	3.4000e-004	3.2100e-003	1.0000e-005	6.6000e-004	0.0000	6.7000e-004	1.8000e-004	0.0000	1.8000e-004	0.0000	0.5927	0.5927	3.0000e-005	0.0000	0.5933
Total	**3.0000e-004**	**8.6000e-004**	**3.6700e-003**	**1.0000e-005**	**6.9000e-004**	**1.0000e-005**	**7.1000e-004**	**1.9000e-004**	**1.0000e-005**	**2.0000e-004**	**0.0000**	**0.7270**	**0.7270**	**3.0000e-005**	**0.0000**	**0.7276**

3.3 Mass Grading - 2017

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					7.3908	0.0000	7.3908	4.0216	0.0000	4.0216	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.7001	8.0606	5.1607	7.2500e-003		0.3607	0.3607		0.3319	0.3319	0.0000	673.0138	673.0138	0.2062	0.0000	677.3442
Total	**0.7001**	**8.0606**	**5.1607**	**7.2500e-003**	**7.3908**	**0.3607**	**7.7515**	**4.0216**	**0.3319**	**4.3535**	**0.0000**	**673.0138**	**673.0138**	**0.2062**	**0.0000**	**677.3442**

3.3 Mass Grading - 2017

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	8.0700e-003	0.0107	0.1011	2.6000e-004	0.0208	1.6000e-004	0.0210	5.5300e-003	1.4000e-004	5.6800e-003	0.0000	18.6578	18.6578	9.5000e-004	0.0000	18.6777
Total	**8.0700e-003**	**0.0107**	**0.1011**	**2.6000e-004**	**0.0208**	**1.6000e-004**	**0.0210**	**5.5300e-003**	**1.4000e-004**	**5.6800e-003**	**0.0000**	**18.6578**	**18.6578**	**9.5000e-004**	**0.0000**	**18.6777**

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					7.3908	0.0000	7.3908	4.0216	0.0000	4.0216	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0930	2.4828	3.8591	7.2500e-003		0.0936	0.0936		0.0980	0.0980	0.0000	673.0130	673.0130	0.2062	0.0000	677.3434
Total	**0.0930**	**2.4828**	**3.8591**	**7.2500e-003**	**7.3908**	**0.0936**	**7.4844**	**4.0216**	**0.0980**	**4.1196**	**0.0000**	**673.0130**	**673.0130**	**0.2062**	**0.0000**	**677.3434**

3.3 Mass Grading - 2017

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	8.0700e-003	0.0107	0.1011	2.6000e-004	0.0208	1.6000e-004	0.0210	5.5300e-003	1.4000e-004	5.6800e-003	0.0000	18.6578	18.6578	9.5000e-004	0.0000	18.6777
Total	**8.0700e-003**	**0.0107**	**0.1011**	**2.6000e-004**	**0.0208**	**1.6000e-004**	**0.0210**	**5.5300e-003**	**1.4000e-004**	**5.6800e-003**	**0.0000**	**18.6578**	**18.6578**	**9.5000e-004**	**0.0000**	**18.6777**

3.3 Mass Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					7.3908	0.0000	7.3908	4.0216	0.0000	4.0216	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.6460	18.5905	12.2910	0.0193		0.8213	0.8213		0.7556	0.7556	0.0000	1,763.4845	1,763.4845	0.5490	0.0000	1,775.0135
Total	**1.6460**	**18.5905**	**12.2910**	**0.0193**	**7.3908**	**0.8213**	**8.2121**	**4.0216**	**0.7556**	**4.7772**	**0.0000**	**1,763.4845**	**1,763.4845**	**0.5490**	**0.0000**	**1,775.0135**

3.3 Mass Grading - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0195	0.0260	0.2436	6.8000e-004	0.0555	4.1000e-004	0.0559	0.0147	3.8000e-004	0.0151	0.0000	47.8247	47.8247	2.3500e-003	0.0000	47.8740
Total	**0.0195**	**0.0260**	**0.2436**	**6.8000e-004**	**0.0555**	**4.1000e-004**	**0.0559**	**0.0147**	**3.8000e-004**	**0.0151**	**0.0000**	**47.8247**	**47.8247**	**2.3500e-003**	**0.0000**	**47.8740**

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					7.3908	0.0000	7.3908	4.0216	0.0000	4.0216	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2868	7.1511	10.6331	0.0193		0.2731	0.2731		0.2831	0.2831	0.0000	1,763.4824	1,763.4824	0.5490	0.0000	1,775.0113
Total	**0.2868**	**7.1511**	**10.6331**	**0.0193**	**7.3908**	**0.2731**	**7.6639**	**4.0216**	**0.2831**	**4.3047**	**0.0000**	**1,763.4824**	**1,763.4824**	**0.5490**	**0.0000**	**1,775.0113**

3.3 Mass Grading - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0195	0.0260	0.2436	6.8000e-004	0.0555	4.1000e-004	0.0559	0.0147	3.8000e-004	0.0151	0.0000	47.8247	47.8247	2.3500e-003	0.0000	47.8740
Total	**0.0195**	**0.0260**	**0.2436**	**6.8000e-004**	**0.0555**	**4.1000e-004**	**0.0559**	**0.0147**	**3.8000e-004**	**0.0151**	**0.0000**	**47.8247**	**47.8247**	**2.3500e-003**	**0.0000**	**47.8740**

3.3 Mass Grading - 2019

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					7.3908	0.0000	7.3908	4.0216	0.0000	4.0216	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.1488	12.7147	8.6975	0.0144		0.5581	0.5581		0.5135	0.5135	0.0000	1,295.9000	1,295.9000	0.4100	0.0000	1,304.5101
Total	**1.1488**	**12.7147**	**8.6975**	**0.0144**	**7.3908**	**0.5581**	**7.9489**	**4.0216**	**0.5135**	**4.5351**	**0.0000**	**1,295.9000**	**1,295.9000**	**0.4100**	**0.0000**	**1,304.5101**

3.3 Mass Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0135	0.0179	0.1674	5.1000e-004	0.0414	3.0000e-004	0.0417	0.0110	2.8000e-004	0.0113	0.0000	34.4385	34.4385	1.6500e-003	0.0000	34.4731
Total	**0.0135**	**0.0179**	**0.1674**	**5.1000e-004**	**0.0414**	**3.0000e-004**	**0.0417**	**0.0110**	**2.8000e-004**	**0.0113**	**0.0000**	**34.4385**	**34.4385**	**1.6500e-003**	**0.0000**	**34.4731**

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					7.3908	0.0000	7.3908	4.0216	0.0000	4.0216	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2279	5.5572	8.0660	0.0144		0.2129	0.2129		0.2197	0.2197	0.0000	1,295.8984	1,295.8984	0.4100	0.0000	1,304.5086
Total	**0.2279**	**5.5572**	**8.0660**	**0.0144**	**7.3908**	**0.2129**	**7.6038**	**4.0216**	**0.2197**	**4.2413**	**0.0000**	**1,295.8984**	**1,295.8984**	**0.4100**	**0.0000**	**1,304.5086**

3.3 Mass Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0135	0.0179	0.1674	5.1000e-004	0.0414	3.0000e-004	0.0417	0.0110	2.8000e-004	0.0113	0.0000	34.4385	34.4385	1.6500e-003	0.0000	34.4731
Total	**0.0135**	**0.0179**	**0.1674**	**5.1000e-004**	**0.0414**	**3.0000e-004**	**0.0417**	**0.0110**	**2.8000e-004**	**0.0113**	**0.0000**	**34.4385**	**34.4385**	**1.6500e-003**	**0.0000**	**34.4731**

3.4 Trenching - 2019

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	0.0221	0.2189	0.2362	3.5000e-004		0.0129	0.0129		0.0119	0.0119	0.0000	31.3305	31.3305	9.9100e-003	0.0000	31.5386
Total	**0.0221**	**0.2189**	**0.2362**	**3.5000e-004**		**0.0129**	**0.0129**		**0.0119**	**0.0119**	**0.0000**	**31.3305**	**31.3305**	**9.9100e-003**	**0.0000**	**31.5386**

3.4 Trenching - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.6000e-004	7.5000e-004	6.9600e-003	2.0000e-005	1.7200e-003	1.0000e-005	1.7400e-003	4.6000e-004	1.0000e-005	4.7000e-004	0.0000	1.4329	1.4329	7.0000e-005	0.0000	1.4343
Total	**5.6000e-004**	**7.5000e-004**	**6.9600e-003**	**2.0000e-005**	**1.7200e-003**	**1.0000e-005**	**1.7400e-003**	**4.6000e-004**	**1.0000e-005**	**4.7000e-004**	**0.0000**	**1.4329**	**1.4329**	**7.0000e-005**	**0.0000**	**1.4343**

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	3.0500e-003	0.1346	0.2877	3.5000e-004		7.1100e-003	7.1100e-003		7.4800e-003	7.4800e-003	0.0000	31.3304	31.3304	9.9100e-003	0.0000	31.5386
Total	**3.0500e-003**	**0.1346**	**0.2877**	**3.5000e-004**		**7.1100e-003**	**7.1100e-003**		**7.4800e-003**	**7.4800e-003**	**0.0000**	**31.3304**	**31.3304**	**9.9100e-003**	**0.0000**	**31.5386**

3.4 Trenching - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.6000e-004	7.5000e-004	6.9600e-003	2.0000e-005	1.7200e-003	1.0000e-005	1.7400e-003	4.6000e-004	1.0000e-005	4.7000e-004	0.0000	1.4329	1.4329	7.0000e-005	0.0000	1.4343
Total	**5.6000e-004**	**7.5000e-004**	**6.9600e-003**	**2.0000e-005**	**1.7200e-003**	**1.0000e-005**	**1.7400e-003**	**4.6000e-004**	**1.0000e-005**	**4.7000e-004**	**0.0000**	**1.4329**	**1.4329**	**7.0000e-005**	**0.0000**	**1.4343**

3.5 Fine Grading - 2019

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					0.2283	0.0000	0.2283	0.0845	0.0000	0.0845	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0436	0.4457	0.2921	5.4000e-004		0.0207	0.0207		0.0191	0.0191	0.0000	48.7905	48.7905	0.0154	0.0000	49.1146
Total	**0.0436**	**0.4457**	**0.2921**	**5.4000e-004**	**0.2283**	**0.0207**	**0.2490**	**0.0845**	**0.0191**	**0.1036**	**0.0000**	**48.7905**	**48.7905**	**0.0154**	**0.0000**	**49.1146**

3.5 Fine Grading - 2019

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	8.4000e-004	1.1200e-003	0.0104	3.0000e-005	2.5800e-003	2.0000e-005	2.6000e-003	6.9000e-004	2.0000e-005	7.0000e-004	0.0000	2.1460	2.1460	1.0000e-004	0.0000	2.1481
Total	**8.4000e-004**	**1.1200e-003**	**0.0104**	**3.0000e-005**	**2.5800e-003**	**2.0000e-005**	**2.6000e-003**	**6.9000e-004**	**2.0000e-005**	**7.0000e-004**	**0.0000**	**2.1460**	**2.1460**	**1.0000e-004**	**0.0000**	**2.1481**

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					0.2283	0.0000	0.2283	0.0845	0.0000	0.0845	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0129	0.2431	0.3180	5.4000e-004		9.7300e-003	9.7300e-003		9.7300e-003	9.7300e-003	0.0000	48.7904	48.7904	0.0154	0.0000	49.1146
Total	**0.0129**	**0.2431**	**0.3180**	**5.4000e-004**	**0.2283**	**9.7300e-003**	**0.2380**	**0.0845**	**9.7300e-003**	**0.0942**	**0.0000**	**48.7904**	**48.7904**	**0.0154**	**0.0000**	**49.1146**

3.5 Fine Grading - 2019

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	8.4000e-004	1.1200e-003	0.0104	3.0000e-005	2.5800e-003	2.0000e-005	2.6000e-003	6.9000e-004	2.0000e-005	7.0000e-004	0.0000	2.1460	2.1460	1.0000e-004	0.0000	2.1481
Total	**8.4000e-004**	**1.1200e-003**	**0.0104**	**3.0000e-005**	**2.5800e-003**	**2.0000e-005**	**2.6000e-003**	**6.9000e-004**	**2.0000e-005**	**7.0000e-004**	**0.0000**	**2.1460**	**2.1460**	**1.0000e-004**	**0.0000**	**2.1481**

3.5 Fine Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2283	0.0000	0.2283	0.0845	0.0000	0.0845	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0389	0.3851	0.2678	5.2000e-004		0.0179	0.0179		0.0164	0.0164	0.0000	45.6340	45.6340	0.0148	0.0000	45.9439
Total	**0.0389**	**0.3851**	**0.2678**	**5.2000e-004**	**0.2283**	**0.0179**	**0.2462**	**0.0845**	**0.0164**	**0.1009**	**0.0000**	**45.6340**	**45.6340**	**0.0148**	**0.0000**	**45.9439**

3.5 Fine Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.6000e-004	1.0000e-003	9.3200e-003	3.0000e-005	2.4700e-003	2.0000e-005	2.4900e-003	6.6000e-004	2.0000e-005	6.7000e-004	0.0000	1.9699	1.9699	9.0000e-005	0.0000	1.9719
Total	**7.6000e-004**	**1.0000e-003**	**9.3200e-003**	**3.0000e-005**	**2.4700e-003**	**2.0000e-005**	**2.4900e-003**	**6.6000e-004**	**2.0000e-005**	**6.7000e-004**	**0.0000**	**1.9699**	**1.9699**	**9.0000e-005**	**0.0000**	**1.9719**

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					0.2283	0.0000	0.2283	0.0845	0.0000	0.0845	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0123	0.2325	0.3042	5.2000e-004		9.3100e-003	9.3100e-003		9.3100e-003	9.3100e-003	0.0000	45.6339	45.6339	0.0148	0.0000	45.9438
Total	**0.0123**	**0.2325**	**0.3042**	**5.2000e-004**	**0.2283**	**9.3100e-003**	**0.2376**	**0.0845**	**9.3100e-003**	**0.0938**	**0.0000**	**45.6339**	**45.6339**	**0.0148**	**0.0000**	**45.9438**

3.5 Fine Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.6000e-004	1.0000e-003	9.3200e-003	3.0000e-005	2.4700e-003	2.0000e-005	2.4900e-003	6.6000e-004	2.0000e-005	6.7000e-004	0.0000	1.9699	1.9699	9.0000e-005	0.0000	1.9719
Total	**7.6000e-004**	**1.0000e-003**	**9.3200e-003**	**3.0000e-005**	**2.4700e-003**	**2.0000e-005**	**2.4900e-003**	**6.6000e-004**	**2.0000e-005**	**6.7000e-004**	**0.0000**	**1.9699**	**1.9699**	**9.0000e-005**	**0.0000**	**1.9719**

3.6 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2523	2.2805	2.0086	3.2000e-003		0.1330	0.1330		0.1251	0.1251	0.0000	275.6266	275.6266	0.0672	0.0000	277.0368
Total	**0.2523**	**2.2805**	**2.0086**	**3.2000e-003**		**0.1330**	**0.1330**		**0.1251**	**0.1251**	**0.0000**	**275.6266**	**275.6266**	**0.0672**	**0.0000**	**277.0368**

3.6 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1186	0.8398	1.5660	3.2400e-003	0.0894	0.0133	0.1027	0.0256	0.0122	0.0378	0.0000	275.0968	275.0968	2.0400e-003	0.0000	275.1395
Worker	0.1333	0.1744	1.6279	5.3000e-003	0.4312	3.1300e-003	0.4344	0.1146	2.9100e-003	0.1175	0.0000	343.9386	343.9386	0.0163	0.0000	344.2818
Total	**0.2518**	**1.0142**	**3.1938**	**8.5400e-003**	**0.5206**	**0.0164**	**0.5370**	**0.1402**	**0.0151**	**0.1553**	**0.0000**	**619.0354**	**619.0354**	**0.0184**	**0.0000**	**619.4213**

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	0.0390	0.2664	2.0806	3.2000e-003		4.8500e-003	4.8500e-003		4.8500e-003	4.8500e-003	0.0000	275.6263	275.6263	0.0672	0.0000	277.0365
Total	**0.0390**	**0.2664**	**2.0806**	**3.2000e-003**		**4.8500e-003**	**4.8500e-003**		**4.8500e-003**	**4.8500e-003**	**0.0000**	**275.6263**	**275.6263**	**0.0672**	**0.0000**	**277.0365**

3.6 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1186	0.8398	1.5660	3.2400e-003	0.0894	0.0133	0.1027	0.0256	0.0122	0.0378	0.0000	275.0968	275.0968	2.0400e-003	0.0000	275.1395
Worker	0.1333	0.1744	1.6279	5.3000e-003	0.4312	3.1300e-003	0.4344	0.1146	2.9100e-003	0.1175	0.0000	343.9386	343.9386	0.0163	0.0000	344.2818
Total	**0.2518**	**1.0142**	**3.1938**	**8.5400e-003**	**0.5206**	**0.0164**	**0.5370**	**0.1402**	**0.0151**	**0.1553**	**0.0000**	**619.0354**	**619.0354**	**0.0184**	**0.0000**	**619.4213**

3.6 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	0.2471	2.2629	2.1582	3.5000e-003		0.1246	0.1246		0.1172	0.1172	0.0000	301.0339	301.0339	0.0725	0.0000	302.5568
Total	**0.2471**	**2.2629**	**2.1582**	**3.5000e-003**		**0.1246**	**0.1246**		**0.1172**	**0.1172**	**0.0000**	**301.0339**	**301.0339**	**0.0725**	**0.0000**	**302.5568**

3.6 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	0.1219	0.7520	1.6418	3.5400e-003	0.0976	0.0131	0.1107	0.0279	0.0120	0.0399	0.0000	299.9401	299.9401	2.2100e-003	0.0000	299.9866
Worker	0.1386	0.1788	1.6853	5.8000e-003	0.4709	3.4800e-003	0.4744	0.1251	3.2200e-003	0.1284	0.0000	369.3321	369.3321	0.0172	0.0000	369.6927
Total	**0.2604**	**0.9308**	**3.3271**	**9.3400e-003**	**0.5685**	**0.0165**	**0.5851**	**0.1531**	**0.0152**	**0.1683**	**0.0000**	**669.2721**	**669.2721**	**0.0194**	**0.0000**	**669.6793**

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	0.0426	0.2909	2.2721	3.5000e-003		5.3000e-003	5.3000e-003		5.3000e-003	5.3000e-003	0.0000	301.0335	301.0335	0.0725	0.0000	302.5565
Total	**0.0426**	**0.2909**	**2.2721**	**3.5000e-003**		**5.3000e-003**	**5.3000e-003**		**5.3000e-003**	**5.3000e-003**	**0.0000**	**301.0335**	**301.0335**	**0.0725**	**0.0000**	**302.5565**

3.6 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	0.1219	0.7520	1.6418	3.5400e-003	0.0976	0.0131	0.1107	0.0279	0.0120	0.0399	0.0000	299.9401	299.9401	2.2100e-003	0.0000	299.9866
Worker	0.1386	0.1788	1.6853	5.8000e-003	0.4709	3.4800e-003	0.4744	0.1251	3.2200e-003	0.1284	0.0000	369.3321	369.3321	0.0172	0.0000	369.6927
Total	**0.2604**	**0.9308**	**3.3271**	**9.3400e-003**	**0.5685**	**0.0165**	**0.5851**	**0.1531**	**0.0152**	**0.1683**	**0.0000**	**669.2721**	**669.2721**	**0.0194**	**0.0000**	**669.6793**

3.6 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	0.2209	2.0197	2.1226	3.4900e-003		0.1047	0.1047		0.0986	0.0986	0.0000	299.9946	299.9946	0.0718	0.0000	301.5017
Total	**0.2209**	**2.0197**	**2.1226**	**3.4900e-003**		**0.1047**	**0.1047**		**0.0986**	**0.0986**	**0.0000**	**299.9946**	**299.9946**	**0.0718**	**0.0000**	**301.5017**

3.6 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	0.1166	0.6580	1.5713	3.5200e-003	0.0972	0.0128	0.1100	0.0278	0.0118	0.0396	0.0000	298.4820	298.4820	2.2500e-003	0.0000	298.5293
Worker	0.1315	0.1683	1.5843	5.7800e-003	0.4691	3.4900e-003	0.4726	0.1247	3.2300e-003	0.1279	0.0000	361.7902	361.7902	0.0164	0.0000	362.1348
Total	**0.2481**	**0.8263**	**3.1556**	**9.3000e-003**	**0.5664**	**0.0163**	**0.5826**	**0.1525**	**0.0150**	**0.1675**	**0.0000**	**660.2721**	**660.2721**	**0.0187**	**0.0000**	**660.6640**

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	0.0424	0.2898	2.2634	3.4900e-003		5.2800e-003	5.2800e-003		5.2800e-003	5.2800e-003	0.0000	299.9943	299.9943	0.0718	0.0000	301.5013
Total	**0.0424**	**0.2898**	**2.2634**	**3.4900e-003**		**5.2800e-003**	**5.2800e-003**		**5.2800e-003**	**5.2800e-003**	**0.0000**	**299.9943**	**299.9943**	**0.0718**	**0.0000**	**301.5013**

3.6 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	0.1166	0.6580	1.5713	3.5200e-003	0.0972	0.0128	0.1100	0.0278	0.0118	0.0396	0.0000	298.4820	298.4820	2.2500e-003	0.0000	298.5293
Worker	0.1315	0.1683	1.5843	5.7800e-003	0.4691	3.4900e-003	0.4726	0.1247	3.2300e-003	0.1279	0.0000	361.7902	361.7902	0.0164	0.0000	362.1348
Total	**0.2481**	**0.8263**	**3.1556**	**9.3000e-003**	**0.5664**	**0.0163**	**0.5826**	**0.1525**	**0.0150**	**0.1675**	**0.0000**	**660.2721**	**660.2721**	**0.0187**	**0.0000**	**660.6640**

3.6 Building Construction - 2023

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	0.2036	1.8606	2.1072	3.4900e-003		0.0906	0.0906		0.0852	0.0852	0.0000	300.0980	300.0980	0.0713	0.0000	301.5949
Total	**0.2036**	**1.8606**	**2.1072**	**3.4900e-003**		**0.0906**	**0.0906**		**0.0852**	**0.0852**	**0.0000**	**300.0980**	**300.0980**	**0.0713**	**0.0000**	**301.5949**

3.6 Building Construction - 2023

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	0.1093	0.5727	1.5070	3.5100e-003	0.0972	0.0125	0.1097	0.0278	0.0115	0.0393	0.0000	297.8136	297.8136	2.1100e-003	0.0000	297.8581
Worker	0.1255	0.1596	1.4995	5.7800e-003	0.4691	3.5100e-003	0.4726	0.1247	3.2600e-003	0.1279	0.0000	356.3237	356.3237	0.0158	0.0000	356.6558
Total	**0.2348**	**0.7323**	**3.0065**	**9.2900e-003**	**0.5664**	**0.0160**	**0.5824**	**0.1525**	**0.0148**	**0.1672**	**0.0000**	**654.1374**	**654.1374**	**0.0179**	**0.0000**	**654.5138**

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	0.0424	0.2898	2.2634	3.4900e-003		5.2800e-003	5.2800e-003		5.2800e-003	5.2800e-003	0.0000	300.0976	300.0976	0.0713	0.0000	301.5946
Total	**0.0424**	**0.2898**	**2.2634**	**3.4900e-003**		**5.2800e-003**	**5.2800e-003**		**5.2800e-003**	**5.2800e-003**	**0.0000**	**300.0976**	**300.0976**	**0.0713**	**0.0000**	**301.5946**

3.6 Building Construction - 2023

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	0.1093	0.5727	1.5070	3.5100e-003	0.0972	0.0125	0.1097	0.0278	0.0115	0.0393	0.0000	297.8136	297.8136	2.1100e-003	0.0000	297.8581
Worker	0.1255	0.1596	1.4995	5.7800e-003	0.4691	3.5100e-003	0.4726	0.1247	3.2600e-003	0.1279	0.0000	356.3237	356.3237	0.0158	0.0000	356.6558
Total	**0.2348**	**0.7323**	**3.0065**	**9.2900e-003**	**0.5664**	**0.0160**	**0.5824**	**0.1525**	**0.0148**	**0.1672**	**0.0000**	**654.1374**	**654.1374**	**0.0179**	**0.0000**	**654.5138**

3.6 Building Construction - 2024

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	0.1920	1.7524	2.1135	3.5200e-003		0.0800	0.0800		0.0752	0.0752	0.0000	302.4646	302.4646	0.0714	0.0000	303.9643
Total	**0.1920**	**1.7524**	**2.1135**	**3.5200e-003**		**0.0800**	**0.0800**		**0.0752**	**0.0752**	**0.0000**	**302.4646**	**302.4646**	**0.0714**	**0.0000**	**303.9643**

3.6 Building Construction - 2024

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	0.1037	0.5691	1.4366	3.5300e-003	0.0980	0.0126	0.1106	0.0280	0.0116	0.0397	0.0000	300.0852	300.0852	2.1400e-003	0.0000	300.1301
Worker	0.1210	0.1531	1.4391	5.8200e-003	0.4727	3.5700e-003	0.4763	0.1256	3.3100e-003	0.1289	0.0000	354.1686	354.1686	0.0154	0.0000	354.4920
Total	**0.2247**	**0.7222**	**2.8756**	**9.3500e-003**	**0.5707**	**0.0162**	**0.5869**	**0.1537**	**0.0149**	**0.1686**	**0.0000**	**654.2537**	**654.2537**	**0.0175**	**0.0000**	**654.6221**

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	0.0428	0.2920	2.2808	3.5200e-003		5.3200e-003	5.3200e-003		5.3200e-003	5.3200e-003	0.0000	302.4642	302.4642	0.0714	0.0000	303.9639
Total	**0.0428**	**0.2920**	**2.2808**	**3.5200e-003**		**5.3200e-003**	**5.3200e-003**		**5.3200e-003**	**5.3200e-003**	**0.0000**	**302.4642**	**302.4642**	**0.0714**	**0.0000**	**303.9639**

3.6 Building Construction - 2024

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	0.1037	0.5691	1.4366	3.5300e-003	0.0980	0.0126	0.1106	0.0280	0.0116	0.0397	0.0000	300.0852	300.0852	2.1400e-003	0.0000	300.1301
Worker	0.1210	0.1531	1.4391	5.8200e-003	0.4727	3.5700e-003	0.4763	0.1256	3.3100e-003	0.1289	0.0000	354.1686	354.1686	0.0154	0.0000	354.4920
Total	**0.2247**	**0.7222**	**2.8756**	**9.3500e-003**	**0.5707**	**0.0162**	**0.5869**	**0.1537**	**0.0149**	**0.1686**	**0.0000**	**654.2537**	**654.2537**	**0.0175**	**0.0000**	**654.6221**

3.6 Building Construction - 2025

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	0.0157	0.1427	0.1846	3.1000e-004		6.0400e-003	6.0400e-003		5.6800e-003	5.6800e-003	0.0000	26.5603	26.5603	6.2300e-003	0.0000	26.6912
Total	**0.0157**	**0.1427**	**0.1846**	**3.1000e-004**		**6.0400e-003**	**6.0400e-003**		**5.6800e-003**	**5.6800e-003**	**0.0000**	**26.5603**	**26.5603**	**6.2300e-003**	**0.0000**	**26.6912**

3.6 Building Construction - 2025

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	8.8500e-003	0.0494	0.1228	3.1000e-004	8.6000e-003	1.1100e-003	9.7200e-003	2.4600e-003	1.0200e-003	3.4800e-003	0.0000	26.3456	26.3456	1.9000e-004	0.0000	26.3495
Worker	0.0102	0.0129	0.1211	5.1000e-004	0.0415	3.2000e-004	0.0418	0.0110	2.9000e-004	0.0113	0.0000	30.7175	30.7175	1.3100e-003	0.0000	30.7451
Total	**0.0191**	**0.0623**	**0.2439**	**8.2000e-004**	**0.0501**	**1.4300e-003**	**0.0515**	**0.0135**	**1.3100e-003**	**0.0148**	**0.0000**	**57.0631**	**57.0631**	**1.5000e-003**	**0.0000**	**57.0946**

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	3.7500e-003	0.0256	0.2002	3.1000e-004		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	26.5603	26.5603	6.2300e-003	0.0000	26.6912
Total	**3.7500e-003**	**0.0256**	**0.2002**	**3.1000e-004**		**4.7000e-004**	**4.7000e-004**		**4.7000e-004**	**4.7000e-004**	**0.0000**	**26.5603**	**26.5603**	**6.2300e-003**	**0.0000**	**26.6912**

3.6 Building Construction - 2025

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	8.8500e-003	0.0494	0.1228	3.1000e-004	8.6000e-003	1.1100e-003	9.7200e-003	2.4600e-003	1.0200e-003	3.4800e-003	0.0000	26.3456	26.3456	1.9000e-004	0.0000	26.3495
Worker	0.0102	0.0129	0.1211	5.1000e-004	0.0415	3.2000e-004	0.0418	0.0110	2.9000e-004	0.0113	0.0000	30.7175	30.7175	1.3100e-003	0.0000	30.7451
Total	**0.0191**	**0.0623**	**0.2439**	**8.2000e-004**	**0.0501**	**1.4300e-003**	**0.0515**	**0.0135**	**1.3100e-003**	**0.0148**	**0.0000**	**57.0631**	**57.0631**	**1.5000e-003**	**0.0000**	**57.0946**

3.7 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0253	0.2604	0.2718	4.2000e-004		0.0143	0.0143		0.0131	0.0131	0.0000	36.7323	36.7323	0.0119	0.0000	36.9818
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0253**	**0.2604**	**0.2718**	**4.2000e-004**		**0.0143**	**0.0143**		**0.0131**	**0.0131**	**0.0000**	**36.7323**	**36.7323**	**0.0119**	**0.0000**	**36.9818**

3.7 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.6000e-004	9.9000e-004	9.2500e-003	3.0000e-005	2.4500e-003	2.0000e-005	2.4700e-003	6.5000e-004	2.0000e-005	6.7000e-004	0.0000	1.9539	1.9539	9.0000e-005	0.0000	1.9559
Total	**7.6000e-004**	**9.9000e-004**	**9.2500e-003**	**3.0000e-005**	**2.4500e-003**	**2.0000e-005**	**2.4700e-003**	**6.5000e-004**	**2.0000e-005**	**6.7000e-004**	**0.0000**	**1.9539**	**1.9539**	**9.0000e-005**	**0.0000**	**1.9559**

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	0.0103	0.2095	0.3173	4.2000e-004		0.0116	0.0116		0.0116	0.0116	0.0000	36.7322	36.7322	0.0119	0.0000	36.9817
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0103**	**0.2095**	**0.3173**	**4.2000e-004**		**0.0116**	**0.0116**		**0.0116**	**0.0116**	**0.0000**	**36.7322**	**36.7322**	**0.0119**	**0.0000**	**36.9817**

3.7 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.6000e-004	9.9000e-004	9.2500e-003	3.0000e-005	2.4500e-003	2.0000e-005	2.4700e-003	6.5000e-004	2.0000e-005	6.7000e-004	0.0000	1.9539	1.9539	9.0000e-005	0.0000	1.9559
Total	**7.6000e-004**	**9.9000e-004**	**9.2500e-003**	**3.0000e-005**	**2.4500e-003**	**2.0000e-005**	**2.4700e-003**	**6.5000e-004**	**2.0000e-005**	**6.7000e-004**	**0.0000**	**1.9539**	**1.9539**	**9.0000e-005**	**0.0000**	**1.9559**

3.8 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.8407					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0219	0.1524	0.1657	2.7000e-004		0.0100	0.0100		0.0100	0.0100	0.0000	23.1070	23.1070	1.7900e-003	0.0000	23.1445
Total	**1.8626**	**0.1524**	**0.1657**	**2.7000e-004**		**0.0100**	**0.0100**		**0.0100**	**0.0100**	**0.0000**	**23.1070**	**23.1070**	**1.7900e-003**	**0.0000**	**23.1445**

3.8 Architectural Coating - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0202	0.0264	0.2466	8.0000e-004	0.0653	4.7000e-004	0.0658	0.0174	4.4000e-004	0.0178	0.0000	52.0945	52.0945	2.4800e-003	0.0000	52.1464
Total	**0.0202**	**0.0264**	**0.2466**	**8.0000e-004**	**0.0653**	**4.7000e-004**	**0.0658**	**0.0174**	**4.4000e-004**	**0.0178**	**0.0000**	**52.0945**	**52.0945**	**2.4800e-003**	**0.0000**	**52.1464**

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	1.8407					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.3800e-003	0.1228	0.1658	2.7000e-004		8.6100e-003	8.6100e-003		8.6100e-003	8.6100e-003	0.0000	23.1069	23.1069	1.7900e-003	0.0000	23.1445
Total	**1.8460**	**0.1228**	**0.1658**	**2.7000e-004**		**8.6100e-003**	**8.6100e-003**		**8.6100e-003**	**8.6100e-003**	**0.0000**	**23.1069**	**23.1069**	**1.7900e-003**	**0.0000**	**23.1445**

3.8 Architectural Coating - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0202	0.0264	0.2466	8.0000e-004	0.0653	4.7000e-004	0.0658	0.0174	4.4000e-004	0.0178	0.0000	52.0945	52.0945	2.4800e-003	0.0000	52.1464
Total	**0.0202**	**0.0264**	**0.2466**	**8.0000e-004**	**0.0653**	**4.7000e-004**	**0.0658**	**0.0174**	**4.4000e-004**	**0.0178**	**0.0000**	**52.0945**	**52.0945**	**2.4800e-003**	**0.0000**	**52.1464**

3.8 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	2.6542					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0286	0.1993	0.2372	3.9000e-004		0.0123	0.0123		0.0123	0.0123	0.0000	33.3200	33.3200	2.2900e-003	0.0000	33.3680
Total	**2.6828**	**0.1993**	**0.2372**	**3.9000e-004**		**0.0123**	**0.0123**		**0.0123**	**0.0123**	**0.0000**	**33.3200**	**33.3200**	**2.2900e-003**	**0.0000**	**33.3680**

3.8 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0277	0.0358	0.3371	1.1600e-003	0.0942	7.0000e-004	0.0949	0.0250	6.4000e-004	0.0257	0.0000	73.8664	73.8664	3.4300e-003	0.0000	73.9385
Total	**0.0277**	**0.0358**	**0.3371**	**1.1600e-003**	**0.0942**	**7.0000e-004**	**0.0949**	**0.0250**	**6.4000e-004**	**0.0257**	**0.0000**	**73.8664**	**73.8664**	**3.4300e-003**	**0.0000**	**73.9385**

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	2.6542					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.7600e-003	0.1771	0.2391	3.9000e-004		0.0124	0.0124		0.0124	0.0124	0.0000	33.3199	33.3199	2.2900e-003	0.0000	33.3679
Total	**2.6620**	**0.1771**	**0.2391**	**3.9000e-004**		**0.0124**	**0.0124**		**0.0124**	**0.0124**	**0.0000**	**33.3199**	**33.3199**	**2.2900e-003**	**0.0000**	**33.3679**

3.8 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0277	0.0358	0.3371	1.1600e-003	0.0942	7.0000e-004	0.0949	0.0250	6.4000e-004	0.0257	0.0000	73.8664	73.8664	3.4300e-003	0.0000	73.9385
Total	**0.0277**	**0.0358**	**0.3371**	**1.1600e-003**	**0.0942**	**7.0000e-004**	**0.0949**	**0.0250**	**6.4000e-004**	**0.0257**	**0.0000**	**73.8664**	**73.8664**	**3.4300e-003**	**0.0000**	**73.9385**

3.8 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	2.6440					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0266	0.1831	0.2358	3.9000e-004		0.0106	0.0106		0.0106	0.0106	0.0000	33.1923	33.1923	2.1600e-003	0.0000	33.2377
Total	**2.6706**	**0.1831**	**0.2358**	**3.9000e-004**		**0.0106**	**0.0106**		**0.0106**	**0.0106**	**0.0000**	**33.1923**	**33.1923**	**2.1600e-003**	**0.0000**	**33.2377**

3.8 Architectural Coating - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0263	0.0337	0.3169	1.1600e-003	0.0938	7.0000e-004	0.0945	0.0249	6.5000e-004	0.0256	0.0000	72.3580	72.3580	3.2800e-003	0.0000	72.4270
Total	**0.0263**	**0.0337**	**0.3169**	**1.1600e-003**	**0.0938**	**7.0000e-004**	**0.0945**	**0.0249**	**6.5000e-004**	**0.0256**	**0.0000**	**72.3580**	**72.3580**	**3.2800e-003**	**0.0000**	**72.4270**

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	2.6440					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.7300e-003	0.1764	0.2382	3.9000e-004		0.0124	0.0124		0.0124	0.0124	0.0000	33.1923	33.1923	2.1600e-003	0.0000	33.2376
Total	**2.6518**	**0.1764**	**0.2382**	**3.9000e-004**		**0.0124**	**0.0124**		**0.0124**	**0.0124**	**0.0000**	**33.1923**	**33.1923**	**2.1600e-003**	**0.0000**	**33.2376**

3.8 Architectural Coating - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0263	0.0337	0.3169	1.1600e-003	0.0938	7.0000e-004	0.0945	0.0249	6.5000e-004	0.0256	0.0000	72.3580	72.3580	3.2800e-003	0.0000	72.4270
Total	**0.0263**	**0.0337**	**0.3169**	**1.1600e-003**	**0.0938**	**7.0000e-004**	**0.0945**	**0.0249**	**6.5000e-004**	**0.0256**	**0.0000**	**72.3580**	**72.3580**	**3.2800e-003**	**0.0000**	**72.4270**

3.8 Architectural Coating - 2023

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	2.6440					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0249	0.1694	0.2355	3.9000e-004		9.2100e-003	9.2100e-003		9.2100e-003	9.2100e-003	0.0000	33.1923	33.1923	1.9900e-003	0.0000	33.2340
Total	**2.6690**	**0.1694**	**0.2355**	**3.9000e-004**		**9.2100e-003**	**9.2100e-003**		**9.2100e-003**	**9.2100e-003**	**0.0000**	**33.1923**	**33.1923**	**1.9900e-003**	**0.0000**	**33.2340**

3.8 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0251	0.0319	0.2999	1.1600e-003	0.0938	7.0000e-004	0.0945	0.0249	6.5000e-004	0.0256	0.0000	71.2648	71.2648	3.1600e-003	0.0000	71.3312
Total	**0.0251**	**0.0319**	**0.2999**	**1.1600e-003**	**0.0938**	**7.0000e-004**	**0.0945**	**0.0249**	**6.5000e-004**	**0.0256**	**0.0000**	**71.2648**	**71.2648**	**3.1600e-003**	**0.0000**	**71.3312**

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	2.6440					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.7300e-003	0.1764	0.2382	3.9000e-004		0.0124	0.0124		0.0124	0.0124	0.0000	33.1923	33.1923	1.9900e-003	0.0000	33.2340
Total	**2.6518**	**0.1764**	**0.2382**	**3.9000e-004**		**0.0124**	**0.0124**		**0.0124**	**0.0124**	**0.0000**	**33.1923**	**33.1923**	**1.9900e-003**	**0.0000**	**33.2340**

3.8 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0251	0.0319	0.2999	1.1600e-003	0.0938	7.0000e-004	0.0945	0.0249	6.5000e-004	0.0256	0.0000	71.2648	71.2648	3.1600e-003	0.0000	71.3312
Total	**0.0251**	**0.0319**	**0.2999**	**1.1600e-003**	**0.0938**	**7.0000e-004**	**0.0945**	**0.0249**	**6.5000e-004**	**0.0256**	**0.0000**	**71.2648**	**71.2648**	**3.1600e-003**	**0.0000**	**71.3312**

3.8 Architectural Coating - 2024

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	2.6644					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0237	0.1597	0.2371	3.9000e-004		7.9800e-003	7.9800e-003		7.9800e-003	7.9800e-003	0.0000	33.4476	33.4476	1.8800e-003	0.0000	33.4872
Total	**2.6881**	**0.1597**	**0.2371**	**3.9000e-004**		**7.9800e-003**	**7.9800e-003**		**7.9800e-003**	**7.9800e-003**	**0.0000**	**33.4476**	**33.4476**	**1.8800e-003**	**0.0000**	**33.4872**

3.8 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0242	0.0306	0.2878	1.1600e-003	0.0946	7.1000e-004	0.0953	0.0251	6.6000e-004	0.0258	0.0000	70.8337	70.8337	3.0800e-003	0.0000	70.8984
Total	**0.0242**	**0.0306**	**0.2878**	**1.1600e-003**	**0.0946**	**7.1000e-004**	**0.0953**	**0.0251**	**6.6000e-004**	**0.0258**	**0.0000**	**70.8337**	**70.8337**	**3.0800e-003**	**0.0000**	**70.8984**

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	2.6644					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.7900e-003	0.1778	0.2401	3.9000e-004		0.0125	0.0125		0.0125	0.0125	0.0000	33.4476	33.4476	1.8800e-003	0.0000	33.4871
Total	**2.6722**	**0.1778**	**0.2401**	**3.9000e-004**		**0.0125**	**0.0125**		**0.0125**	**0.0125**	**0.0000**	**33.4476**	**33.4476**	**1.8800e-003**	**0.0000**	**33.4871**

3.8 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0242	0.0306	0.2878	1.1600e-003	0.0946	7.1000e-004	0.0953	0.0251	6.6000e-004	0.0258	0.0000	70.8337	70.8337	3.0800e-003	0.0000	70.8984
Total	**0.0242**	**0.0306**	**0.2878**	**1.1600e-003**	**0.0946**	**7.1000e-004**	**0.0953**	**0.0251**	**6.6000e-004**	**0.0258**	**0.0000**	**70.8337**	**70.8337**	**3.0800e-003**	**0.0000**	**70.8984**

3.8 Architectural Coating - 2025

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	0.2339					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9600e-003	0.0132	0.0208	3.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.0000	2.9362	2.9362	1.6000e-004	0.0000	2.9396
Total	**0.2359**	**0.0132**	**0.0208**	**3.0000e-005**		**5.9000e-004**	**5.9000e-004**		**5.9000e-004**	**5.9000e-004**	**0.0000**	**2.9362**	**2.9362**	**1.6000e-004**	**0.0000**	**2.9396**

3.8 Architectural Coating - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0400e-003	2.5800e-003	0.0242	1.0000e-004	8.3000e-003	6.0000e-005	8.3600e-003	2.2100e-003	6.0000e-005	2.2600e-003	0.0000	6.1435	6.1435	2.6000e-004	0.0000	6.1490
Total	**2.0400e-003**	**2.5800e-003**	**0.0242**	**1.0000e-004**	**8.3000e-003**	**6.0000e-005**	**8.3600e-003**	**2.2100e-003**	**6.0000e-005**	**2.2600e-003**	**0.0000**	**6.1435**	**6.1435**	**2.6000e-004**	**0.0000**	**6.1490**

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	0.2339					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.8000e-004	0.0156	0.0211	3.0000e-005		1.0900e-003	1.0900e-003		1.0900e-003	1.0900e-003	0.0000	2.9362	2.9362	1.6000e-004	0.0000	2.9396
Total	**0.2346**	**0.0156**	**0.0211**	**3.0000e-005**		**1.0900e-003**	**1.0900e-003**		**1.0900e-003**	**1.0900e-003**	**0.0000**	**2.9362**	**2.9362**	**1.6000e-004**	**0.0000**	**2.9396**

3.8 Architectural Coating - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0400e-003	2.5800e-003	0.0242	1.0000e-004	8.3000e-003	6.0000e-005	8.3600e-003	2.2100e-003	6.0000e-005	2.2600e-003	0.0000	6.1435	6.1435	2.6000e-004	0.0000	6.1490
Total	**2.0400e-003**	**2.5800e-003**	**0.0242**	**1.0000e-004**	**8.3000e-003**	**6.0000e-005**	**8.3600e-003**	**2.2100e-003**	**6.0000e-005**	**2.2600e-003**	**0.0000**	**6.1435**	**6.1435**	**2.6000e-004**	**0.0000**	**6.1490**

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	4.5210	11.2716	51.0090	0.1502	10.4080	0.1700	10.5780	2.7836	0.1569	2.9405	0.0000	10,425.2331	10,425.2331	0.3963	0.0000	10,433.5555
Unmitigated	4.5210	11.2716	51.0090	0.1502	10.4080	0.1700	10.5780	2.7836	0.1569	2.9405	0.0000	10,425.2331	10,425.2331	0.3963	0.0000	10,433.5555

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	211.50	211.50	211.50	521,602	521,602
Condo/Townhouse	1,968.00	1,968.00	1968.00	7,282,900	7,282,900
Single Family Housing	5,340.00	5,340.00	5340.00	19,761,528	19,761,528
User Defined Commercial	50.00	50.00	50.00	113,203	113,203
Total	7,569.50	7,569.50	7,569.50	27,679,233	27,679,233

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
City Park	14.70	6.60	6.60	33.00	48.00	19.00	66	28	6
Condo/Townhouse	16.80	7.10	7.90	41.60	18.80	39.60	86	11	3
Single Family Housing	16.80	7.10	7.90	41.60	18.80	39.60	86	11	3
User Defined Commercial	14.70	6.60	6.60	5.00	90.00	5.00	86	11	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.513300	0.073549	0.191092	0.130830	0.036094	0.005140	0.012550	0.022916	0.001871	0.002062	0.006564	0.000586	0.003446

4.4 Fleet Mix

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,660.4002	1,660.4002	0.0668	0.0138	1,666.0901
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,712.5514	1,712.5514	0.0689	0.0143	1,718.4200
NaturalGas Mitigated	0.0941	0.8044	0.3452	5.1300e-003		0.0650	0.0650		0.0650	0.0650	0.0000	931.0292	931.0292	0.0178	0.0171	936.6953
NaturalGas Unmitigated	0.0941	0.8044	0.3452	5.1300e-003		0.0650	0.0650		0.0650	0.0650	0.0000	931.0292	931.0292	0.0178	0.0171	936.6953

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					
City Park	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
Condo/Townhouse	3.29174e+006	0.0178	0.1517	0.0645	9.7000e-004		0.0123	0.0123		0.0123	0.0123	0.0000	175.6597	175.6597	3.3700e-003	3.2200e-003	176.7287
Single Family Housing	1.40091e+007	0.0755	0.6455	0.2747	4.1200e-003		0.0522	0.0522		0.0522	0.0522	0.0000	747.5784	747.5784	0.0143	0.0137	752.1280
User Defined Commercial	146000	7.9000e-004	7.1600e-003	6.0100e-003	4.0000e-005		5.4000e-004	5.4000e-004		5.4000e-004	5.4000e-004	0.0000	7.7911	7.7911	1.5000e-004	1.4000e-004	7.8385
Total		**0.0941**	**0.8044**	**0.3452**	**5.1300e-003**		**0.0650**	**0.0650**		**0.0650**	**0.0650**	**0.0000**	**931.0292**	**931.0292**	**0.0179**	**0.0171**	**936.6953**

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					
City Park	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
Condo/Townhouse	3.29174e+006	0.0178	0.1517	0.0645	9.7000e-004		0.0123	0.0123		0.0123	0.0123	0.0000	175.6597	175.6597	3.3700e-003	3.2200e-003	176.7287
Single Family Housing	1.40091e+007	0.0755	0.6455	0.2747	4.1200e-003		0.0522	0.0522		0.0522	0.0522	0.0000	747.5784	747.5784	0.0143	0.0137	752.1280
User Defined Commercial	146000	7.9000e-004	7.1600e-003	6.0100e-003	4.0000e-005		5.4000e-004	5.4000e-004		5.4000e-004	5.4000e-004	0.0000	7.7911	7.7911	1.5000e-004	1.4000e-004	7.8385
Total		**0.0941**	**0.8044**	**0.3452**	**5.1300e-003**		**0.0650**	**0.0650**		**0.0650**	**0.0650**	**0.0000**	**931.0292**	**931.0292**	**0.0179**	**0.0171**	**936.6953**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	79231.3	25.8935	1.0400e-003	2.2000e-004	25.9822
Condo/Townhouse	1.05437e+006	344.5760	0.0139	2.8700e-003	345.7568
Single Family Housing	3.72163e+006	1,216.2605	0.0490	0.0101	1,220.4284
User Defined Commercial	385000	125.8214	5.0600e-003	1.0500e-003	126.2525
Total		**1,712.5514**	**0.0689**	**0.0143**	**1,718.4200**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	79231.3	25.8935	1.0400e-003	2.2000e-004	25.9822
Condo/Townhouse	1.01855e+006	332.8720	0.0134	2.7700e-003	334.0127
Single Family Housing	3.59786e+006	1,175.8133	0.0473	9.7900e-003	1,179.8426
User Defined Commercial	385000	125.8214	5.0600e-003	1.0500e-003	126.2525
Total		**1,660.4002**	**0.0668**	**0.0138**	**1,666.0901**

6.0 Area Detail

6.1 Mitigation Measures Area

Use only Natural Gas Hearths

	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	7.7972	0.0672	5.8139	3.1000e-004		0.0706	0.0706		0.0702	0.0702	0.0000	562.3907	562.3907	0.0198	0.0101	565.9495
Unmitigated	56.6834	0.7312	66.1022	0.0239		8.5025	8.5025		8.5023	8.5023	805.7070	347.3623	1,153.0693	0.7528	0.0634	1,188.5235

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	2.0910					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	5.4734					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	48.9420	0.6640	60.2913	0.0236		8.4706	8.4706		8.4703	8.4703	805.7070	337.9018	1,143.6088	0.7435	0.0634	1,178.8692
Landscaping	0.1770	0.0672	5.8109	3.1000e-004		0.0320	0.0320		0.0320	0.0320	0.0000	9.4606	9.4606	9.2300e-003	0.0000	9.6543
Total	**56.6834**	**0.7312**	**66.1022**	**0.0239**		**8.5025**	**8.5025**		**8.5023**	**8.5023**	**805.7070**	**347.3623**	**1,153.0693**	**0.7528**	**0.0634**	**1,188.5235**

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	2.0910					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	5.4734					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0559	0.0000	3.0500e-003	0.0000		0.0386	0.0386		0.0382	0.0382	0.0000	552.9302	552.9302	0.0106	0.0101	556.2952
Landscaping	0.1770	0.0672	5.8109	3.1000e-004		0.0320	0.0320		0.0320	0.0320	0.0000	9.4606	9.4606	9.2300e-003	0.0000	9.6543
Total	**7.7973**	**0.0672**	**5.8139**	**3.1000e-004**		**0.0706**	**0.0706**		**0.0702**	**0.0702**	**0.0000**	**562.3907**	**562.3907**	**0.0198**	**0.0101**	**565.9495**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	286.9613	1.3416	0.0337	325.5827
Unmitigated	366.2406	1.6774	0.0422	414.5432

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 4.40601	15.9975	6.4000e-004	1.3000e-004	16.0524
Condo/Townhouse	16.0279 / 10.1045	109.9777	0.5265	0.0132	125.1276
Single Family Housing	34.7922 / 21.9342	238.7320	1.1429	0.0287	271.6185
User Defined Commercial	0.223478 / 0.140889	1.5334	7.3400e-003	1.8000e-004	1.7447
Total		**366.2406**	**1.6773**	**0.0422**	**414.5432**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 3.52481	12.7980	5.2000e-004	1.1000e-004	12.8419
Condo/Townhouse	12.8223 / 8.08363	86.0883	0.4211	0.0106	98.2018
Single Family Housing	27.8338 / 17.5474	186.8746	0.9141	0.0229	213.1698
User Defined Commercial	0.178783 / 0.112711	1.2003	5.8700e-003	1.5000e-004	1.3692
Total		**286.9613**	**1.3416**	**0.0337**	**325.5827**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	112.8381	6.6685	0.0000	252.8775
Unmitigated	150.4508	8.8914	0.0000	337.1700

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.36	0.0731	4.3200e-003	0.0000	0.1638
Condo/Townhouse	113.16	22.9705	1.3575	0.0000	51.4783
Single Family Housing	626.07	127.0866	7.5106	0.0000	284.8092
User Defined Commercial	1.58	0.3207	0.0190	0.0000	0.7188
Total		**150.4508**	**8.8914**	**0.0000**	**337.1700**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.27	0.0548	3.2400e-003	0.0000	0.1228
Condo/Townhouse	84.87	17.2278	1.0181	0.0000	38.6087
Single Family Housing	469.553	95.3149	5.6330	0.0000	213.6069
User Defined Commercial	1.185	0.2405	0.0142	0.0000	0.5391
Total		**112.8381**	**6.6686**	**0.0000**	**252.8775**

9.0 Operational Offroad

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

10.0 Vegetation

ATTACHMENT B

CALEEMOD 2013.2.2 – 9,605 Solar Panels

Warner Ranch Solar

San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

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

1.2 Other Project Characteristics

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

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Project would install 6,500 Solar Panels 300Watts Each

Land Use - Rooftop Solar

Construction Phase -

Off-road Equipment -

Off-road Equipment - zero hours

Trips and VMT - zero

Grading -

Architectural Coating -

Vehicle Trips -

Woodstoves - asdf

Area Coating -

Landscape Equipment - zero

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

Water And Wastewater -

Energy Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	250	0
tblConstructionPhase	PhaseEndDate	12/30/2016	12/31/2016
tblLandUse	LotAcreage	0.00	1.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2020
tblTripsAndVMT	WorkerTripNumber	3.00	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	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**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0000**	**2.0000e-005**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	-1,093.5675	-1,093.5675	-0.0440	-0.0091	-1,097.3150
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**-1,093.5675**	**-1,093.5675**	**-0.0440**	**-0.0091**	**-1,097.3150**

	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**	**5,467,837,500.00**	**5,467,837,500.00**	**0.00**	**0.00**	**5,486,574,850.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	12/30/2016	12/31/2016	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

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

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	1	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.2 Site Preparation - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.2 Site Preparation - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

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

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
User Defined Industrial	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.513300	0.073549	0.191092	0.130830	0.036094	0.005140	0.012550	0.022916	0.001871	0.002062	0.006564	0.000586	0.003446

4.4 Fleet Mix

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Kilowatt Hours of Renewable Electricity Generated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	-1,093.5675	-1,093.5675	-0.0440	-0.0091	-1,097.3150
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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					
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Unmitigated

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

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
User Defined Industrial	-3.3462e+006	-1,093.5675	-0.0440	-0.0091	-1,097.3150
Total		**-1,093.5675**	**-0.0440**	**-0.0091**	**-1,097.3150**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Unmitigated	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Total	**0.0000**	**0.0000**	**1.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0000**	**2.0000e-005**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Total	**0.0000**	**0.0000**	**1.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0000**	**2.0000e-005**

7.0 Water Detail

7.1 Mitigation Measures Water

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

7.2 Water by Land Use

Unmitigated

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

7.2 Water by Land Use

Mitigated

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

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

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

8.2 Waste by Land Use

Unmitigated

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

Mitigated

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

9.0 Operational Offroad

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

10.0 Vegetation

ATTACHMENT C

Estimated Solar Energy Calculations

Attachment C

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

Model elevation

Northern boundary
34

Western boundary
-118

Center
Latitude **33.5**
Longitude **-117.5**

Eastern boundary
-117

Southern boundary
33

Parameters for Tilted Solar Panels:

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

Lat 33.36 Lon -117.07	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Average
SSE HRZ	3.05	3.80	5.05	6.38	6.72	6.97	6.97	6.52	5.53	4.26	3.44	2.86	5.13
K	0.56	0.56	0.59	0.63	0.60	0.60	0.61	0.62	0.61	0.58	0.60	0.57	0.59
Diffuse	0.90	1.18	1.48	1.71	2.08	2.19	2.07	1.82	1.54	1.25	0.90	0.80	1.50
Direct	5.09	5.27	6.22	7.29	6.91	7.06	7.25	7.16	6.59	5.75	5.76	5.14	6.30
Tilt 0	3.00	3.77	5.00	6.23	6.69	6.93	6.93	6.49	5.45	4.23	3.37	2.83	5.08
Tilt 18	3.96	4.60	5.63	6.53	6.58	6.67	6.74	6.59	5.95	5.03	4.39	3.85	5.55
Tilt 33	4.52	5.02	5.83	6.39	6.13	6.09	6.20	6.29	6.03	5.40	4.98	4.47	5.61
Tilt 48	4.82	5.17	5.71	5.92	5.38	5.21	5.36	5.67	5.78	5.48	5.28	4.83	5.38
Tilt 90	4.19	4.10	3.86	3.16	2.48	2.25	2.35	2.84	3.60	4.15	4.50	4.34	3.48
OPT	4.87	5.17	5.83	6.53	6.71	6.93	6.94	6.61	6.04	5.49	5.31	4.9[illegible]	5.95
OPT ANG	57.0	48.0	35.0	20.0	5.00	0.00	2.00	12.0	29.0	44.0	55.0	60.0	50.4

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

Parameter Definition

$$E\ (kWh) = \#Panels * Panel\ Rating * H * 365days * PR$$

#Panels =9605

Panel Rating in kWp = .285 kWp

H= Annual Average irradiation on tilted panels (kwh/m^2/year) = 5.95 (365) = 2171.75

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

E=Energy (kWh) = 9605 panels * .285kwp * 2171.75 (kwh/m^2/year) *.80 = 4,756,002.20 kWh

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
User Defined Industrial	-4.756e +006	-1,554.3032	-0.0626	-0.0129	-1,559.6295
Total		**-1,554.3032**	**-0.0626**	**-0.0129**	**-1,559.6295**

ATTACHMENT D

CALEEMOD 2013.2.2 – Project Buildout Year 2025

Warner Ranch Residential Development (2025)

San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Commercial	1.00	User Defined Unit	1.00	10,000.00	10
City Park	4.23	Acre	4.23	184,258.80	0
Condo/Townhouse	246.00	Dwelling Unit	11.77	246,000.00	704
Single Family Housing	534.00	Dwelling Unit	159.00	961,200.00	1527

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2025
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Per Project Specifications

Land Use - Per project description

Construction Phase - Estimates per project description

Off-road Equipment -

Off-road Equipment - Estimates per project description

Off-road Equipment - Estimates per project description

Off-road Equipment - Off-Highway Trucks represent Water Trucks as required per project description.

Off-road Equipment - Per project description

Off-road Equipment - Off-Highway trucks represent Water Trucks needed per project description.

Off-road Equipment - Estimates per Project requirements

Off-road Equipment - Estimates per project description.

Trips and VMT - Estimates per project description

Demolition -

Architectural Coating - Estimates per project description

Vehicle Trips - Updated per traffic study

Vechicle Emission Factors -

Vechicle Emission Factors -

Vechicle Emission Factors -

Area Coating -

Energy Use - User defined subtype represents project's proposed Fire Station.

Water And Wastewater - User Defined water usage refers to project's Fire House. City park water use was derived using California Department of Water Resources 2009 model per equation in report (4,406,008 GPY)

Solid Waste - User Defined Commercial is for the Firehouse. It's estimated that 2.91 residents per multi-family unit and since 10 firefighters are assumed to live in the firehouse, 10/2.91=3.43x the waste of multi-family is 0.46 tons/year.

Construction Off-road Equipment Mitigation - Proposed mitigation

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	150.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150

tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	150	250
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
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tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	220.00	1,247.00
tblConstructionPhase	NumDays	3,100.00	1,305.00
tblConstructionPhase	NumDays	200.00	11.00
tblConstructionPhase	NumDays	310.00	554.00
tblConstructionPhase	NumDays	310.00	45.00
tblConstructionPhase	NumDays	220.00	47.00
tblConstructionPhase	PhaseEndDate	1/16/2025	1/31/2025
tblConstructionPhase	PhaseEndDate	1/30/2025	1/31/2025
tblConstructionPhase	PhaseEndDate	4/8/2025	4/7/2020
tblConstructionPhase	PhaseStartDate	4/8/2020	4/23/2020
tblConstructionPhase	PhaseStartDate	1/31/2020	2/3/2020
tblConstructionPhase	PhaseStartDate	2/1/2025	2/3/2020
tblEnergyUse	LightingElect	0.00	0.43
tblEnergyUse	NT24E	0.00	38.50
tblEnergyUse	NT24NG	0.00	14.60
tblGrading	AcresOfGrading	2,423.75	175.00
tblGrading	AcresOfGrading	33.75	175.00
tblLandUse	LandUseSquareFeet	0.00	10,000.00
tblLandUse	LotAcreage	0.00	1.00
tblLandUse	LotAcreage	15.38	11.77
tblLandUse	LotAcreage	173.38	159.00

tblLandUse	Population	0.00	10.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
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tblOffRoadEquipment	UsageHours	8.00	7.00
tblOffRoadEquipment	UsageHours	8.00	6.00
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tblOffRoadEquipment	UsageHours	8.00	7.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblProjectCharacteristics	OperationalYear	2014	2025
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	0.00	1.58
tblTripsAndVMT	VendorTripLength	6.60	7.30
tblTripsAndVMT	VendorTripLength	6.60	7.30
tblTripsAndVMT	VendorTripLength	6.60	7.30
tblTripsAndVMT	VendorTripLength	6.60	7.30
tblTripsAndVMT	VendorTripLength	6.60	7.30
tblTripsAndVMT	VendorTripLength	6.60	7.30
tblTripsAndVMT	VendorTripLength	6.60	7.30
tblTripsAndVMT	WorkerTripLength	16.80	10.80
tblTripsAndVMT	WorkerTripLength	16.80	10.80
tblTripsAndVMT	WorkerTripLength	16.80	10.80
tblTripsAndVMT	WorkerTripLength	16.80	10.80

tblTripsAndVMT	WorkerTripLength	16.80	10.80
tblTripsAndVMT	WorkerTripLength	16.80	10.80
tblTripsAndVMT	WorkerTripLength	16.80	10.80
tblTripsAndVMT	WorkerTripNumber	48.00	53.00
tblTripsAndVMT	WorkerTripNumber	15.00	28.00
tblVehicleTrips	CC_TTP	0.00	90.00
tblVehicleTrips	CNW_TTP	0.00	5.00
tblVehicleTrips	CW_TTP	0.00	5.00
tblVehicleTrips	DV_TP	0.00	11.00
tblVehicleTrips	PB_TP	0.00	3.00
tblVehicleTrips	PR_TP	0.00	86.00
tblVehicleTrips	ST_TR	1.59	50.00
tblVehicleTrips	ST_TR	7.16	8.00
tblVehicleTrips	ST_TR	10.08	10.00
tblVehicleTrips	ST_TR	0.00	50.00
tblVehicleTrips	SU_TR	1.59	50.00
tblVehicleTrips	SU_TR	6.07	8.00
tblVehicleTrips	SU_TR	8.77	10.00
tblVehicleTrips	SU_TR	0.00	50.00
tblVehicleTrips	WD_TR	1.59	50.00
tblVehicleTrips	WD_TR	6.59	8.00
tblVehicleTrips	WD_TR	9.57	10.00
tblVehicleTrips	WD_TR	0.00	50.00
tblWater	IndoorWaterUseRate	0.00	223,478.30
tblWater	OutdoorWaterUseRate	5,039,966.11	4,406,008.00
tblWater	OutdoorWaterUseRate	0.00	140,888.50

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					
2017	0.7308	8.3069	5.4519	7.7400e-003	7.4128	0.3726	7.7853	4.0274	0.3429	4.3703	0.0000	712.5386	712.5386	0.2127	0.0000	717.0056
2018	1.6655	18.6165	12.5345	0.0200	7.4463	0.8217	8.2679	4.0363	0.7559	4.7923	0.0000	1,811.3092	1,811.3092	0.5514	0.0000	1,822.8875
2019	1.2295	13.3991	9.4107	0.0159	7.6649	0.5921	8.2569	4.1183	0.5447	4.6629	0.0000	1,414.0381	1,414.0381	0.4372	0.0000	1,423.2190
2020	2.4526	4.1211	6.1729	0.0138	0.8191	0.1921	1.0112	0.2433	0.1803	0.4236	0.0000	1,056.1536	1,056.1536	0.1166	0.0000	1,058.6025
2021	3.2179	3.4288	6.0595	0.0144	0.6627	0.1541	0.8168	0.1781	0.1453	0.3234	0.0000	1,077.4924	1,077.4924	0.0976	0.0000	1,079.5426
2022	3.1659	3.0628	5.8308	0.0143	0.6602	0.1324	0.7925	0.1774	0.1248	0.3022	0.0000	1,065.8171	1,065.8171	0.0959	0.0000	1,067.8304
2023	3.1325	2.7942	5.6491	0.0143	0.6602	0.1165	0.7767	0.1774	0.1098	0.2873	0.0000	1,058.6924	1,058.6924	0.0944	0.0000	1,060.6739
2024	3.1289	2.6649	5.5140	0.0144	0.6653	0.1049	0.7701	0.1788	0.0988	0.2776	0.0000	1,060.9997	1,060.9997	0.0939	0.0000	1,062.9720
2025	0.2726	0.2208	0.4735	1.2700e-003	0.0584	8.1200e-003	0.0665	0.0157	7.6500e-003	0.0233	0.0000	92.7032	92.7032	8.1600e-003	0.0000	92.8745
Total	**18.9962**	**56.6151**	**57.0970**	**0.1161**	**26.0498**	**2.4943**	**28.5441**	**13.1527**	**2.3103**	**15.4629**	**0.0000**	**9,349.7442**	**9,349.7442**	**1.7078**	**0.0000**	**9,385.6079**

2.1 Overall Construction

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					
2017	0.1035	2.5778	4.1107	7.7400e-003	7.4128	0.0976	7.5103	4.0274	0.1023	4.1296	0.0000	712.5378	712.5378	0.2127	0.0000	717.0048
2018	0.3063	7.1771	10.8766	0.0200	7.4463	0.2735	7.7197	4.0363	0.2835	4.3198	0.0000	1,811.3071	1,811.3071	0.5514	0.0000	1,822.8854
2019	0.2588	5.9547	8.8564	0.0159	7.6649	0.2301	7.8950	4.1183	0.2373	4.3555	0.0000	1,414.0365	1,414.0365	0.4372	0.0000	1,423.2173
2020	2.1812	1.8738	6.3269	0.0138	0.8191	0.0513	0.8704	0.2433	0.0500	0.2933	0.0000	1,056.1531	1,056.1531	0.1166	0.0000	1,058.6021
2021	2.9927	1.4346	6.1754	0.0144	0.6627	0.0349	0.6977	0.1781	0.0336	0.2117	0.0000	1,077.4920	1,077.4920	0.0976	0.0000	1,079.5422
2022	2.9686	1.3261	5.9741	0.0143	0.6602	0.0346	0.6948	0.1774	0.0333	0.2107	0.0000	1,065.8167	1,065.8167	0.0959	0.0000	1,067.8300
2023	2.9541	1.2304	5.8081	0.0143	0.6602	0.0344	0.6945	0.1774	0.0330	0.2105	0.0000	1,058.6920	1,058.6920	0.0944	0.0000	1,060.6735
2024	2.9638	1.2225	5.6843	0.0144	0.6653	0.0347	0.7000	0.1788	0.0334	0.2121	0.0000	1,060.9993	1,060.9993	0.0939	0.0000	1,062.9716
2025	0.2594	0.1061	0.4894	1.2700e-003	0.0584	3.0500e-003	0.0615	0.0157	2.9400e-003	0.0186	0.0000	92.7031	92.7031	8.1600e-003	0.0000	92.8745
Total	**14.9885**	**22.9031**	**54.3020**	**0.1161**	**26.0498**	**0.7941**	**26.8438**	**13.1527**	**0.8092**	**13.9619**	**0.0000**	**9,349.7375**	**9,349.7375**	**1.7078**	**0.0000**	**9,385.6012**

	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	**21.10**	**59.55**	**4.90**	**0.00**	**0.00**	**68.16**	**5.96**	**0.00**	**64.97**	**9.71**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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	56.6802	0.7307	66.0775	0.0239		8.5027	8.5027		8.5024	8.5024	805.7070	347.3623	1,153.0693	0.7526	0.0634	1,188.5200
Energy	0.0987	0.8439	0.3621	5.3800e-003		0.0682	0.0682		0.0682	0.0682	0.0000	2,720.3154	2,720.3154	0.0889	0.0324	2,732.2350
Mobile	3.7306	8.0225	40.7652	0.1505	10.4080	0.1636	10.5717	2.7835	0.1511	2.9346	0.0000	9,896.8999	9,896.8999	0.3300	0.0000	9,903.8291
Waste						0.0000	0.0000		0.0000	0.0000	150.4508	0.0000	150.4508	8.8914	0.0000	337.1700
Water						0.0000	0.0000		0.0000	0.0000	16.1938	350.0468	366.2406	1.6774	0.0422	414.5432
Total	**60.5095**	**9.5971**	**107.2047**	**0.1798**	**10.4080**	**8.7345**	**19.1426**	**2.7835**	**8.7217**	**11.5052**	**972.3516**	**13,314.6244**	**14,286.9760**	**11.7402**	**0.1380**	**14,576.2973**

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	7.7940	0.0667	5.7892	3.1000e-004		0.0707	0.0707		0.0703	0.0703	0.0000	562.3907	562.3907	0.0197	0.0101	565.9460
Energy	0.0987	0.8439	0.3621	5.3800e-003		0.0682	0.0682		0.0682	0.0682	0.0000	2,718.1992	2,718.1992	0.0888	0.0324	2,730.1115
Mobile	3.7306	8.0225	40.7652	0.1505	10.4080	0.1636	10.5717	2.7835	0.1511	2.9346	0.0000	9,896.8999	9,896.8999	0.3300	0.0000	9,903.8291
Waste						0.0000	0.0000		0.0000	0.0000	112.8381	0.0000	112.8381	6.6685	0.0000	252.8775
Water						0.0000	0.0000		0.0000	0.0000	12.9550	274.0062	286.9613	1.3416	0.0337	325.5827
Total	**11.6233**	**8.9330**	**46.9164**	**0.1562**	**10.4080**	**0.3026**	**10.7106**	**2.7835**	**0.2896**	**3.0731**	**125.7931**	**13,451.4961**	**13,577.2892**	**8.4486**	**0.0763**	**13,778.3468**

	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	**80.79**	**6.92**	**56.24**	**13.10**	**0.00**	**96.54**	**44.05**	**0.00**	**96.68**	**73.29**	**87.06**	**-1.03**	**4.97**	**28.04**	**44.74**	**5.47**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	8/1/2017	8/15/2017	5	11	
2	Mass Grading	Grading	8/16/2017	9/30/2019	5	554	
3	Trenching	Trenching	10/1/2019	11/28/2019	5	43	
4	Fine Grading	Grading	11/29/2019	1/30/2020	5	45	
5	Building Construction	Building Construction	2/3/2020	1/31/2025	5	1305	
6	Paving	Paving	2/3/2020	4/7/2020	5	47	
7	Architectural Coating	Architectural Coating	4/23/2020	1/31/2025	5	1247	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 2,444,580; Residential Outdoor: 814,860; Non-Residential Indoor: 291,388; Non-Residential Outdoor: 97,129 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Mass Grading	Bore/Drill Rigs	2	7.00	205	0.50
Mass Grading	Graders	2	7.00	174	0.41
Mass Grading	Off-Highway Trucks	2	7.00	400	0.38
Mass Grading	Rubber Tired Dozers	5	7.00	255	0.40
Mass Grading	Scrapers	4	7.00	361	0.48
Mass Grading	Tractors/Loaders/Backhoes	4	5.00	97	0.37
Trenching	Excavators	2	8.00	162	0.38
Trenching	Other General Industrial Equipment	1	8.00	87	0.34
Trenching	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Fine Grading	Graders	2	6.00	174	0.41
Fine Grading	Off-Highway Trucks	2	8.00	400	0.38
Fine Grading	Rubber Tired Dozers	1	8.00	255	0.40
Fine Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	7.00	226	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
Paving	Pavers	1	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
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
Demolition	6	15.00	0.00	4.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Mass Grading	19	53.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Fine Grading	6	28.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	450.00	115.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	90.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

3.2 Demolition - 2017

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					4.5000e-004	0.0000	4.5000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0223	0.2348	0.1864	2.2000e-004		0.0117	0.0117		0.0109	0.0109	0.0000	20.1400	20.1400	5.5200e-003	0.0000	20.2560
Total	**0.0223**	**0.2348**	**0.1864**	**2.2000e-004**	**4.5000e-004**	**0.0117**	**0.0121**	**7.0000e-005**	**0.0109**	**0.0110**	**0.0000**	**20.1400**	**20.1400**	**5.5200e-003**	**0.0000**	**20.2560**

3.2 Demolition - 2017

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	4.0000e-005	5.2000e-004	4.6000e-004	0.0000	3.0000e-005	1.0000e-005	4.0000e-005	1.0000e-005	1.0000e-005	2.0000e-005	0.0000	0.1343	0.1343	0.0000	0.0000	0.1343
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e-004	3.4000e-004	3.2100e-003	1.0000e-005	6.6000e-004	0.0000	6.7000e-004	1.8000e-004	0.0000	1.8000e-004	0.0000	0.5927	0.5927	3.0000e-005	0.0000	0.5933
Total	**3.0000e-004**	**8.6000e-004**	**3.6700e-003**	**1.0000e-005**	**6.9000e-004**	**1.0000e-005**	**7.1000e-004**	**1.9000e-004**	**1.0000e-005**	**2.0000e-004**	**0.0000**	**0.7270**	**0.7270**	**3.0000e-005**	**0.0000**	**0.7276**

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					4.5000e-004	0.0000	4.5000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1500e-003	0.0834	0.1468	2.2000e-004		3.8500e-003	3.8500e-003		4.0500e-003	4.0500e-003	0.0000	20.1400	20.1400	5.5200e-003	0.0000	20.2560
Total	**2.1500e-003**	**0.0834**	**0.1468**	**2.2000e-004**	**4.5000e-004**	**3.8500e-003**	**4.3000e-003**	**7.0000e-005**	**4.0500e-003**	**4.1200e-003**	**0.0000**	**20.1400**	**20.1400**	**5.5200e-003**	**0.0000**	**20.2560**

3.2 Demolition - 2017

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	4.0000e-005	5.2000e-004	4.6000e-004	0.0000	3.0000e-005	1.0000e-005	4.0000e-005	1.0000e-005	1.0000e-005	2.0000e-005	0.0000	0.1343	0.1343	0.0000	0.0000	0.1343
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e-004	3.4000e-004	3.2100e-003	1.0000e-005	6.6000e-004	0.0000	6.7000e-004	1.8000e-004	0.0000	1.8000e-004	0.0000	0.5927	0.5927	3.0000e-005	0.0000	0.5933
Total	**3.0000e-004**	**8.6000e-004**	**3.6700e-003**	**1.0000e-005**	**6.9000e-004**	**1.0000e-005**	**7.1000e-004**	**1.9000e-004**	**1.0000e-005**	**2.0000e-004**	**0.0000**	**0.7270**	**0.7270**	**3.0000e-005**	**0.0000**	**0.7276**

3.3 Mass Grading - 2017

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					7.3908	0.0000	7.3908	4.0216	0.0000	4.0216	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.7001	8.0606	5.1607	7.2500e-003		0.3607	0.3607		0.3319	0.3319	0.0000	673.0138	673.0138	0.2062	0.0000	677.3442
Total	**0.7001**	**8.0606**	**5.1607**	**7.2500e-003**	**7.3908**	**0.3607**	**7.7515**	**4.0216**	**0.3319**	**4.3535**	**0.0000**	**673.0138**	**673.0138**	**0.2062**	**0.0000**	**677.3442**

3.3 Mass Grading - 2017

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	8.0700e-003	0.0107	0.1011	2.6000e-004	0.0208	1.6000e-004	0.0210	5.5300e-003	1.4000e-004	5.6800e-003	0.0000	18.6578	18.6578	9.5000e-004	0.0000	18.6777
Total	**8.0700e-003**	**0.0107**	**0.1011**	**2.6000e-004**	**0.0208**	**1.6000e-004**	**0.0210**	**5.5300e-003**	**1.4000e-004**	**5.6800e-003**	**0.0000**	**18.6578**	**18.6578**	**9.5000e-004**	**0.0000**	**18.6777**

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					7.3908	0.0000	7.3908	4.0216	0.0000	4.0216	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0930	2.4828	3.8591	7.2500e-003		0.0936	0.0936		0.0980	0.0980	0.0000	673.0130	673.0130	0.2062	0.0000	677.3434
Total	**0.0930**	**2.4828**	**3.8591**	**7.2500e-003**	**7.3908**	**0.0936**	**7.4844**	**4.0216**	**0.0980**	**4.1196**	**0.0000**	**673.0130**	**673.0130**	**0.2062**	**0.0000**	**677.3434**

3.3 Mass Grading - 2017

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	8.0700e-003	0.0107	0.1011	2.6000e-004	0.0208	1.6000e-004	0.0210	5.5300e-003	1.4000e-004	5.6800e-003	0.0000	18.6578	18.6578	9.5000e-004	0.0000	18.6777
Total	**8.0700e-003**	**0.0107**	**0.1011**	**2.6000e-004**	**0.0208**	**1.6000e-004**	**0.0210**	**5.5300e-003**	**1.4000e-004**	**5.6800e-003**	**0.0000**	**18.6578**	**18.6578**	**9.5000e-004**	**0.0000**	**18.6777**

3.3 Mass Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					7.3908	0.0000	7.3908	4.0216	0.0000	4.0216	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.6460	18.5905	12.2910	0.0193		0.8213	0.8213		0.7556	0.7556	0.0000	1,763.4845	1,763.4845	0.5490	0.0000	1,775.0135
Total	**1.6460**	**18.5905**	**12.2910**	**0.0193**	**7.3908**	**0.8213**	**8.2121**	**4.0216**	**0.7556**	**4.7772**	**0.0000**	**1,763.4845**	**1,763.4845**	**0.5490**	**0.0000**	**1,775.0135**

3.3 Mass Grading - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0195	0.0260	0.2436	6.8000e-004	0.0555	4.1000e-004	0.0559	0.0147	3.8000e-004	0.0151	0.0000	47.8247	47.8247	2.3500e-003	0.0000	47.8740
Total	**0.0195**	**0.0260**	**0.2436**	**6.8000e-004**	**0.0555**	**4.1000e-004**	**0.0559**	**0.0147**	**3.8000e-004**	**0.0151**	**0.0000**	**47.8247**	**47.8247**	**2.3500e-003**	**0.0000**	**47.8740**

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					7.3908	0.0000	7.3908	4.0216	0.0000	4.0216	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2868	7.1511	10.6331	0.0193		0.2731	0.2731		0.2831	0.2831	0.0000	1,763.4824	1,763.4824	0.5490	0.0000	1,775.0113
Total	**0.2868**	**7.1511**	**10.6331**	**0.0193**	**7.3908**	**0.2731**	**7.6639**	**4.0216**	**0.2831**	**4.3047**	**0.0000**	**1,763.4824**	**1,763.4824**	**0.5490**	**0.0000**	**1,775.0113**

3.3 Mass Grading - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0195	0.0260	0.2436	6.8000e-004	0.0555	4.1000e-004	0.0559	0.0147	3.8000e-004	0.0151	0.0000	47.8247	47.8247	2.3500e-003	0.0000	47.8740
Total	**0.0195**	**0.0260**	**0.2436**	**6.8000e-004**	**0.0555**	**4.1000e-004**	**0.0559**	**0.0147**	**3.8000e-004**	**0.0151**	**0.0000**	**47.8247**	**47.8247**	**2.3500e-003**	**0.0000**	**47.8740**

3.3 Mass Grading - 2019

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					7.3908	0.0000	7.3908	4.0216	0.0000	4.0216	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.1488	12.7147	8.6975	0.0144		0.5581	0.5581		0.5135	0.5135	0.0000	1,295.9000	1,295.9000	0.4100	0.0000	1,304.5101
Total	**1.1488**	**12.7147**	**8.6975**	**0.0144**	**7.3908**	**0.5581**	**7.9489**	**4.0216**	**0.5135**	**4.5351**	**0.0000**	**1,295.9000**	**1,295.9000**	**0.4100**	**0.0000**	**1,304.5101**

3.3 Mass Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0135	0.0179	0.1674	5.1000e-004	0.0414	3.0000e-004	0.0417	0.0110	2.8000e-004	0.0113	0.0000	34.4385	34.4385	1.6500e-003	0.0000	34.4731
Total	**0.0135**	**0.0179**	**0.1674**	**5.1000e-004**	**0.0414**	**3.0000e-004**	**0.0417**	**0.0110**	**2.8000e-004**	**0.0113**	**0.0000**	**34.4385**	**34.4385**	**1.6500e-003**	**0.0000**	**34.4731**

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					7.3908	0.0000	7.3908	4.0216	0.0000	4.0216	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2279	5.5572	8.0660	0.0144		0.2129	0.2129		0.2197	0.2197	0.0000	1,295.8984	1,295.8984	0.4100	0.0000	1,304.5086
Total	**0.2279**	**5.5572**	**8.0660**	**0.0144**	**7.3908**	**0.2129**	**7.6038**	**4.0216**	**0.2197**	**4.2413**	**0.0000**	**1,295.8984**	**1,295.8984**	**0.4100**	**0.0000**	**1,304.5086**

3.3 Mass Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0135	0.0179	0.1674	5.1000e-004	0.0414	3.0000e-004	0.0417	0.0110	2.8000e-004	0.0113	0.0000	34.4385	34.4385	1.6500e-003	0.0000	34.4731
Total	**0.0135**	**0.0179**	**0.1674**	**5.1000e-004**	**0.0414**	**3.0000e-004**	**0.0417**	**0.0110**	**2.8000e-004**	**0.0113**	**0.0000**	**34.4385**	**34.4385**	**1.6500e-003**	**0.0000**	**34.4731**

3.4 Trenching - 2019

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	0.0221	0.2189	0.2362	3.5000e-004		0.0129	0.0129		0.0119	0.0119	0.0000	31.3305	31.3305	9.9100e-003	0.0000	31.5386
Total	**0.0221**	**0.2189**	**0.2362**	**3.5000e-004**		**0.0129**	**0.0129**		**0.0119**	**0.0119**	**0.0000**	**31.3305**	**31.3305**	**9.9100e-003**	**0.0000**	**31.5386**

3.4 Trenching - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.6000e-004	7.5000e-004	6.9600e-003	2.0000e-005	1.7200e-003	1.0000e-005	1.7400e-003	4.6000e-004	1.0000e-005	4.7000e-004	0.0000	1.4329	1.4329	7.0000e-005	0.0000	1.4343
Total	**5.6000e-004**	**7.5000e-004**	**6.9600e-003**	**2.0000e-005**	**1.7200e-003**	**1.0000e-005**	**1.7400e-003**	**4.6000e-004**	**1.0000e-005**	**4.7000e-004**	**0.0000**	**1.4329**	**1.4329**	**7.0000e-005**	**0.0000**	**1.4343**

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	3.0500e-003	0.1346	0.2877	3.5000e-004		7.1100e-003	7.1100e-003		7.4800e-003	7.4800e-003	0.0000	31.3304	31.3304	9.9100e-003	0.0000	31.5386
Total	**3.0500e-003**	**0.1346**	**0.2877**	**3.5000e-004**		**7.1100e-003**	**7.1100e-003**		**7.4800e-003**	**7.4800e-003**	**0.0000**	**31.3304**	**31.3304**	**9.9100e-003**	**0.0000**	**31.5386**

3.4 Trenching - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.6000e-004	7.5000e-004	6.9600e-003	2.0000e-005	1.7200e-003	1.0000e-005	1.7400e-003	4.6000e-004	1.0000e-005	4.7000e-004	0.0000	1.4329	1.4329	7.0000e-005	0.0000	1.4343
Total	**5.6000e-004**	**7.5000e-004**	**6.9600e-003**	**2.0000e-005**	**1.7200e-003**	**1.0000e-005**	**1.7400e-003**	**4.6000e-004**	**1.0000e-005**	**4.7000e-004**	**0.0000**	**1.4329**	**1.4329**	**7.0000e-005**	**0.0000**	**1.4343**

3.5 Fine Grading - 2019

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					0.2283	0.0000	0.2283	0.0845	0.0000	0.0845	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0436	0.4457	0.2921	5.4000e-004		0.0207	0.0207		0.0191	0.0191	0.0000	48.7905	48.7905	0.0154	0.0000	49.1146
Total	**0.0436**	**0.4457**	**0.2921**	**5.4000e-004**	**0.2283**	**0.0207**	**0.2490**	**0.0845**	**0.0191**	**0.1036**	**0.0000**	**48.7905**	**48.7905**	**0.0154**	**0.0000**	**49.1146**

3.5 Fine Grading - 2019

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	8.4000e-004	1.1200e-003	0.0104	3.0000e-005	2.5800e-003	2.0000e-005	2.6000e-003	6.9000e-004	2.0000e-005	7.0000e-004	0.0000	2.1460	2.1460	1.0000e-004	0.0000	2.1481
Total	**8.4000e-004**	**1.1200e-003**	**0.0104**	**3.0000e-005**	**2.5800e-003**	**2.0000e-005**	**2.6000e-003**	**6.9000e-004**	**2.0000e-005**	**7.0000e-004**	**0.0000**	**2.1460**	**2.1460**	**1.0000e-004**	**0.0000**	**2.1481**

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					0.2283	0.0000	0.2283	0.0845	0.0000	0.0845	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0129	0.2431	0.3180	5.4000e-004		9.7300e-003	9.7300e-003		9.7300e-003	9.7300e-003	0.0000	48.7904	48.7904	0.0154	0.0000	49.1146
Total	**0.0129**	**0.2431**	**0.3180**	**5.4000e-004**	**0.2283**	**9.7300e-003**	**0.2380**	**0.0845**	**9.7300e-003**	**0.0942**	**0.0000**	**48.7904**	**48.7904**	**0.0154**	**0.0000**	**49.1146**

3.5 Fine Grading - 2019

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	8.4000e-004	1.1200e-003	0.0104	3.0000e-005	2.5800e-003	2.0000e-005	2.6000e-003	6.9000e-004	2.0000e-005	7.0000e-004	0.0000	2.1460	2.1460	1.0000e-004	0.0000	2.1481
Total	**8.4000e-004**	**1.1200e-003**	**0.0104**	**3.0000e-005**	**2.5800e-003**	**2.0000e-005**	**2.6000e-003**	**6.9000e-004**	**2.0000e-005**	**7.0000e-004**	**0.0000**	**2.1460**	**2.1460**	**1.0000e-004**	**0.0000**	**2.1481**

3.5 Fine Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2283	0.0000	0.2283	0.0845	0.0000	0.0845	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0389	0.3851	0.2678	5.2000e-004		0.0179	0.0179		0.0164	0.0164	0.0000	45.6340	45.6340	0.0148	0.0000	45.9439
Total	**0.0389**	**0.3851**	**0.2678**	**5.2000e-004**	**0.2283**	**0.0179**	**0.2462**	**0.0845**	**0.0164**	**0.1009**	**0.0000**	**45.6340**	**45.6340**	**0.0148**	**0.0000**	**45.9439**

3.5 Fine Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.6000e-004	1.0000e-003	9.3200e-003	3.0000e-005	2.4700e-003	2.0000e-005	2.4900e-003	6.6000e-004	2.0000e-005	6.7000e-004	0.0000	1.9699	1.9699	9.0000e-005	0.0000	1.9719
Total	**7.6000e-004**	**1.0000e-003**	**9.3200e-003**	**3.0000e-005**	**2.4700e-003**	**2.0000e-005**	**2.4900e-003**	**6.6000e-004**	**2.0000e-005**	**6.7000e-004**	**0.0000**	**1.9699**	**1.9699**	**9.0000e-005**	**0.0000**	**1.9719**

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					0.2283	0.0000	0.2283	0.0845	0.0000	0.0845	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0123	0.2325	0.3042	5.2000e-004		9.3100e-003	9.3100e-003		9.3100e-003	9.3100e-003	0.0000	45.6339	45.6339	0.0148	0.0000	45.9438
Total	**0.0123**	**0.2325**	**0.3042**	**5.2000e-004**	**0.2283**	**9.3100e-003**	**0.2376**	**0.0845**	**9.3100e-003**	**0.0938**	**0.0000**	**45.6339**	**45.6339**	**0.0148**	**0.0000**	**45.9438**

3.5 Fine Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.6000e-004	1.0000e-003	9.3200e-003	3.0000e-005	2.4700e-003	2.0000e-005	2.4900e-003	6.6000e-004	2.0000e-005	6.7000e-004	0.0000	1.9699	1.9699	9.0000e-005	0.0000	1.9719
Total	**7.6000e-004**	**1.0000e-003**	**9.3200e-003**	**3.0000e-005**	**2.4700e-003**	**2.0000e-005**	**2.4900e-003**	**6.6000e-004**	**2.0000e-005**	**6.7000e-004**	**0.0000**	**1.9699**	**1.9699**	**9.0000e-005**	**0.0000**	**1.9719**

3.6 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2523	2.2805	2.0086	3.2000e-003		0.1330	0.1330		0.1251	0.1251	0.0000	275.6266	275.6266	0.0672	0.0000	277.0368
Total	**0.2523**	**2.2805**	**2.0086**	**3.2000e-003**		**0.1330**	**0.1330**		**0.1251**	**0.1251**	**0.0000**	**275.6266**	**275.6266**	**0.0672**	**0.0000**	**277.0368**

3.6 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1186	0.8398	1.5660	3.2400e-003	0.0894	0.0133	0.1027	0.0256	0.0122	0.0378	0.0000	275.0968	275.0968	2.0400e-003	0.0000	275.1395
Worker	0.1333	0.1744	1.6279	5.3000e-003	0.4312	3.1300e-003	0.4344	0.1146	2.9100e-003	0.1175	0.0000	343.9386	343.9386	0.0163	0.0000	344.2818
Total	**0.2518**	**1.0142**	**3.1938**	**8.5400e-003**	**0.5206**	**0.0164**	**0.5370**	**0.1402**	**0.0151**	**0.1553**	**0.0000**	**619.0354**	**619.0354**	**0.0184**	**0.0000**	**619.4213**

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	0.0390	0.2664	2.0806	3.2000e-003		4.8500e-003	4.8500e-003		4.8500e-003	4.8500e-003	0.0000	275.6263	275.6263	0.0672	0.0000	277.0365
Total	**0.0390**	**0.2664**	**2.0806**	**3.2000e-003**		**4.8500e-003**	**4.8500e-003**		**4.8500e-003**	**4.8500e-003**	**0.0000**	**275.6263**	**275.6263**	**0.0672**	**0.0000**	**277.0365**

3.6 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1186	0.8398	1.5660	3.2400e-003	0.0894	0.0133	0.1027	0.0256	0.0122	0.0378	0.0000	275.0968	275.0968	2.0400e-003	0.0000	275.1395
Worker	0.1333	0.1744	1.6279	5.3000e-003	0.4312	3.1300e-003	0.4344	0.1146	2.9100e-003	0.1175	0.0000	343.9386	343.9386	0.0163	0.0000	344.2818
Total	**0.2518**	**1.0142**	**3.1938**	**8.5400e-003**	**0.5206**	**0.0164**	**0.5370**	**0.1402**	**0.0151**	**0.1553**	**0.0000**	**619.0354**	**619.0354**	**0.0184**	**0.0000**	**619.4213**

3.6 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	0.2471	2.2629	2.1582	3.5000e-003		0.1246	0.1246		0.1172	0.1172	0.0000	301.0339	301.0339	0.0725	0.0000	302.5568
Total	**0.2471**	**2.2629**	**2.1582**	**3.5000e-003**		**0.1246**	**0.1246**		**0.1172**	**0.1172**	**0.0000**	**301.0339**	**301.0339**	**0.0725**	**0.0000**	**302.5568**

3.6 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	0.1219	0.7520	1.6418	3.5400e-003	0.0976	0.0131	0.1107	0.0279	0.0120	0.0399	0.0000	299.9401	299.9401	2.2100e-003	0.0000	299.9866
Worker	0.1386	0.1788	1.6853	5.8000e-003	0.4709	3.4800e-003	0.4744	0.1251	3.2200e-003	0.1284	0.0000	369.3321	369.3321	0.0172	0.0000	369.6927
Total	**0.2604**	**0.9308**	**3.3271**	**9.3400e-003**	**0.5685**	**0.0165**	**0.5851**	**0.1531**	**0.0152**	**0.1683**	**0.0000**	**669.2721**	**669.2721**	**0.0194**	**0.0000**	**669.6793**

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	0.0426	0.2909	2.2721	3.5000e-003		5.3000e-003	5.3000e-003		5.3000e-003	5.3000e-003	0.0000	301.0335	301.0335	0.0725	0.0000	302.5565
Total	**0.0426**	**0.2909**	**2.2721**	**3.5000e-003**		**5.3000e-003**	**5.3000e-003**		**5.3000e-003**	**5.3000e-003**	**0.0000**	**301.0335**	**301.0335**	**0.0725**	**0.0000**	**302.5565**

3.6 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	0.1219	0.7520	1.6418	3.5400e-003	0.0976	0.0131	0.1107	0.0279	0.0120	0.0399	0.0000	299.9401	299.9401	2.2100e-003	0.0000	299.9866
Worker	0.1386	0.1788	1.6853	5.8000e-003	0.4709	3.4800e-003	0.4744	0.1251	3.2200e-003	0.1284	0.0000	369.3321	369.3321	0.0172	0.0000	369.6927
Total	**0.2604**	**0.9308**	**3.3271**	**9.3400e-003**	**0.5685**	**0.0165**	**0.5851**	**0.1531**	**0.0152**	**0.1683**	**0.0000**	**669.2721**	**669.2721**	**0.0194**	**0.0000**	**669.6793**

3.6 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	0.2209	2.0197	2.1226	3.4900e-003		0.1047	0.1047		0.0986	0.0986	0.0000	299.9946	299.9946	0.0718	0.0000	301.5017
Total	**0.2209**	**2.0197**	**2.1226**	**3.4900e-003**		**0.1047**	**0.1047**		**0.0986**	**0.0986**	**0.0000**	**299.9946**	**299.9946**	**0.0718**	**0.0000**	**301.5017**

3.6 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	0.1166	0.6580	1.5713	3.5200e-003	0.0972	0.0128	0.1100	0.0278	0.0118	0.0396	0.0000	298.4820	298.4820	2.2500e-003	0.0000	298.5293
Worker	0.1315	0.1683	1.5843	5.7800e-003	0.4691	3.4900e-003	0.4726	0.1247	3.2300e-003	0.1279	0.0000	361.7902	361.7902	0.0164	0.0000	362.1348
Total	**0.2481**	**0.8263**	**3.1556**	**9.3000e-003**	**0.5664**	**0.0163**	**0.5826**	**0.1525**	**0.0150**	**0.1675**	**0.0000**	**660.2721**	**660.2721**	**0.0187**	**0.0000**	**660.6640**

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	0.0424	0.2898	2.2634	3.4900e-003		5.2800e-003	5.2800e-003		5.2800e-003	5.2800e-003	0.0000	299.9943	299.9943	0.0718	0.0000	301.5013
Total	**0.0424**	**0.2898**	**2.2634**	**3.4900e-003**		**5.2800e-003**	**5.2800e-003**		**5.2800e-003**	**5.2800e-003**	**0.0000**	**299.9943**	**299.9943**	**0.0718**	**0.0000**	**301.5013**

3.6 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	0.1166	0.6580	1.5713	3.5200e-003	0.0972	0.0128	0.1100	0.0278	0.0118	0.0396	0.0000	298.4820	298.4820	2.2500e-003	0.0000	298.5293
Worker	0.1315	0.1683	1.5843	5.7800e-003	0.4691	3.4900e-003	0.4726	0.1247	3.2300e-003	0.1279	0.0000	361.7902	361.7902	0.0164	0.0000	362.1348
Total	**0.2481**	**0.8263**	**3.1556**	**9.3000e-003**	**0.5664**	**0.0163**	**0.5826**	**0.1525**	**0.0150**	**0.1675**	**0.0000**	**660.2721**	**660.2721**	**0.0187**	**0.0000**	**660.6640**

3.6 Building Construction - 2023

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	0.2036	1.8606	2.1072	3.4900e-003		0.0906	0.0906		0.0852	0.0852	0.0000	300.0980	300.0980	0.0713	0.0000	301.5949
Total	**0.2036**	**1.8606**	**2.1072**	**3.4900e-003**		**0.0906**	**0.0906**		**0.0852**	**0.0852**	**0.0000**	**300.0980**	**300.0980**	**0.0713**	**0.0000**	**301.5949**

3.6 Building Construction - 2023

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	0.1093	0.5727	1.5070	3.5100e-003	0.0972	0.0125	0.1097	0.0278	0.0115	0.0393	0.0000	297.8136	297.8136	2.1100e-003	0.0000	297.8581
Worker	0.1255	0.1596	1.4995	5.7800e-003	0.4691	3.5100e-003	0.4726	0.1247	3.2600e-003	0.1279	0.0000	356.3237	356.3237	0.0158	0.0000	356.6558
Total	**0.2348**	**0.7323**	**3.0065**	**9.2900e-003**	**0.5664**	**0.0160**	**0.5824**	**0.1525**	**0.0148**	**0.1672**	**0.0000**	**654.1374**	**654.1374**	**0.0179**	**0.0000**	**654.5138**

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	0.0424	0.2898	2.2634	3.4900e-003		5.2800e-003	5.2800e-003		5.2800e-003	5.2800e-003	0.0000	300.0976	300.0976	0.0713	0.0000	301.5946
Total	**0.0424**	**0.2898**	**2.2634**	**3.4900e-003**		**5.2800e-003**	**5.2800e-003**		**5.2800e-003**	**5.2800e-003**	**0.0000**	**300.0976**	**300.0976**	**0.0713**	**0.0000**	**301.5946**

3.6 Building Construction - 2023

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	0.1093	0.5727	1.5070	3.5100e-003	0.0972	0.0125	0.1097	0.0278	0.0115	0.0393	0.0000	297.8136	297.8136	2.1100e-003	0.0000	297.8581
Worker	0.1255	0.1596	1.4995	5.7800e-003	0.4691	3.5100e-003	0.4726	0.1247	3.2600e-003	0.1279	0.0000	356.3237	356.3237	0.0158	0.0000	356.6558
Total	**0.2348**	**0.7323**	**3.0065**	**9.2900e-003**	**0.5664**	**0.0160**	**0.5824**	**0.1525**	**0.0148**	**0.1672**	**0.0000**	**654.1374**	**654.1374**	**0.0179**	**0.0000**	**654.5138**

3.6 Building Construction - 2024

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	0.1920	1.7524	2.1135	3.5200e-003		0.0800	0.0800		0.0752	0.0752	0.0000	302.4646	302.4646	0.0714	0.0000	303.9643
Total	**0.1920**	**1.7524**	**2.1135**	**3.5200e-003**		**0.0800**	**0.0800**		**0.0752**	**0.0752**	**0.0000**	**302.4646**	**302.4646**	**0.0714**	**0.0000**	**303.9643**

3.6 Building Construction - 2024

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	0.1037	0.5691	1.4366	3.5300e-003	0.0980	0.0126	0.1106	0.0280	0.0116	0.0397	0.0000	300.0852	300.0852	2.1400e-003	0.0000	300.1301
Worker	0.1210	0.1531	1.4391	5.8200e-003	0.4727	3.5700e-003	0.4763	0.1256	3.3100e-003	0.1289	0.0000	354.1686	354.1686	0.0154	0.0000	354.4920
Total	**0.2247**	**0.7222**	**2.8756**	**9.3500e-003**	**0.5707**	**0.0162**	**0.5869**	**0.1537**	**0.0149**	**0.1686**	**0.0000**	**654.2537**	**654.2537**	**0.0175**	**0.0000**	**654.6221**

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	0.0428	0.2920	2.2808	3.5200e-003		5.3200e-003	5.3200e-003		5.3200e-003	5.3200e-003	0.0000	302.4642	302.4642	0.0714	0.0000	303.9639
Total	**0.0428**	**0.2920**	**2.2808**	**3.5200e-003**		**5.3200e-003**	**5.3200e-003**		**5.3200e-003**	**5.3200e-003**	**0.0000**	**302.4642**	**302.4642**	**0.0714**	**0.0000**	**303.9639**

3.6 Building Construction - 2024

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	0.1037	0.5691	1.4366	3.5300e-003	0.0980	0.0126	0.1106	0.0280	0.0116	0.0397	0.0000	300.0852	300.0852	2.1400e-003	0.0000	300.1301
Worker	0.1210	0.1531	1.4391	5.8200e-003	0.4727	3.5700e-003	0.4763	0.1256	3.3100e-003	0.1289	0.0000	354.1686	354.1686	0.0154	0.0000	354.4920
Total	**0.2247**	**0.7222**	**2.8756**	**9.3500e-003**	**0.5707**	**0.0162**	**0.5869**	**0.1537**	**0.0149**	**0.1686**	**0.0000**	**654.2537**	**654.2537**	**0.0175**	**0.0000**	**654.6221**

3.6 Building Construction - 2025

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	0.0157	0.1427	0.1846	3.1000e-004		6.0400e-003	6.0400e-003		5.6800e-003	5.6800e-003	0.0000	26.5603	26.5603	6.2300e-003	0.0000	26.6912
Total	**0.0157**	**0.1427**	**0.1846**	**3.1000e-004**		**6.0400e-003**	**6.0400e-003**		**5.6800e-003**	**5.6800e-003**	**0.0000**	**26.5603**	**26.5603**	**6.2300e-003**	**0.0000**	**26.6912**

3.6 Building Construction - 2025

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	8.8500e-003	0.0494	0.1228	3.1000e-004	8.6000e-003	1.1100e-003	9.7200e-003	2.4600e-003	1.0200e-003	3.4800e-003	0.0000	26.3456	26.3456	1.9000e-004	0.0000	26.3495
Worker	0.0102	0.0129	0.1211	5.1000e-004	0.0415	3.2000e-004	0.0418	0.0110	2.9000e-004	0.0113	0.0000	30.7175	30.7175	1.3100e-003	0.0000	30.7451
Total	**0.0191**	**0.0623**	**0.2439**	**8.2000e-004**	**0.0501**	**1.4300e-003**	**0.0515**	**0.0135**	**1.3100e-003**	**0.0148**	**0.0000**	**57.0631**	**57.0631**	**1.5000e-003**	**0.0000**	**57.0946**

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	3.7500e-003	0.0256	0.2002	3.1000e-004		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	26.5603	26.5603	6.2300e-003	0.0000	26.6912
Total	**3.7500e-003**	**0.0256**	**0.2002**	**3.1000e-004**		**4.7000e-004**	**4.7000e-004**		**4.7000e-004**	**4.7000e-004**	**0.0000**	**26.5603**	**26.5603**	**6.2300e-003**	**0.0000**	**26.6912**

3.6 Building Construction - 2025

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	8.8500e-003	0.0494	0.1228	3.1000e-004	8.6000e-003	1.1100e-003	9.7200e-003	2.4600e-003	1.0200e-003	3.4800e-003	0.0000	26.3456	26.3456	1.9000e-004	0.0000	26.3495
Worker	0.0102	0.0129	0.1211	5.1000e-004	0.0415	3.2000e-004	0.0418	0.0110	2.9000e-004	0.0113	0.0000	30.7175	30.7175	1.3100e-003	0.0000	30.7451
Total	**0.0191**	**0.0623**	**0.2439**	**8.2000e-004**	**0.0501**	**1.4300e-003**	**0.0515**	**0.0135**	**1.3100e-003**	**0.0148**	**0.0000**	**57.0631**	**57.0631**	**1.5000e-003**	**0.0000**	**57.0946**

3.7 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0253	0.2604	0.2718	4.2000e-004		0.0143	0.0143		0.0131	0.0131	0.0000	36.7323	36.7323	0.0119	0.0000	36.9818
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0253**	**0.2604**	**0.2718**	**4.2000e-004**		**0.0143**	**0.0143**		**0.0131**	**0.0131**	**0.0000**	**36.7323**	**36.7323**	**0.0119**	**0.0000**	**36.9818**

3.7 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.6000e-004	9.9000e-004	9.2500e-003	3.0000e-005	2.4500e-003	2.0000e-005	2.4700e-003	6.5000e-004	2.0000e-005	6.7000e-004	0.0000	1.9539	1.9539	9.0000e-005	0.0000	1.9559
Total	**7.6000e-004**	**9.9000e-004**	**9.2500e-003**	**3.0000e-005**	**2.4500e-003**	**2.0000e-005**	**2.4700e-003**	**6.5000e-004**	**2.0000e-005**	**6.7000e-004**	**0.0000**	**1.9539**	**1.9539**	**9.0000e-005**	**0.0000**	**1.9559**

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	0.0103	0.2095	0.3173	4.2000e-004		0.0116	0.0116		0.0116	0.0116	0.0000	36.7322	36.7322	0.0119	0.0000	36.9817
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0103**	**0.2095**	**0.3173**	**4.2000e-004**		**0.0116**	**0.0116**		**0.0116**	**0.0116**	**0.0000**	**36.7322**	**36.7322**	**0.0119**	**0.0000**	**36.9817**

3.7 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.6000e-004	9.9000e-004	9.2500e-003	3.0000e-005	2.4500e-003	2.0000e-005	2.4700e-003	6.5000e-004	2.0000e-005	6.7000e-004	0.0000	1.9539	1.9539	9.0000e-005	0.0000	1.9559
Total	**7.6000e-004**	**9.9000e-004**	**9.2500e-003**	**3.0000e-005**	**2.4500e-003**	**2.0000e-005**	**2.4700e-003**	**6.5000e-004**	**2.0000e-005**	**6.7000e-004**	**0.0000**	**1.9539**	**1.9539**	**9.0000e-005**	**0.0000**	**1.9559**

3.8 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.8407					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0219	0.1524	0.1657	2.7000e-004		0.0100	0.0100		0.0100	0.0100	0.0000	23.1070	23.1070	1.7900e-003	0.0000	23.1445
Total	**1.8626**	**0.1524**	**0.1657**	**2.7000e-004**		**0.0100**	**0.0100**		**0.0100**	**0.0100**	**0.0000**	**23.1070**	**23.1070**	**1.7900e-003**	**0.0000**	**23.1445**

3.8 Architectural Coating - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0202	0.0264	0.2466	8.0000e-004	0.0653	4.7000e-004	0.0658	0.0174	4.4000e-004	0.0178	0.0000	52.0945	52.0945	2.4800e-003	0.0000	52.1464
Total	**0.0202**	**0.0264**	**0.2466**	**8.0000e-004**	**0.0653**	**4.7000e-004**	**0.0658**	**0.0174**	**4.4000e-004**	**0.0178**	**0.0000**	**52.0945**	**52.0945**	**2.4800e-003**	**0.0000**	**52.1464**

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	1.8407					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.3800e-003	0.1228	0.1658	2.7000e-004		8.6100e-003	8.6100e-003		8.6100e-003	8.6100e-003	0.0000	23.1069	23.1069	1.7900e-003	0.0000	23.1445
Total	**1.8460**	**0.1228**	**0.1658**	**2.7000e-004**		**8.6100e-003**	**8.6100e-003**		**8.6100e-003**	**8.6100e-003**	**0.0000**	**23.1069**	**23.1069**	**1.7900e-003**	**0.0000**	**23.1445**

3.8 Architectural Coating - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0202	0.0264	0.2466	8.0000e-004	0.0653	4.7000e-004	0.0658	0.0174	4.4000e-004	0.0178	0.0000	52.0945	52.0945	2.4800e-003	0.0000	52.1464
Total	**0.0202**	**0.0264**	**0.2466**	**8.0000e-004**	**0.0653**	**4.7000e-004**	**0.0658**	**0.0174**	**4.4000e-004**	**0.0178**	**0.0000**	**52.0945**	**52.0945**	**2.4800e-003**	**0.0000**	**52.1464**

3.8 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	2.6542					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0286	0.1993	0.2372	3.9000e-004		0.0123	0.0123		0.0123	0.0123	0.0000	33.3200	33.3200	2.2900e-003	0.0000	33.3680
Total	**2.6828**	**0.1993**	**0.2372**	**3.9000e-004**		**0.0123**	**0.0123**		**0.0123**	**0.0123**	**0.0000**	**33.3200**	**33.3200**	**2.2900e-003**	**0.0000**	**33.3680**

3.8 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0277	0.0358	0.3371	1.1600e-003	0.0942	7.0000e-004	0.0949	0.0250	6.4000e-004	0.0257	0.0000	73.8664	73.8664	3.4300e-003	0.0000	73.9385
Total	**0.0277**	**0.0358**	**0.3371**	**1.1600e-003**	**0.0942**	**7.0000e-004**	**0.0949**	**0.0250**	**6.4000e-004**	**0.0257**	**0.0000**	**73.8664**	**73.8664**	**3.4300e-003**	**0.0000**	**73.9385**

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	2.6542					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.7600e-003	0.1771	0.2391	3.9000e-004		0.0124	0.0124		0.0124	0.0124	0.0000	33.3199	33.3199	2.2900e-003	0.0000	33.3679
Total	**2.6620**	**0.1771**	**0.2391**	**3.9000e-004**		**0.0124**	**0.0124**		**0.0124**	**0.0124**	**0.0000**	**33.3199**	**33.3199**	**2.2900e-003**	**0.0000**	**33.3679**

3.8 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0277	0.0358	0.3371	1.1600e-003	0.0942	7.0000e-004	0.0949	0.0250	6.4000e-004	0.0257	0.0000	73.8664	73.8664	3.4300e-003	0.0000	73.9385
Total	**0.0277**	**0.0358**	**0.3371**	**1.1600e-003**	**0.0942**	**7.0000e-004**	**0.0949**	**0.0250**	**6.4000e-004**	**0.0257**	**0.0000**	**73.8664**	**73.8664**	**3.4300e-003**	**0.0000**	**73.9385**

3.8 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	2.6440					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0266	0.1831	0.2358	3.9000e-004		0.0106	0.0106		0.0106	0.0106	0.0000	33.1923	33.1923	2.1600e-003	0.0000	33.2377
Total	**2.6706**	**0.1831**	**0.2358**	**3.9000e-004**		**0.0106**	**0.0106**		**0.0106**	**0.0106**	**0.0000**	**33.1923**	**33.1923**	**2.1600e-003**	**0.0000**	**33.2377**

3.8 Architectural Coating - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0263	0.0337	0.3169	1.1600e-003	0.0938	7.0000e-004	0.0945	0.0249	6.5000e-004	0.0256	0.0000	72.3580	72.3580	3.2800e-003	0.0000	72.4270
Total	**0.0263**	**0.0337**	**0.3169**	**1.1600e-003**	**0.0938**	**7.0000e-004**	**0.0945**	**0.0249**	**6.5000e-004**	**0.0256**	**0.0000**	**72.3580**	**72.3580**	**3.2800e-003**	**0.0000**	**72.4270**

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	2.6440					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.7300e-003	0.1764	0.2382	3.9000e-004		0.0124	0.0124		0.0124	0.0124	0.0000	33.1923	33.1923	2.1600e-003	0.0000	33.2376
Total	**2.6518**	**0.1764**	**0.2382**	**3.9000e-004**		**0.0124**	**0.0124**		**0.0124**	**0.0124**	**0.0000**	**33.1923**	**33.1923**	**2.1600e-003**	**0.0000**	**33.2376**

3.8 Architectural Coating - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0263	0.0337	0.3169	1.1600e-003	0.0938	7.0000e-004	0.0945	0.0249	6.5000e-004	0.0256	0.0000	72.3580	72.3580	3.2800e-003	0.0000	72.4270
Total	**0.0263**	**0.0337**	**0.3169**	**1.1600e-003**	**0.0938**	**7.0000e-004**	**0.0945**	**0.0249**	**6.5000e-004**	**0.0256**	**0.0000**	**72.3580**	**72.3580**	**3.2800e-003**	**0.0000**	**72.4270**

3.8 Architectural Coating - 2023

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	2.6440					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0249	0.1694	0.2355	3.9000e-004		9.2100e-003	9.2100e-003		9.2100e-003	9.2100e-003	0.0000	33.1923	33.1923	1.9900e-003	0.0000	33.2340
Total	**2.6690**	**0.1694**	**0.2355**	**3.9000e-004**		**9.2100e-003**	**9.2100e-003**		**9.2100e-003**	**9.2100e-003**	**0.0000**	**33.1923**	**33.1923**	**1.9900e-003**	**0.0000**	**33.2340**

3.8 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0251	0.0319	0.2999	1.1600e-003	0.0938	7.0000e-004	0.0945	0.0249	6.5000e-004	0.0256	0.0000	71.2648	71.2648	3.1600e-003	0.0000	71.3312
Total	**0.0251**	**0.0319**	**0.2999**	**1.1600e-003**	**0.0938**	**7.0000e-004**	**0.0945**	**0.0249**	**6.5000e-004**	**0.0256**	**0.0000**	**71.2648**	**71.2648**	**3.1600e-003**	**0.0000**	**71.3312**

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	2.6440					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.7300e-003	0.1764	0.2382	3.9000e-004		0.0124	0.0124		0.0124	0.0124	0.0000	33.1923	33.1923	1.9900e-003	0.0000	33.2340
Total	**2.6518**	**0.1764**	**0.2382**	**3.9000e-004**		**0.0124**	**0.0124**		**0.0124**	**0.0124**	**0.0000**	**33.1923**	**33.1923**	**1.9900e-003**	**0.0000**	**33.2340**

3.8 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0251	0.0319	0.2999	1.1600e-003	0.0938	7.0000e-004	0.0945	0.0249	6.5000e-004	0.0256	0.0000	71.2648	71.2648	3.1600e-003	0.0000	71.3312
Total	**0.0251**	**0.0319**	**0.2999**	**1.1600e-003**	**0.0938**	**7.0000e-004**	**0.0945**	**0.0249**	**6.5000e-004**	**0.0256**	**0.0000**	**71.2648**	**71.2648**	**3.1600e-003**	**0.0000**	**71.3312**

3.8 Architectural Coating - 2024

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	2.6644					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0237	0.1597	0.2371	3.9000e-004		7.9800e-003	7.9800e-003		7.9800e-003	7.9800e-003	0.0000	33.4476	33.4476	1.8800e-003	0.0000	33.4872
Total	**2.6881**	**0.1597**	**0.2371**	**3.9000e-004**		**7.9800e-003**	**7.9800e-003**		**7.9800e-003**	**7.9800e-003**	**0.0000**	**33.4476**	**33.4476**	**1.8800e-003**	**0.0000**	**33.4872**

3.8 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0242	0.0306	0.2878	1.1600e-003	0.0946	7.1000e-004	0.0953	0.0251	6.6000e-004	0.0258	0.0000	70.8337	70.8337	3.0800e-003	0.0000	70.8984
Total	**0.0242**	**0.0306**	**0.2878**	**1.1600e-003**	**0.0946**	**7.1000e-004**	**0.0953**	**0.0251**	**6.6000e-004**	**0.0258**	**0.0000**	**70.8337**	**70.8337**	**3.0800e-003**	**0.0000**	**70.8984**

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	2.6644					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.7900e-003	0.1778	0.2401	3.9000e-004		0.0125	0.0125		0.0125	0.0125	0.0000	33.4476	33.4476	1.8800e-003	0.0000	33.4871
Total	**2.6722**	**0.1778**	**0.2401**	**3.9000e-004**		**0.0125**	**0.0125**		**0.0125**	**0.0125**	**0.0000**	**33.4476**	**33.4476**	**1.8800e-003**	**0.0000**	**33.4871**

3.8 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0242	0.0306	0.2878	1.1600e-003	0.0946	7.1000e-004	0.0953	0.0251	6.6000e-004	0.0258	0.0000	70.8337	70.8337	3.0800e-003	0.0000	70.8984
Total	**0.0242**	**0.0306**	**0.2878**	**1.1600e-003**	**0.0946**	**7.1000e-004**	**0.0953**	**0.0251**	**6.6000e-004**	**0.0258**	**0.0000**	**70.8337**	**70.8337**	**3.0800e-003**	**0.0000**	**70.8984**

3.8 Architectural Coating - 2025

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	0.2339					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9600e-003	0.0132	0.0208	3.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.0000	2.9362	2.9362	1.6000e-004	0.0000	2.9396
Total	**0.2359**	**0.0132**	**0.0208**	**3.0000e-005**		**5.9000e-004**	**5.9000e-004**		**5.9000e-004**	**5.9000e-004**	**0.0000**	**2.9362**	**2.9362**	**1.6000e-004**	**0.0000**	**2.9396**

3.8 Architectural Coating - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0400e-003	2.5800e-003	0.0242	1.0000e-004	8.3000e-003	6.0000e-005	8.3600e-003	2.2100e-003	6.0000e-005	2.2600e-003	0.0000	6.1435	6.1435	2.6000e-004	0.0000	6.1490
Total	**2.0400e-003**	**2.5800e-003**	**0.0242**	**1.0000e-004**	**8.3000e-003**	**6.0000e-005**	**8.3600e-003**	**2.2100e-003**	**6.0000e-005**	**2.2600e-003**	**0.0000**	**6.1435**	**6.1435**	**2.6000e-004**	**0.0000**	**6.1490**

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	0.2339					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.8000e-004	0.0156	0.0211	3.0000e-005		1.0900e-003	1.0900e-003		1.0900e-003	1.0900e-003	0.0000	2.9362	2.9362	1.6000e-004	0.0000	2.9396
Total	**0.2346**	**0.0156**	**0.0211**	**3.0000e-005**		**1.0900e-003**	**1.0900e-003**		**1.0900e-003**	**1.0900e-003**	**0.0000**	**2.9362**	**2.9362**	**1.6000e-004**	**0.0000**	**2.9396**

3.8 Architectural Coating - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0400e-003	2.5800e-003	0.0242	1.0000e-004	8.3000e-003	6.0000e-005	8.3600e-003	2.2100e-003	6.0000e-005	2.2600e-003	0.0000	6.1435	6.1435	2.6000e-004	0.0000	6.1490
Total	**2.0400e-003**	**2.5800e-003**	**0.0242**	**1.0000e-004**	**8.3000e-003**	**6.0000e-005**	**8.3600e-003**	**2.2100e-003**	**6.0000e-005**	**2.2600e-003**	**0.0000**	**6.1435**	**6.1435**	**2.6000e-004**	**0.0000**	**6.1490**

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	3.7306	8.0225	40.7652	0.1505	10.4080	0.1636	10.5717	2.7835	0.1511	2.9346	0.0000	9,896.8999	9,896.8999	0.3300	0.0000	9,903.8291
Unmitigated	3.7306	8.0225	40.7652	0.1505	10.4080	0.1636	10.5717	2.7835	0.1511	2.9346	0.0000	9,896.8999	9,896.8999	0.3300	0.0000	9,903.8291

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	211.50	211.50	211.50	521,602	521,602
Condo/Townhouse	1,968.00	1,968.00	1968.00	7,282,900	7,282,900
Single Family Housing	5,340.00	5,340.00	5340.00	19,761,528	19,761,528
User Defined Commercial	50.00	50.00	50.00	113,203	113,203
Total	7,569.50	7,569.50	7,569.50	27,679,233	27,679,233

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
City Park	14.70	6.60	6.60	33.00	48.00	19.00	66	28	6
Condo/Townhouse	16.80	7.10	7.90	41.60	18.80	39.60	86	11	3
Single Family Housing	16.80	7.10	7.90	41.60	18.80	39.60	86	11	3
User Defined Commercial	14.70	6.60	6.60	5.00	90.00	5.00	86	11	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.511923	0.073395	0.191568	0.130918	0.036235	0.005199	0.012665	0.023708	0.001889	0.002027	0.006511	0.000534	0.003431

4.4 Fleet Mix

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,741.3447	1,741.3447	0.0701	0.0145	1,747.3120
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,743.4609	1,743.4609	0.0702	0.0145	1,749.4355
NaturalGas Mitigated	0.0987	0.8439	0.3621	5.3800e-003		0.0682	0.0682		0.0682	0.0682	0.0000	976.8545	976.8545	0.0187	0.0179	982.7995
NaturalGas Unmitigated	0.0987	0.8439	0.3621	5.3800e-003		0.0682	0.0682		0.0682	0.0682	0.0000	976.8545	976.8545	0.0187	0.0179	982.7995

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					
City Park	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
Condo/Townhouse	3.3926e+006	0.0183	0.1563	0.0665	1.0000e-003		0.0126	0.0126		0.0126	0.0126	0.0000	181.0420	181.0420	3.4700e-003	3.3200e-003	182.1438
Single Family Housing	1.4767e+007	0.0796	0.6804	0.2896	4.3400e-003		0.0550	0.0550		0.0550	0.0550	0.0000	788.0214	788.0214	0.0151	0.0145	792.8172
User Defined Commercial	146000	7.9000e-004	7.1600e-003	6.0100e-003	4.0000e-005		5.4000e-004	5.4000e-004		5.4000e-004	5.4000e-004	0.0000	7.7911	7.7911	1.5000e-004	1.4000e-004	7.8385
Total		**0.0987**	**0.8439**	**0.3621**	**5.3800e-003**		**0.0682**	**0.0682**		**0.0682**	**0.0682**	**0.0000**	**976.8545**	**976.8545**	**0.0187**	**0.0179**	**982.7995**

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					
City Park	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
Condo/Townhouse	3.3926e+006	0.0183	0.1563	0.0665	1.0000e-003		0.0126	0.0126		0.0126	0.0126	0.0000	181.0420	181.0420	3.4700e-003	3.3200e-003	182.1438
Single Family Housing	1.4767e+007	0.0796	0.6804	0.2896	4.3400e-003		0.0550	0.0550		0.0550	0.0550	0.0000	788.0214	788.0214	0.0151	0.0145	792.8172
User Defined Commercial	146000	7.9000e-004	7.1600e-003	6.0100e-003	4.0000e-005		5.4000e-004	5.4000e-004		5.4000e-004	5.4000e-004	0.0000	7.7911	7.7911	1.5000e-004	1.4000e-004	7.8385
Total		**0.0987**	**0.8439**	**0.3621**	**5.3800e-003**		**0.0682**	**0.0682**		**0.0682**	**0.0682**	**0.0000**	**976.8545**	**976.8545**	**0.0187**	**0.0179**	**982.7995**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	79231.3	25.8935	1.0400e-003	2.2000e-004	25.9822
Condo/Townhouse	1.06621e+006	348.4478	0.0140	2.9000e-003	349.6419
Single Family Housing	3.80436e+006	1,243.2983	0.0500	0.0104	1,247.5588
User Defined Commercial	385000	125.8214	5.0600e-003	1.0500e-003	126.2525
Total		**1,743.4609**	**0.0702**	**0.0145**	**1,749.4355**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	79231.3	25.8935	1.0400e-003	2.2000e-004	25.9822
Condo/Townhouse	1.06466e+006	347.9394	0.0140	2.9000e-003	349.1317
Single Family Housing	3.79944e+006	1,241.6904	0.0500	0.0103	1,245.9455
User Defined Commercial	385000	125.8214	5.0600e-003	1.0500e-003	126.2525
Total		**1,741.3447**	**0.0701**	**0.0145**	**1,747.3120**

6.0 Area Detail

6.1 Mitigation Measures Area

Use only Natural Gas Hearths

	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	7.7940	0.0667	5.7892	3.1000e-004		0.0707	0.0707		0.0703	0.0703	0.0000	562.3907	562.3907	0.0197	0.0101	565.9460
Unmitigated	56.6802	0.7307	66.0775	0.0239		8.5027	8.5027		8.5024	8.5024	805.7070	347.3623	1,153.0693	0.7526	0.0634	1,188.5200

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	2.0910					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	5.4734					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	48.9420	0.6640	60.2913	0.0236		8.4706	8.4706		8.4703	8.4703	805.7070	337.9018	1,143.6088	0.7435	0.0634	1,178.8692
Landscaping	0.1737	0.0667	5.7862	3.1000e-004		0.0321	0.0321		0.0321	0.0321	0.0000	9.4606	9.4606	9.0600e-003	0.0000	9.6508
Total	**56.6802**	**0.7307**	**66.0775**	**0.0239**		**8.5027**	**8.5027**		**8.5024**	**8.5024**	**805.7070**	**347.3623**	**1,153.0693**	**0.7526**	**0.0634**	**1,188.5200**

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	2.0910					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	5.4734					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0559	0.0000	3.0500e-003	0.0000		0.0386	0.0386		0.0382	0.0382	0.0000	552.9302	552.9302	0.0106	0.0101	556.2952
Landscaping	0.1737	0.0667	5.7862	3.1000e-004		0.0321	0.0321		0.0321	0.0321	0.0000	9.4606	9.4606	9.0600e-003	0.0000	9.6508
Total	**7.7940**	**0.0667**	**5.7892**	**3.1000e-004**		**0.0707**	**0.0707**		**0.0703**	**0.0703**	**0.0000**	**562.3907**	**562.3907**	**0.0197**	**0.0101**	**565.9460**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	286.9613	1.3416	0.0337	325.5827
Unmitigated	366.2406	1.6774	0.0422	414.5432

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 4.40601	15.9975	6.4000e-004	1.3000e-004	16.0524
Condo/Townhouse	16.0279 / 10.1045	109.9777	0.5265	0.0132	125.1276
Single Family Housing	34.7922 / 21.9342	238.7320	1.1429	0.0287	271.6185
User Defined Commercial	0.223478 / 0.140889	1.5334	7.3400e-003	1.8000e-004	1.7447
Total		**366.2406**	**1.6773**	**0.0422**	**414.5432**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 3.52481	12.7980	5.2000e-004	1.1000e-004	12.8419
Condo/Townhouse	12.8223 / 8.08363	86.0883	0.4211	0.0106	98.2018
Single Family Housing	27.8338 / 17.5474	186.8746	0.9141	0.0229	213.1698
User Defined Commercial	0.178783 / 0.112711	1.2003	5.8700e-003	1.5000e-004	1.3692
Total		**286.9613**	**1.3416**	**0.0337**	**325.5827**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	112.8381	6.6685	0.0000	252.8775
Unmitigated	150.4508	8.8914	0.0000	337.1700

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.36	0.0731	4.3200e-003	0.0000	0.1638
Condo/Townhouse	113.16	22.9705	1.3575	0.0000	51.4783
Single Family Housing	626.07	127.0866	7.5106	0.0000	284.8092
User Defined Commercial	1.58	0.3207	0.0190	0.0000	0.7188
Total		**150.4508**	**8.8914**	**0.0000**	**337.1700**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.27	0.0548	3.2400e-003	0.0000	0.1228
Condo/Townhouse	84.87	17.2278	1.0181	0.0000	38.6087
Single Family Housing	469.553	95.3149	5.6330	0.0000	213.6069
User Defined Commercial	1.185	0.2405	0.0142	0.0000	0.5391
Total		**112.8381**	**6.6686**	**0.0000**	**252.8775**

9.0 Operational Offroad

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

10.0 Vegetation

Warner Ranch Residential Development (2025 Mitigated)

San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Commercial	1.00	User Defined Unit	1.00	10,000.00	10
City Park	4.23	Acre	4.23	184,258.80	0
Condo/Townhouse	246.00	Dwelling Unit	11.77	246,000.00	704
Single Family Housing	534.00	Dwelling Unit	159.00	961,200.00	1527

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2025
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Per Project Specifications

Land Use - Per project description

Construction Phase - Estimates per project description

Off-road Equipment -

Off-road Equipment - Estimates per project description

Off-road Equipment - Estimates per project description

Off-road Equipment - Off-Highway Trucks represent Water Trucks as required per project description.

Off-road Equipment - Per project description

Off-road Equipment - Off-Highway trucks represent Water Trucks needed per project description.

Off-road Equipment - Estimates per Project requirements

Off-road Equipment - Estimates per project description.

Trips and VMT - Estimates per project description

Demolition -

Architectural Coating - Estimates per project description

Vehicle Trips - Updated per traffic study

Vechicle Emission Factors -

Vechicle Emission Factors -

Vechicle Emission Factors -

Area Coating - 150 g/l emission factor is typical for all coatings in San Diego

Energy Use - User defined subtype represents project's proposed Fire Station.

Water And Wastewater - User Defined water usage refers to project's Fire House. City park water use was derived using California Department of Water Resources 2009 model per equation in report (4,406,008 GPY)

Solid Waste - User Defined Commercial is for the Firehouse. It's estimated that 2.91 residents per multi-family unit and since 10 firefighters are assumed to live in the firehouse, 10/2.91=3.43x the waste of multi-family is 0.46 tons/year.

Construction Off-road Equipment Mitigation - Proposed mitigation

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation - 13% additional beyond the 20% already assumed by the County.

Water Mitigation -

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	150.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150

tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	150	250
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
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tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 3
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tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	220.00	1,247.00
tblConstructionPhase	NumDays	3,100.00	1,305.00
tblConstructionPhase	NumDays	200.00	11.00
tblConstructionPhase	NumDays	310.00	554.00
tblConstructionPhase	NumDays	310.00	45.00
tblConstructionPhase	NumDays	220.00	47.00
tblConstructionPhase	PhaseEndDate	1/16/2025	1/31/2025
tblConstructionPhase	PhaseEndDate	1/30/2025	1/31/2025
tblConstructionPhase	PhaseEndDate	4/8/2025	4/7/2020
tblConstructionPhase	PhaseStartDate	4/8/2020	4/23/2020
tblConstructionPhase	PhaseStartDate	1/31/2020	2/3/2020
tblConstructionPhase	PhaseStartDate	2/1/2025	2/3/2020
tblEnergyUse	LightingElect	0.00	0.43
tblEnergyUse	NT24E	0.00	38.50
tblEnergyUse	NT24NG	0.00	14.60
tblGrading	AcresOfGrading	2,423.75	175.00
tblGrading	AcresOfGrading	33.75	175.00
tblLandUse	LandUseSquareFeet	0.00	10,000.00
tblLandUse	LotAcreage	0.00	1.00
tblLandUse	LotAcreage	15.38	11.77
tblLandUse	LotAcreage	173.38	159.00

tblLandUse	Population	0.00	10.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	5.00
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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblProjectCharacteristics	OperationalYear	2014	2025
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	0.00	1.58
tblTripsAndVMT	VendorTripLength	6.60	7.30
tblTripsAndVMT	VendorTripLength	6.60	7.30
tblTripsAndVMT	VendorTripLength	6.60	7.30
tblTripsAndVMT	VendorTripLength	6.60	7.30
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tblTripsAndVMT	VendorTripLength	6.60	7.30
tblTripsAndVMT	VendorTripLength	6.60	7.30
tblTripsAndVMT	WorkerTripLength	16.80	10.80
tblTripsAndVMT	WorkerTripLength	16.80	10.80
tblTripsAndVMT	WorkerTripLength	16.80	10.80
tblTripsAndVMT	WorkerTripLength	16.80	10.80

tblTripsAndVMT	WorkerTripLength	16.80	10.80
tblTripsAndVMT	WorkerTripLength	16.80	10.80
tblTripsAndVMT	WorkerTripLength	16.80	10.80
tblTripsAndVMT	WorkerTripNumber	48.00	53.00
tblTripsAndVMT	WorkerTripNumber	15.00	25.00
tblVehicleTrips	CC_TTP	0.00	90.00
tblVehicleTrips	CNW_TTP	0.00	5.00
tblVehicleTrips	CW_TTP	0.00	5.00
tblVehicleTrips	DV_TP	0.00	11.00
tblVehicleTrips	PB_TP	0.00	3.00
tblVehicleTrips	PR_TP	0.00	86.00
tblVehicleTrips	ST_TR	1.59	50.00
tblVehicleTrips	ST_TR	7.16	8.00
tblVehicleTrips	ST_TR	10.08	10.00
tblVehicleTrips	ST_TR	0.00	50.00
tblVehicleTrips	SU_TR	1.59	50.00
tblVehicleTrips	SU_TR	6.07	8.00
tblVehicleTrips	SU_TR	8.77	10.00
tblVehicleTrips	SU_TR	0.00	50.00
tblVehicleTrips	WD_TR	1.59	50.00
tblVehicleTrips	WD_TR	6.59	8.00
tblVehicleTrips	WD_TR	9.57	10.00
tblVehicleTrips	WD_TR	0.00	50.00
tblWater	IndoorWaterUseRate	0.00	223,478.30
tblWater	OutdoorWaterUseRate	5,039,966.11	4,406,008.00
tblWater	OutdoorWaterUseRate	0.00	140,888.50

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					
2017	0.7308	8.3069	5.4519	7.7400e-003	7.4128	0.3726	7.7853	4.0274	0.3429	4.3703	0.0000	712.5386	712.5386	0.2127	0.0000	717.0056
2018	1.6655	18.6165	12.5345	0.0200	7.4463	0.8217	8.2679	4.0363	0.7559	4.7923	0.0000	1,811.3092	1,811.3092	0.5514	0.0000	1,822.8875
2019	1.2294	13.3990	9.4096	0.0159	7.6646	0.5921	8.2566	4.1182	0.5447	4.6629	0.0000	1,413.8082	1,413.8082	0.4372	0.0000	1,422.9888
2020	2.4525	4.1210	6.1719	0.0138	0.8189	0.1921	1.0110	0.2433	0.1803	0.4235	0.0000	1,055.9425	1,055.9425	0.1166	0.0000	1,058.3912
2021	3.2179	3.4288	6.0595	0.0144	0.6627	0.1541	0.8168	0.1781	0.1453	0.3234	0.0000	1,077.4924	1,077.4924	0.0976	0.0000	1,079.5426
2022	3.1659	3.0628	5.8308	0.0143	0.6602	0.1324	0.7925	0.1774	0.1248	0.3022	0.0000	1,065.8171	1,065.8171	0.0959	0.0000	1,067.8304
2023	3.1325	2.7942	5.6491	0.0143	0.6602	0.1165	0.7767	0.1774	0.1098	0.2873	0.0000	1,058.6924	1,058.6924	0.0944	0.0000	1,060.6739
2024	3.1289	2.6649	5.5140	0.0144	0.6653	0.1049	0.7701	0.1788	0.0988	0.2776	0.0000	1,060.9997	1,060.9997	0.0939	0.0000	1,062.9720
2025	0.2726	0.2208	0.4735	1.2700e-003	0.0584	8.1200e-003	0.0665	0.0157	7.6500e-003	0.0233	0.0000	92.7032	92.7032	8.1600e-003	0.0000	92.8745
Total	**18.9960**	**56.6149**	**57.0949**	**0.1161**	**26.0492**	**2.4943**	**28.5435**	**13.1525**	**2.3102**	**15.4628**	**0.0000**	**9,349.3032**	**9,349.3032**	**1.7078**	**0.0000**	**9,385.1664**

2.1 Overall Construction

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					
2017	0.1035	2.5778	4.1107	7.7400e-003	7.4128	0.0976	7.5103	4.0274	0.1023	4.1296	0.0000	712.5378	712.5378	0.2127	0.0000	717.0048
2018	0.3063	7.1771	10.8766	0.0200	7.4463	0.2735	7.7197	4.0363	0.2835	4.3198	0.0000	1,811.3071	1,811.3071	0.5514	0.0000	1,822.8854
2019	0.2587	5.9546	8.8553	0.0159	7.6646	0.2301	7.8947	4.1182	0.2373	4.3554	0.0000	1,413.8066	1,413.8066	0.4372	0.0000	1,422.9871
2020	2.1811	1.8737	6.3259	0.0138	0.8189	0.0513	0.8702	0.2433	0.0500	0.2932	0.0000	1,055.9420	1,055.9420	0.1166	0.0000	1,058.3908
2021	2.9927	1.4346	6.1754	0.0144	0.6627	0.0349	0.6977	0.1781	0.0336	0.2117	0.0000	1,077.4920	1,077.4920	0.0976	0.0000	1,079.5422
2022	2.9686	1.3261	5.9741	0.0143	0.6602	0.0346	0.6948	0.1774	0.0333	0.2107	0.0000	1,065.8167	1,065.8167	0.0959	0.0000	1,067.8300
2023	2.9541	1.2304	5.8081	0.0143	0.6602	0.0344	0.6945	0.1774	0.0330	0.2105	0.0000	1,058.6920	1,058.6920	0.0944	0.0000	1,060.6735
2024	2.9638	1.2225	5.6843	0.0144	0.6653	0.0347	0.7000	0.1788	0.0334	0.2121	0.0000	1,060.9993	1,060.9993	0.0939	0.0000	1,062.9716
2025	0.2594	0.1061	0.4894	1.2700e-003	0.0584	3.0500e-003	0.0615	0.0157	2.9400e-003	0.0186	0.0000	92.7031	92.7031	8.1600e-003	0.0000	92.8745
Total	**14.9883**	**22.9029**	**54.2999**	**0.1161**	**26.0492**	**0.7941**	**26.8433**	**13.1525**	**0.8092**	**13.9617**	**0.0000**	**9,349.2965**	**9,349.2965**	**1.7078**	**0.0000**	**9,385.1597**

	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	**21.10**	**59.55**	**4.90**	**0.00**	**0.00**	**68.16**	**5.96**	**0.00**	**64.97**	**9.71**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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	56.6802	0.7307	66.0775	0.0239		8.5027	8.5027		8.5024	8.5024	805.7070	347.3623	1,153.0693	0.7526	0.0634	1,188.5200
Energy	0.0987	0.8439	0.3621	5.3800e-003		0.0682	0.0682		0.0682	0.0682	0.0000	2,720.3154	2,720.3154	0.0889	0.0324	2,732.2350
Mobile	3.7306	8.0225	40.7652	0.1505	10.4080	0.1636	10.5717	2.7835	0.1511	2.9346	0.0000	9,896.8999	9,896.8999	0.3300	0.0000	9,903.8291
Waste						0.0000	0.0000		0.0000	0.0000	150.4508	0.0000	150.4508	8.8914	0.0000	337.1700
Water						0.0000	0.0000		0.0000	0.0000	16.1938	350.0468	366.2406	1.6774	0.0422	414.5432
Total	**60.5095**	**9.5971**	**107.2047**	**0.1798**	**10.4080**	**8.7345**	**19.1426**	**2.7835**	**8.7217**	**11.5052**	**972.3516**	**13,314.6244**	**14,286.9760**	**11.7402**	**0.1380**	**14,576.2973**

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	7.7940	0.0667	5.7892	3.1000e-004		0.0707	0.0707		0.0703	0.0703	0.0000	562.3907	562.3907	0.0197	0.0101	565.9460
Energy	0.0987	0.8439	0.3621	5.3800e-003		0.0682	0.0682		0.0682	0.0682	0.0000	2,718.1992	2,718.1992	0.0888	0.0324	2,730.1115
Mobile	3.7306	8.0225	40.7652	0.1505	10.4080	0.1636	10.5717	2.7835	0.1511	2.9346	0.0000	9,896.8999	9,896.8999	0.3300	0.0000	9,903.8291
Waste						0.0000	0.0000		0.0000	0.0000	112.8381	0.0000	112.8381	6.6685	0.0000	252.8775
Water						0.0000	0.0000		0.0000	0.0000	12.9550	274.0062	286.9613	1.3416	0.0337	325.5827
Total	**11.6233**	**8.9330**	**46.9164**	**0.1562**	**10.4080**	**0.3026**	**10.7106**	**2.7835**	**0.2896**	**3.0731**	**125.7931**	**13,451.4961**	**13,577.2892**	**8.4486**	**0.0763**	**13,778.3468**

	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	**80.79**	**6.92**	**56.24**	**13.10**	**0.00**	**96.54**	**44.05**	**0.00**	**96.68**	**73.29**	**87.06**	**-1.03**	**4.97**	**28.04**	**44.74**	**5.47**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	8/1/2017	8/15/2017	5	11	
2	Mass Grading	Grading	8/16/2017	9/30/2019	5	554	
3	Trenching	Trenching	10/1/2019	11/28/2019	5	43	
4	Fine Grading	Grading	11/29/2019	1/30/2020	5	45	
5	Building Construction	Building Construction	2/3/2020	1/31/2025	5	1305	
6	Paving	Paving	2/3/2020	4/7/2020	5	47	
7	Architectural Coating	Architectural Coating	4/23/2020	1/31/2025	5	1247	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 2,444,580; Residential Outdoor: 814,860; Non-Residential Indoor: 291,388; Non-Residential Outdoor: 97,129 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Mass Grading	Bore/Drill Rigs	2	7.00	205	0.50
Mass Grading	Graders	2	7.00	174	0.41
Mass Grading	Off-Highway Trucks	2	7.00	400	0.38
Mass Grading	Rubber Tired Dozers	5	7.00	255	0.40
Mass Grading	Scrapers	4	7.00	361	0.48
Mass Grading	Tractors/Loaders/Backhoes	4	5.00	97	0.37
Trenching	Excavators	2	8.00	162	0.38
Trenching	Other General Industrial Equipment	1	8.00	87	0.34
Trenching	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Fine Grading	Graders	2	6.00	174	0.41
Fine Grading	Off-Highway Trucks	2	8.00	400	0.38
Fine Grading	Rubber Tired Dozers	1	8.00	255	0.40
Fine Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	7.00	226	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
Paving	Pavers	1	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
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
Demolition	6	15.00	0.00	4.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Mass Grading	19	53.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Fine Grading	6	25.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	450.00	115.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	90.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

3.2 Demolition - 2017

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					4.5000e-004	0.0000	4.5000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0223	0.2348	0.1864	2.2000e-004		0.0117	0.0117		0.0109	0.0109	0.0000	20.1400	20.1400	5.5200e-003	0.0000	20.2560
Total	**0.0223**	**0.2348**	**0.1864**	**2.2000e-004**	**4.5000e-004**	**0.0117**	**0.0121**	**7.0000e-005**	**0.0109**	**0.0110**	**0.0000**	**20.1400**	**20.1400**	**5.5200e-003**	**0.0000**	**20.2560**

3.2 Demolition - 2017

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	4.0000e-005	5.2000e-004	4.6000e-004	0.0000	3.0000e-005	1.0000e-005	4.0000e-005	1.0000e-005	1.0000e-005	2.0000e-005	0.0000	0.1343	0.1343	0.0000	0.0000	0.1343
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e-004	3.4000e-004	3.2100e-003	1.0000e-005	6.6000e-004	0.0000	6.7000e-004	1.8000e-004	0.0000	1.8000e-004	0.0000	0.5927	0.5927	3.0000e-005	0.0000	0.5933
Total	**3.0000e-004**	**8.6000e-004**	**3.6700e-003**	**1.0000e-005**	**6.9000e-004**	**1.0000e-005**	**7.1000e-004**	**1.9000e-004**	**1.0000e-005**	**2.0000e-004**	**0.0000**	**0.7270**	**0.7270**	**3.0000e-005**	**0.0000**	**0.7276**

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					4.5000e-004	0.0000	4.5000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1500e-003	0.0834	0.1468	2.2000e-004		3.8500e-003	3.8500e-003		4.0500e-003	4.0500e-003	0.0000	20.1400	20.1400	5.5200e-003	0.0000	20.2560
Total	**2.1500e-003**	**0.0834**	**0.1468**	**2.2000e-004**	**4.5000e-004**	**3.8500e-003**	**4.3000e-003**	**7.0000e-005**	**4.0500e-003**	**4.1200e-003**	**0.0000**	**20.1400**	**20.1400**	**5.5200e-003**	**0.0000**	**20.2560**

3.2 Demolition - 2017

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	4.0000e-005	5.2000e-004	4.6000e-004	0.0000	3.0000e-005	1.0000e-005	4.0000e-005	1.0000e-005	1.0000e-005	2.0000e-005	0.0000	0.1343	0.1343	0.0000	0.0000	0.1343
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e-004	3.4000e-004	3.2100e-003	1.0000e-005	6.6000e-004	0.0000	6.7000e-004	1.8000e-004	0.0000	1.8000e-004	0.0000	0.5927	0.5927	3.0000e-005	0.0000	0.5933
Total	**3.0000e-004**	**8.6000e-004**	**3.6700e-003**	**1.0000e-005**	**6.9000e-004**	**1.0000e-005**	**7.1000e-004**	**1.9000e-004**	**1.0000e-005**	**2.0000e-004**	**0.0000**	**0.7270**	**0.7270**	**3.0000e-005**	**0.0000**	**0.7276**

3.3 Mass Grading - 2017

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					7.3908	0.0000	7.3908	4.0216	0.0000	4.0216	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.7001	8.0606	5.1607	7.2500e-003		0.3607	0.3607		0.3319	0.3319	0.0000	673.0138	673.0138	0.2062	0.0000	677.3442
Total	**0.7001**	**8.0606**	**5.1607**	**7.2500e-003**	**7.3908**	**0.3607**	**7.7515**	**4.0216**	**0.3319**	**4.3535**	**0.0000**	**673.0138**	**673.0138**	**0.2062**	**0.0000**	**677.3442**

3.3 Mass Grading - 2017

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	8.0700e-003	0.0107	0.1011	2.6000e-004	0.0208	1.6000e-004	0.0210	5.5300e-003	1.4000e-004	5.6800e-003	0.0000	18.6578	18.6578	9.5000e-004	0.0000	18.6777
Total	**8.0700e-003**	**0.0107**	**0.1011**	**2.6000e-004**	**0.0208**	**1.6000e-004**	**0.0210**	**5.5300e-003**	**1.4000e-004**	**5.6800e-003**	**0.0000**	**18.6578**	**18.6578**	**9.5000e-004**	**0.0000**	**18.6777**

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					7.3908	0.0000	7.3908	4.0216	0.0000	4.0216	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0930	2.4828	3.8591	7.2500e-003		0.0936	0.0936		0.0980	0.0980	0.0000	673.0130	673.0130	0.2062	0.0000	677.3434
Total	**0.0930**	**2.4828**	**3.8591**	**7.2500e-003**	**7.3908**	**0.0936**	**7.4844**	**4.0216**	**0.0980**	**4.1196**	**0.0000**	**673.0130**	**673.0130**	**0.2062**	**0.0000**	**677.3434**

3.3 Mass Grading - 2017

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	8.0700e-003	0.0107	0.1011	2.6000e-004	0.0208	1.6000e-004	0.0210	5.5300e-003	1.4000e-004	5.6800e-003	0.0000	18.6578	18.6578	9.5000e-004	0.0000	18.6777
Total	**8.0700e-003**	**0.0107**	**0.1011**	**2.6000e-004**	**0.0208**	**1.6000e-004**	**0.0210**	**5.5300e-003**	**1.4000e-004**	**5.6800e-003**	**0.0000**	**18.6578**	**18.6578**	**9.5000e-004**	**0.0000**	**18.6777**

3.3 Mass Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					7.3908	0.0000	7.3908	4.0216	0.0000	4.0216	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.6460	18.5905	12.2910	0.0193		0.8213	0.8213		0.7556	0.7556	0.0000	1,763.4845	1,763.4845	0.5490	0.0000	1,775.0135
Total	**1.6460**	**18.5905**	**12.2910**	**0.0193**	**7.3908**	**0.8213**	**8.2121**	**4.0216**	**0.7556**	**4.7772**	**0.0000**	**1,763.4845**	**1,763.4845**	**0.5490**	**0.0000**	**1,775.0135**

3.3 Mass Grading - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0195	0.0260	0.2436	6.8000e-004	0.0555	4.1000e-004	0.0559	0.0147	3.8000e-004	0.0151	0.0000	47.8247	47.8247	2.3500e-003	0.0000	47.8740
Total	**0.0195**	**0.0260**	**0.2436**	**6.8000e-004**	**0.0555**	**4.1000e-004**	**0.0559**	**0.0147**	**3.8000e-004**	**0.0151**	**0.0000**	**47.8247**	**47.8247**	**2.3500e-003**	**0.0000**	**47.8740**

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					7.3908	0.0000	7.3908	4.0216	0.0000	4.0216	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2868	7.1511	10.6331	0.0193		0.2731	0.2731		0.2831	0.2831	0.0000	1,763.4824	1,763.4824	0.5490	0.0000	1,775.0113
Total	**0.2868**	**7.1511**	**10.6331**	**0.0193**	**7.3908**	**0.2731**	**7.6639**	**4.0216**	**0.2831**	**4.3047**	**0.0000**	**1,763.4824**	**1,763.4824**	**0.5490**	**0.0000**	**1,775.0113**

3.3 Mass Grading - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0195	0.0260	0.2436	6.8000e-004	0.0555	4.1000e-004	0.0559	0.0147	3.8000e-004	0.0151	0.0000	47.8247	47.8247	2.3500e-003	0.0000	47.8740
Total	**0.0195**	**0.0260**	**0.2436**	**6.8000e-004**	**0.0555**	**4.1000e-004**	**0.0559**	**0.0147**	**3.8000e-004**	**0.0151**	**0.0000**	**47.8247**	**47.8247**	**2.3500e-003**	**0.0000**	**47.8740**

3.3 Mass Grading - 2019

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					7.3908	0.0000	7.3908	4.0216	0.0000	4.0216	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.1488	12.7147	8.6975	0.0144		0.5581	0.5581		0.5135	0.5135	0.0000	1,295.9000	1,295.9000	0.4100	0.0000	1,304.5101
Total	**1.1488**	**12.7147**	**8.6975**	**0.0144**	**7.3908**	**0.5581**	**7.9489**	**4.0216**	**0.5135**	**4.5351**	**0.0000**	**1,295.9000**	**1,295.9000**	**0.4100**	**0.0000**	**1,304.5101**

3.3 Mass Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0135	0.0179	0.1674	5.1000e-004	0.0414	3.0000e-004	0.0417	0.0110	2.8000e-004	0.0113	0.0000	34.4385	34.4385	1.6500e-003	0.0000	34.4731
Total	**0.0135**	**0.0179**	**0.1674**	**5.1000e-004**	**0.0414**	**3.0000e-004**	**0.0417**	**0.0110**	**2.8000e-004**	**0.0113**	**0.0000**	**34.4385**	**34.4385**	**1.6500e-003**	**0.0000**	**34.4731**

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					7.3908	0.0000	7.3908	4.0216	0.0000	4.0216	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2279	5.5572	8.0660	0.0144		0.2129	0.2129		0.2197	0.2197	0.0000	1,295.8984	1,295.8984	0.4100	0.0000	1,304.5086
Total	**0.2279**	**5.5572**	**8.0660**	**0.0144**	**7.3908**	**0.2129**	**7.6038**	**4.0216**	**0.2197**	**4.2413**	**0.0000**	**1,295.8984**	**1,295.8984**	**0.4100**	**0.0000**	**1,304.5086**

3.3 Mass Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0135	0.0179	0.1674	5.1000e-004	0.0414	3.0000e-004	0.0417	0.0110	2.8000e-004	0.0113	0.0000	34.4385	34.4385	1.6500e-003	0.0000	34.4731
Total	**0.0135**	**0.0179**	**0.1674**	**5.1000e-004**	**0.0414**	**3.0000e-004**	**0.0417**	**0.0110**	**2.8000e-004**	**0.0113**	**0.0000**	**34.4385**	**34.4385**	**1.6500e-003**	**0.0000**	**34.4731**

3.4 Trenching - 2019

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	0.0221	0.2189	0.2362	3.5000e-004		0.0129	0.0129		0.0119	0.0119	0.0000	31.3305	31.3305	9.9100e-003	0.0000	31.5386
Total	**0.0221**	**0.2189**	**0.2362**	**3.5000e-004**		**0.0129**	**0.0129**		**0.0119**	**0.0119**	**0.0000**	**31.3305**	**31.3305**	**9.9100e-003**	**0.0000**	**31.5386**

3.4 Trenching - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.6000e-004	7.5000e-004	6.9600e-003	2.0000e-005	1.7200e-003	1.0000e-005	1.7400e-003	4.6000e-004	1.0000e-005	4.7000e-004	0.0000	1.4329	1.4329	7.0000e-005	0.0000	1.4343
Total	**5.6000e-004**	**7.5000e-004**	**6.9600e-003**	**2.0000e-005**	**1.7200e-003**	**1.0000e-005**	**1.7400e-003**	**4.6000e-004**	**1.0000e-005**	**4.7000e-004**	**0.0000**	**1.4329**	**1.4329**	**7.0000e-005**	**0.0000**	**1.4343**

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	3.0500e-003	0.1346	0.2877	3.5000e-004		7.1100e-003	7.1100e-003		7.4800e-003	7.4800e-003	0.0000	31.3304	31.3304	9.9100e-003	0.0000	31.5386
Total	**3.0500e-003**	**0.1346**	**0.2877**	**3.5000e-004**		**7.1100e-003**	**7.1100e-003**		**7.4800e-003**	**7.4800e-003**	**0.0000**	**31.3304**	**31.3304**	**9.9100e-003**	**0.0000**	**31.5386**

3.4 Trenching - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.6000e-004	7.5000e-004	6.9600e-003	2.0000e-005	1.7200e-003	1.0000e-005	1.7400e-003	4.6000e-004	1.0000e-005	4.7000e-004	0.0000	1.4329	1.4329	7.0000e-005	0.0000	1.4343
Total	**5.6000e-004**	**7.5000e-004**	**6.9600e-003**	**2.0000e-005**	**1.7200e-003**	**1.0000e-005**	**1.7400e-003**	**4.6000e-004**	**1.0000e-005**	**4.7000e-004**	**0.0000**	**1.4329**	**1.4329**	**7.0000e-005**	**0.0000**	**1.4343**

3.5 Fine Grading - 2019

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					0.2283	0.0000	0.2283	0.0845	0.0000	0.0845	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0436	0.4457	0.2921	5.4000e-004		0.0207	0.0207		0.0191	0.0191	0.0000	48.7905	48.7905	0.0154	0.0000	49.1146
Total	**0.0436**	**0.4457**	**0.2921**	**5.4000e-004**	**0.2283**	**0.0207**	**0.2490**	**0.0845**	**0.0191**	**0.1036**	**0.0000**	**48.7905**	**48.7905**	**0.0154**	**0.0000**	**49.1146**

3.5 Fine Grading - 2019

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	7.5000e-004	1.0000e-003	9.3100e-003	3.0000e-005	2.3100e-003	2.0000e-005	2.3200e-003	6.1000e-004	2.0000e-005	6.3000e-004	0.0000	1.9160	1.9160	9.0000e-005	0.0000	1.9180
Total	**7.5000e-004**	**1.0000e-003**	**9.3100e-003**	**3.0000e-005**	**2.3100e-003**	**2.0000e-005**	**2.3200e-003**	**6.1000e-004**	**2.0000e-005**	**6.3000e-004**	**0.0000**	**1.9160**	**1.9160**	**9.0000e-005**	**0.0000**	**1.9180**

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					0.2283	0.0000	0.2283	0.0845	0.0000	0.0845	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0129	0.2431	0.3180	5.4000e-004		9.7300e-003	9.7300e-003		9.7300e-003	9.7300e-003	0.0000	48.7904	48.7904	0.0154	0.0000	49.1146
Total	**0.0129**	**0.2431**	**0.3180**	**5.4000e-004**	**0.2283**	**9.7300e-003**	**0.2380**	**0.0845**	**9.7300e-003**	**0.0942**	**0.0000**	**48.7904**	**48.7904**	**0.0154**	**0.0000**	**49.1146**

3.5 Fine Grading - 2019

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	7.5000e-004	1.0000e-003	9.3100e-003	3.0000e-005	2.3100e-003	2.0000e-005	2.3200e-003	6.1000e-004	2.0000e-005	6.3000e-004	0.0000	1.9160	1.9160	9.0000e-005	0.0000	1.9180
Total	**7.5000e-004**	**1.0000e-003**	**9.3100e-003**	**3.0000e-005**	**2.3100e-003**	**2.0000e-005**	**2.3200e-003**	**6.1000e-004**	**2.0000e-005**	**6.3000e-004**	**0.0000**	**1.9160**	**1.9160**	**9.0000e-005**	**0.0000**	**1.9180**

3.5 Fine Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2283	0.0000	0.2283	0.0845	0.0000	0.0845	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0389	0.3851	0.2678	5.2000e-004		0.0179	0.0179		0.0164	0.0164	0.0000	45.6340	45.6340	0.0148	0.0000	45.9439
Total	**0.0389**	**0.3851**	**0.2678**	**5.2000e-004**	**0.2283**	**0.0179**	**0.2462**	**0.0845**	**0.0164**	**0.1009**	**0.0000**	**45.6340**	**45.6340**	**0.0148**	**0.0000**	**45.9439**

3.5 Fine Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.8000e-004	8.9000e-004	8.3200e-003	3.0000e-005	2.2100e-003	2.0000e-005	2.2200e-003	5.9000e-004	1.0000e-005	6.0000e-004	0.0000	1.7589	1.7589	8.0000e-005	0.0000	1.7606
Total	**6.8000e-004**	**8.9000e-004**	**8.3200e-003**	**3.0000e-005**	**2.2100e-003**	**2.0000e-005**	**2.2200e-003**	**5.9000e-004**	**1.0000e-005**	**6.0000e-004**	**0.0000**	**1.7589**	**1.7589**	**8.0000e-005**	**0.0000**	**1.7606**

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					0.2283	0.0000	0.2283	0.0845	0.0000	0.0845	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0123	0.2325	0.3042	5.2000e-004		9.3100e-003	9.3100e-003		9.3100e-003	9.3100e-003	0.0000	45.6339	45.6339	0.0148	0.0000	45.9438
Total	**0.0123**	**0.2325**	**0.3042**	**5.2000e-004**	**0.2283**	**9.3100e-003**	**0.2376**	**0.0845**	**9.3100e-003**	**0.0938**	**0.0000**	**45.6339**	**45.6339**	**0.0148**	**0.0000**	**45.9438**

3.5 Fine Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.8000e-004	8.9000e-004	8.3200e-003	3.0000e-005	2.2100e-003	2.0000e-005	2.2200e-003	5.9000e-004	1.0000e-005	6.0000e-004	0.0000	1.7589	1.7589	8.0000e-005	0.0000	1.7606
Total	**6.8000e-004**	**8.9000e-004**	**8.3200e-003**	**3.0000e-005**	**2.2100e-003**	**2.0000e-005**	**2.2200e-003**	**5.9000e-004**	**1.0000e-005**	**6.0000e-004**	**0.0000**	**1.7589**	**1.7589**	**8.0000e-005**	**0.0000**	**1.7606**

3.6 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2523	2.2805	2.0086	3.2000e-003		0.1330	0.1330		0.1251	0.1251	0.0000	275.6266	275.6266	0.0672	0.0000	277.0368
Total	**0.2523**	**2.2805**	**2.0086**	**3.2000e-003**		**0.1330**	**0.1330**		**0.1251**	**0.1251**	**0.0000**	**275.6266**	**275.6266**	**0.0672**	**0.0000**	**277.0368**

3.6 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1186	0.8398	1.5660	3.2400e-003	0.0894	0.0133	0.1027	0.0256	0.0122	0.0378	0.0000	275.0968	275.0968	2.0400e-003	0.0000	275.1395
Worker	0.1333	0.1744	1.6279	5.3000e-003	0.4312	3.1300e-003	0.4344	0.1146	2.9100e-003	0.1175	0.0000	343.9386	343.9386	0.0163	0.0000	344.2818
Total	**0.2518**	**1.0142**	**3.1938**	**8.5400e-003**	**0.5206**	**0.0164**	**0.5370**	**0.1402**	**0.0151**	**0.1553**	**0.0000**	**619.0354**	**619.0354**	**0.0184**	**0.0000**	**619.4213**

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	0.0390	0.2664	2.0806	3.2000e-003		4.8500e-003	4.8500e-003		4.8500e-003	4.8500e-003	0.0000	275.6263	275.6263	0.0672	0.0000	277.0365
Total	**0.0390**	**0.2664**	**2.0806**	**3.2000e-003**		**4.8500e-003**	**4.8500e-003**		**4.8500e-003**	**4.8500e-003**	**0.0000**	**275.6263**	**275.6263**	**0.0672**	**0.0000**	**277.0365**

3.6 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1186	0.8398	1.5660	3.2400e-003	0.0894	0.0133	0.1027	0.0256	0.0122	0.0378	0.0000	275.0968	275.0968	2.0400e-003	0.0000	275.1395
Worker	0.1333	0.1744	1.6279	5.3000e-003	0.4312	3.1300e-003	0.4344	0.1146	2.9100e-003	0.1175	0.0000	343.9386	343.9386	0.0163	0.0000	344.2818
Total	**0.2518**	**1.0142**	**3.1938**	**8.5400e-003**	**0.5206**	**0.0164**	**0.5370**	**0.1402**	**0.0151**	**0.1553**	**0.0000**	**619.0354**	**619.0354**	**0.0184**	**0.0000**	**619.4213**

3.6 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	0.2471	2.2629	2.1582	3.5000e-003		0.1246	0.1246		0.1172	0.1172	0.0000	301.0339	301.0339	0.0725	0.0000	302.5568
Total	**0.2471**	**2.2629**	**2.1582**	**3.5000e-003**		**0.1246**	**0.1246**		**0.1172**	**0.1172**	**0.0000**	**301.0339**	**301.0339**	**0.0725**	**0.0000**	**302.5568**

3.6 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	0.1219	0.7520	1.6418	3.5400e-003	0.0976	0.0131	0.1107	0.0279	0.0120	0.0399	0.0000	299.9401	299.9401	2.2100e-003	0.0000	299.9866
Worker	0.1386	0.1788	1.6853	5.8000e-003	0.4709	3.4800e-003	0.4744	0.1251	3.2200e-003	0.1284	0.0000	369.3321	369.3321	0.0172	0.0000	369.6927
Total	**0.2604**	**0.9308**	**3.3271**	**9.3400e-003**	**0.5685**	**0.0165**	**0.5851**	**0.1531**	**0.0152**	**0.1683**	**0.0000**	**669.2721**	**669.2721**	**0.0194**	**0.0000**	**669.6793**

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	0.0426	0.2909	2.2721	3.5000e-003		5.3000e-003	5.3000e-003		5.3000e-003	5.3000e-003	0.0000	301.0335	301.0335	0.0725	0.0000	302.5565
Total	**0.0426**	**0.2909**	**2.2721**	**3.5000e-003**		**5.3000e-003**	**5.3000e-003**		**5.3000e-003**	**5.3000e-003**	**0.0000**	**301.0335**	**301.0335**	**0.0725**	**0.0000**	**302.5565**

3.6 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	0.1219	0.7520	1.6418	3.5400e-003	0.0976	0.0131	0.1107	0.0279	0.0120	0.0399	0.0000	299.9401	299.9401	2.2100e-003	0.0000	299.9866
Worker	0.1386	0.1788	1.6853	5.8000e-003	0.4709	3.4800e-003	0.4744	0.1251	3.2200e-003	0.1284	0.0000	369.3321	369.3321	0.0172	0.0000	369.6927
Total	**0.2604**	**0.9308**	**3.3271**	**9.3400e-003**	**0.5685**	**0.0165**	**0.5851**	**0.1531**	**0.0152**	**0.1683**	**0.0000**	**669.2721**	**669.2721**	**0.0194**	**0.0000**	**669.6793**

3.6 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	0.2209	2.0197	2.1226	3.4900e-003		0.1047	0.1047		0.0986	0.0986	0.0000	299.9946	299.9946	0.0718	0.0000	301.5017
Total	**0.2209**	**2.0197**	**2.1226**	**3.4900e-003**		**0.1047**	**0.1047**		**0.0986**	**0.0986**	**0.0000**	**299.9946**	**299.9946**	**0.0718**	**0.0000**	**301.5017**

3.6 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	0.1166	0.6580	1.5713	3.5200e-003	0.0972	0.0128	0.1100	0.0278	0.0118	0.0396	0.0000	298.4820	298.4820	2.2500e-003	0.0000	298.5293
Worker	0.1315	0.1683	1.5843	5.7800e-003	0.4691	3.4900e-003	0.4726	0.1247	3.2300e-003	0.1279	0.0000	361.7902	361.7902	0.0164	0.0000	362.1348
Total	**0.2481**	**0.8263**	**3.1556**	**9.3000e-003**	**0.5664**	**0.0163**	**0.5826**	**0.1525**	**0.0150**	**0.1675**	**0.0000**	**660.2721**	**660.2721**	**0.0187**	**0.0000**	**660.6640**

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	0.0424	0.2898	2.2634	3.4900e-003		5.2800e-003	5.2800e-003		5.2800e-003	5.2800e-003	0.0000	299.9943	299.9943	0.0718	0.0000	301.5013
Total	**0.0424**	**0.2898**	**2.2634**	**3.4900e-003**		**5.2800e-003**	**5.2800e-003**		**5.2800e-003**	**5.2800e-003**	**0.0000**	**299.9943**	**299.9943**	**0.0718**	**0.0000**	**301.5013**

3.6 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	0.1166	0.6580	1.5713	3.5200e-003	0.0972	0.0128	0.1100	0.0278	0.0118	0.0396	0.0000	298.4820	298.4820	2.2500e-003	0.0000	298.5293
Worker	0.1315	0.1683	1.5843	5.7800e-003	0.4691	3.4900e-003	0.4726	0.1247	3.2300e-003	0.1279	0.0000	361.7902	361.7902	0.0164	0.0000	362.1348
Total	**0.2481**	**0.8263**	**3.1556**	**9.3000e-003**	**0.5664**	**0.0163**	**0.5826**	**0.1525**	**0.0150**	**0.1675**	**0.0000**	**660.2721**	**660.2721**	**0.0187**	**0.0000**	**660.6640**

3.6 Building Construction - 2023

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	0.2036	1.8606	2.1072	3.4900e-003		0.0906	0.0906		0.0852	0.0852	0.0000	300.0980	300.0980	0.0713	0.0000	301.5949
Total	**0.2036**	**1.8606**	**2.1072**	**3.4900e-003**		**0.0906**	**0.0906**		**0.0852**	**0.0852**	**0.0000**	**300.0980**	**300.0980**	**0.0713**	**0.0000**	**301.5949**

3.6 Building Construction - 2023

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	0.1093	0.5727	1.5070	3.5100e-003	0.0972	0.0125	0.1097	0.0278	0.0115	0.0393	0.0000	297.8136	297.8136	2.1100e-003	0.0000	297.8581
Worker	0.1255	0.1596	1.4995	5.7800e-003	0.4691	3.5100e-003	0.4726	0.1247	3.2600e-003	0.1279	0.0000	356.3237	356.3237	0.0158	0.0000	356.6558
Total	**0.2348**	**0.7323**	**3.0065**	**9.2900e-003**	**0.5664**	**0.0160**	**0.5824**	**0.1525**	**0.0148**	**0.1672**	**0.0000**	**654.1374**	**654.1374**	**0.0179**	**0.0000**	**654.5138**

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	0.0424	0.2898	2.2634	3.4900e-003		5.2800e-003	5.2800e-003		5.2800e-003	5.2800e-003	0.0000	300.0976	300.0976	0.0713	0.0000	301.5946
Total	**0.0424**	**0.2898**	**2.2634**	**3.4900e-003**		**5.2800e-003**	**5.2800e-003**		**5.2800e-003**	**5.2800e-003**	**0.0000**	**300.0976**	**300.0976**	**0.0713**	**0.0000**	**301.5946**

3.6 Building Construction - 2023

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	0.1093	0.5727	1.5070	3.5100e-003	0.0972	0.0125	0.1097	0.0278	0.0115	0.0393	0.0000	297.8136	297.8136	2.1100e-003	0.0000	297.8581
Worker	0.1255	0.1596	1.4995	5.7800e-003	0.4691	3.5100e-003	0.4726	0.1247	3.2600e-003	0.1279	0.0000	356.3237	356.3237	0.0158	0.0000	356.6558
Total	**0.2348**	**0.7323**	**3.0065**	**9.2900e-003**	**0.5664**	**0.0160**	**0.5824**	**0.1525**	**0.0148**	**0.1672**	**0.0000**	**654.1374**	**654.1374**	**0.0179**	**0.0000**	**654.5138**

3.6 Building Construction - 2024

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	0.1920	1.7524	2.1135	3.5200e-003		0.0800	0.0800		0.0752	0.0752	0.0000	302.4646	302.4646	0.0714	0.0000	303.9643
Total	**0.1920**	**1.7524**	**2.1135**	**3.5200e-003**		**0.0800**	**0.0800**		**0.0752**	**0.0752**	**0.0000**	**302.4646**	**302.4646**	**0.0714**	**0.0000**	**303.9643**

3.6 Building Construction - 2024

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	0.1037	0.5691	1.4366	3.5300e-003	0.0980	0.0126	0.1106	0.0280	0.0116	0.0397	0.0000	300.0852	300.0852	2.1400e-003	0.0000	300.1301
Worker	0.1210	0.1531	1.4391	5.8200e-003	0.4727	3.5700e-003	0.4763	0.1256	3.3100e-003	0.1289	0.0000	354.1686	354.1686	0.0154	0.0000	354.4920
Total	**0.2247**	**0.7222**	**2.8756**	**9.3500e-003**	**0.5707**	**0.0162**	**0.5869**	**0.1537**	**0.0149**	**0.1686**	**0.0000**	**654.2537**	**654.2537**	**0.0175**	**0.0000**	**654.6221**

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	0.0428	0.2920	2.2808	3.5200e-003		5.3200e-003	5.3200e-003		5.3200e-003	5.3200e-003	0.0000	302.4642	302.4642	0.0714	0.0000	303.9639
Total	**0.0428**	**0.2920**	**2.2808**	**3.5200e-003**		**5.3200e-003**	**5.3200e-003**		**5.3200e-003**	**5.3200e-003**	**0.0000**	**302.4642**	**302.4642**	**0.0714**	**0.0000**	**303.9639**

3.6 Building Construction - 2024

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	0.1037	0.5691	1.4366	3.5300e-003	0.0980	0.0126	0.1106	0.0280	0.0116	0.0397	0.0000	300.0852	300.0852	2.1400e-003	0.0000	300.1301
Worker	0.1210	0.1531	1.4391	5.8200e-003	0.4727	3.5700e-003	0.4763	0.1256	3.3100e-003	0.1289	0.0000	354.1686	354.1686	0.0154	0.0000	354.4920
Total	**0.2247**	**0.7222**	**2.8756**	**9.3500e-003**	**0.5707**	**0.0162**	**0.5869**	**0.1537**	**0.0149**	**0.1686**	**0.0000**	**654.2537**	**654.2537**	**0.0175**	**0.0000**	**654.6221**

3.6 Building Construction - 2025

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	0.0157	0.1427	0.1846	3.1000e-004		6.0400e-003	6.0400e-003		5.6800e-003	5.6800e-003	0.0000	26.5603	26.5603	6.2300e-003	0.0000	26.6912
Total	**0.0157**	**0.1427**	**0.1846**	**3.1000e-004**		**6.0400e-003**	**6.0400e-003**		**5.6800e-003**	**5.6800e-003**	**0.0000**	**26.5603**	**26.5603**	**6.2300e-003**	**0.0000**	**26.6912**

3.6 Building Construction - 2025

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	8.8500e-003	0.0494	0.1228	3.1000e-004	8.6000e-003	1.1100e-003	9.7200e-003	2.4600e-003	1.0200e-003	3.4800e-003	0.0000	26.3456	26.3456	1.9000e-004	0.0000	26.3495
Worker	0.0102	0.0129	0.1211	5.1000e-004	0.0415	3.2000e-004	0.0418	0.0110	2.9000e-004	0.0113	0.0000	30.7175	30.7175	1.3100e-003	0.0000	30.7451
Total	**0.0191**	**0.0623**	**0.2439**	**8.2000e-004**	**0.0501**	**1.4300e-003**	**0.0515**	**0.0135**	**1.3100e-003**	**0.0148**	**0.0000**	**57.0631**	**57.0631**	**1.5000e-003**	**0.0000**	**57.0946**

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	3.7500e-003	0.0256	0.2002	3.1000e-004		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	26.5603	26.5603	6.2300e-003	0.0000	26.6912
Total	**3.7500e-003**	**0.0256**	**0.2002**	**3.1000e-004**		**4.7000e-004**	**4.7000e-004**		**4.7000e-004**	**4.7000e-004**	**0.0000**	**26.5603**	**26.5603**	**6.2300e-003**	**0.0000**	**26.6912**

3.6 Building Construction - 2025

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	8.8500e-003	0.0494	0.1228	3.1000e-004	8.6000e-003	1.1100e-003	9.7200e-003	2.4600e-003	1.0200e-003	3.4800e-003	0.0000	26.3456	26.3456	1.9000e-004	0.0000	26.3495
Worker	0.0102	0.0129	0.1211	5.1000e-004	0.0415	3.2000e-004	0.0418	0.0110	2.9000e-004	0.0113	0.0000	30.7175	30.7175	1.3100e-003	0.0000	30.7451
Total	**0.0191**	**0.0623**	**0.2439**	**8.2000e-004**	**0.0501**	**1.4300e-003**	**0.0515**	**0.0135**	**1.3100e-003**	**0.0148**	**0.0000**	**57.0631**	**57.0631**	**1.5000e-003**	**0.0000**	**57.0946**

3.7 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0253	0.2604	0.2718	4.2000e-004		0.0143	0.0143		0.0131	0.0131	0.0000	36.7323	36.7323	0.0119	0.0000	36.9818
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0253**	**0.2604**	**0.2718**	**4.2000e-004**		**0.0143**	**0.0143**		**0.0131**	**0.0131**	**0.0000**	**36.7323**	**36.7323**	**0.0119**	**0.0000**	**36.9818**

3.7 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.6000e-004	9.9000e-004	9.2500e-003	3.0000e-005	2.4500e-003	2.0000e-005	2.4700e-003	6.5000e-004	2.0000e-005	6.7000e-004	0.0000	1.9539	1.9539	9.0000e-005	0.0000	1.9559
Total	**7.6000e-004**	**9.9000e-004**	**9.2500e-003**	**3.0000e-005**	**2.4500e-003**	**2.0000e-005**	**2.4700e-003**	**6.5000e-004**	**2.0000e-005**	**6.7000e-004**	**0.0000**	**1.9539**	**1.9539**	**9.0000e-005**	**0.0000**	**1.9559**

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	0.0103	0.2095	0.3173	4.2000e-004		0.0116	0.0116		0.0116	0.0116	0.0000	36.7322	36.7322	0.0119	0.0000	36.9817
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0103**	**0.2095**	**0.3173**	**4.2000e-004**		**0.0116**	**0.0116**		**0.0116**	**0.0116**	**0.0000**	**36.7322**	**36.7322**	**0.0119**	**0.0000**	**36.9817**

3.7 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.6000e-004	9.9000e-004	9.2500e-003	3.0000e-005	2.4500e-003	2.0000e-005	2.4700e-003	6.5000e-004	2.0000e-005	6.7000e-004	0.0000	1.9539	1.9539	9.0000e-005	0.0000	1.9559
Total	**7.6000e-004**	**9.9000e-004**	**9.2500e-003**	**3.0000e-005**	**2.4500e-003**	**2.0000e-005**	**2.4700e-003**	**6.5000e-004**	**2.0000e-005**	**6.7000e-004**	**0.0000**	**1.9539**	**1.9539**	**9.0000e-005**	**0.0000**	**1.9559**

3.8 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.8407					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0219	0.1524	0.1657	2.7000e-004		0.0100	0.0100		0.0100	0.0100	0.0000	23.1070	23.1070	1.7900e-003	0.0000	23.1445
Total	**1.8626**	**0.1524**	**0.1657**	**2.7000e-004**		**0.0100**	**0.0100**		**0.0100**	**0.0100**	**0.0000**	**23.1070**	**23.1070**	**1.7900e-003**	**0.0000**	**23.1445**

3.8 Architectural Coating - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0202	0.0264	0.2466	8.0000e-004	0.0653	4.7000e-004	0.0658	0.0174	4.4000e-004	0.0178	0.0000	52.0945	52.0945	2.4800e-003	0.0000	52.1464
Total	**0.0202**	**0.0264**	**0.2466**	**8.0000e-004**	**0.0653**	**4.7000e-004**	**0.0658**	**0.0174**	**4.4000e-004**	**0.0178**	**0.0000**	**52.0945**	**52.0945**	**2.4800e-003**	**0.0000**	**52.1464**

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	1.8407					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.3800e-003	0.1228	0.1658	2.7000e-004		8.6100e-003	8.6100e-003		8.6100e-003	8.6100e-003	0.0000	23.1069	23.1069	1.7900e-003	0.0000	23.1445
Total	**1.8460**	**0.1228**	**0.1658**	**2.7000e-004**		**8.6100e-003**	**8.6100e-003**		**8.6100e-003**	**8.6100e-003**	**0.0000**	**23.1069**	**23.1069**	**1.7900e-003**	**0.0000**	**23.1445**

3.8 Architectural Coating - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0202	0.0264	0.2466	8.0000e-004	0.0653	4.7000e-004	0.0658	0.0174	4.4000e-004	0.0178	0.0000	52.0945	52.0945	2.4800e-003	0.0000	52.1464
Total	**0.0202**	**0.0264**	**0.2466**	**8.0000e-004**	**0.0653**	**4.7000e-004**	**0.0658**	**0.0174**	**4.4000e-004**	**0.0178**	**0.0000**	**52.0945**	**52.0945**	**2.4800e-003**	**0.0000**	**52.1464**

3.8 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	2.6542					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0286	0.1993	0.2372	3.9000e-004		0.0123	0.0123		0.0123	0.0123	0.0000	33.3200	33.3200	2.2900e-003	0.0000	33.3680
Total	**2.6828**	**0.1993**	**0.2372**	**3.9000e-004**		**0.0123**	**0.0123**		**0.0123**	**0.0123**	**0.0000**	**33.3200**	**33.3200**	**2.2900e-003**	**0.0000**	**33.3680**

3.8 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0277	0.0358	0.3371	1.1600e-003	0.0942	7.0000e-004	0.0949	0.0250	6.4000e-004	0.0257	0.0000	73.8664	73.8664	3.4300e-003	0.0000	73.9385
Total	**0.0277**	**0.0358**	**0.3371**	**1.1600e-003**	**0.0942**	**7.0000e-004**	**0.0949**	**0.0250**	**6.4000e-004**	**0.0257**	**0.0000**	**73.8664**	**73.8664**	**3.4300e-003**	**0.0000**	**73.9385**

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	2.6542					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.7600e-003	0.1771	0.2391	3.9000e-004		0.0124	0.0124		0.0124	0.0124	0.0000	33.3199	33.3199	2.2900e-003	0.0000	33.3679
Total	**2.6620**	**0.1771**	**0.2391**	**3.9000e-004**		**0.0124**	**0.0124**		**0.0124**	**0.0124**	**0.0000**	**33.3199**	**33.3199**	**2.2900e-003**	**0.0000**	**33.3679**

3.8 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0277	0.0358	0.3371	1.1600e-003	0.0942	7.0000e-004	0.0949	0.0250	6.4000e-004	0.0257	0.0000	73.8664	73.8664	3.4300e-003	0.0000	73.9385
Total	**0.0277**	**0.0358**	**0.3371**	**1.1600e-003**	**0.0942**	**7.0000e-004**	**0.0949**	**0.0250**	**6.4000e-004**	**0.0257**	**0.0000**	**73.8664**	**73.8664**	**3.4300e-003**	**0.0000**	**73.9385**

3.8 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	2.6440					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0266	0.1831	0.2358	3.9000e-004		0.0106	0.0106		0.0106	0.0106	0.0000	33.1923	33.1923	2.1600e-003	0.0000	33.2377
Total	**2.6706**	**0.1831**	**0.2358**	**3.9000e-004**		**0.0106**	**0.0106**		**0.0106**	**0.0106**	**0.0000**	**33.1923**	**33.1923**	**2.1600e-003**	**0.0000**	**33.2377**

3.8 Architectural Coating - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0263	0.0337	0.3169	1.1600e-003	0.0938	7.0000e-004	0.0945	0.0249	6.5000e-004	0.0256	0.0000	72.3580	72.3580	3.2800e-003	0.0000	72.4270
Total	**0.0263**	**0.0337**	**0.3169**	**1.1600e-003**	**0.0938**	**7.0000e-004**	**0.0945**	**0.0249**	**6.5000e-004**	**0.0256**	**0.0000**	**72.3580**	**72.3580**	**3.2800e-003**	**0.0000**	**72.4270**

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	2.6440					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.7300e-003	0.1764	0.2382	3.9000e-004		0.0124	0.0124		0.0124	0.0124	0.0000	33.1923	33.1923	2.1600e-003	0.0000	33.2376
Total	**2.6518**	**0.1764**	**0.2382**	**3.9000e-004**		**0.0124**	**0.0124**		**0.0124**	**0.0124**	**0.0000**	**33.1923**	**33.1923**	**2.1600e-003**	**0.0000**	**33.2376**

3.8 Architectural Coating - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0263	0.0337	0.3169	1.1600e-003	0.0938	7.0000e-004	0.0945	0.0249	6.5000e-004	0.0256	0.0000	72.3580	72.3580	3.2800e-003	0.0000	72.4270
Total	**0.0263**	**0.0337**	**0.3169**	**1.1600e-003**	**0.0938**	**7.0000e-004**	**0.0945**	**0.0249**	**6.5000e-004**	**0.0256**	**0.0000**	**72.3580**	**72.3580**	**3.2800e-003**	**0.0000**	**72.4270**

3.8 Architectural Coating - 2023

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	2.6440					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0249	0.1694	0.2355	3.9000e-004		9.2100e-003	9.2100e-003		9.2100e-003	9.2100e-003	0.0000	33.1923	33.1923	1.9900e-003	0.0000	33.2340
Total	**2.6690**	**0.1694**	**0.2355**	**3.9000e-004**		**9.2100e-003**	**9.2100e-003**		**9.2100e-003**	**9.2100e-003**	**0.0000**	**33.1923**	**33.1923**	**1.9900e-003**	**0.0000**	**33.2340**

3.8 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0251	0.0319	0.2999	1.1600e-003	0.0938	7.0000e-004	0.0945	0.0249	6.5000e-004	0.0256	0.0000	71.2648	71.2648	3.1600e-003	0.0000	71.3312
Total	**0.0251**	**0.0319**	**0.2999**	**1.1600e-003**	**0.0938**	**7.0000e-004**	**0.0945**	**0.0249**	**6.5000e-004**	**0.0256**	**0.0000**	**71.2648**	**71.2648**	**3.1600e-003**	**0.0000**	**71.3312**

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	2.6440					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.7300e-003	0.1764	0.2382	3.9000e-004		0.0124	0.0124		0.0124	0.0124	0.0000	33.1923	33.1923	1.9900e-003	0.0000	33.2340
Total	**2.6518**	**0.1764**	**0.2382**	**3.9000e-004**		**0.0124**	**0.0124**		**0.0124**	**0.0124**	**0.0000**	**33.1923**	**33.1923**	**1.9900e-003**	**0.0000**	**33.2340**

3.8 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0251	0.0319	0.2999	1.1600e-003	0.0938	7.0000e-004	0.0945	0.0249	6.5000e-004	0.0256	0.0000	71.2648	71.2648	3.1600e-003	0.0000	71.3312
Total	**0.0251**	**0.0319**	**0.2999**	**1.1600e-003**	**0.0938**	**7.0000e-004**	**0.0945**	**0.0249**	**6.5000e-004**	**0.0256**	**0.0000**	**71.2648**	**71.2648**	**3.1600e-003**	**0.0000**	**71.3312**

3.8 Architectural Coating - 2024

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	2.6644					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0237	0.1597	0.2371	3.9000e-004		7.9800e-003	7.9800e-003		7.9800e-003	7.9800e-003	0.0000	33.4476	33.4476	1.8800e-003	0.0000	33.4872
Total	**2.6881**	**0.1597**	**0.2371**	**3.9000e-004**		**7.9800e-003**	**7.9800e-003**		**7.9800e-003**	**7.9800e-003**	**0.0000**	**33.4476**	**33.4476**	**1.8800e-003**	**0.0000**	**33.4872**

3.8 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0242	0.0306	0.2878	1.1600e-003	0.0946	7.1000e-004	0.0953	0.0251	6.6000e-004	0.0258	0.0000	70.8337	70.8337	3.0800e-003	0.0000	70.8984
Total	**0.0242**	**0.0306**	**0.2878**	**1.1600e-003**	**0.0946**	**7.1000e-004**	**0.0953**	**0.0251**	**6.6000e-004**	**0.0258**	**0.0000**	**70.8337**	**70.8337**	**3.0800e-003**	**0.0000**	**70.8984**

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	2.6644					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.7900e-003	0.1778	0.2401	3.9000e-004		0.0125	0.0125		0.0125	0.0125	0.0000	33.4476	33.4476	1.8800e-003	0.0000	33.4871
Total	**2.6722**	**0.1778**	**0.2401**	**3.9000e-004**		**0.0125**	**0.0125**		**0.0125**	**0.0125**	**0.0000**	**33.4476**	**33.4476**	**1.8800e-003**	**0.0000**	**33.4871**

3.8 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0242	0.0306	0.2878	1.1600e-003	0.0946	7.1000e-004	0.0953	0.0251	6.6000e-004	0.0258	0.0000	70.8337	70.8337	3.0800e-003	0.0000	70.8984
Total	**0.0242**	**0.0306**	**0.2878**	**1.1600e-003**	**0.0946**	**7.1000e-004**	**0.0953**	**0.0251**	**6.6000e-004**	**0.0258**	**0.0000**	**70.8337**	**70.8337**	**3.0800e-003**	**0.0000**	**70.8984**

3.8 Architectural Coating - 2025

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	0.2339					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9600e-003	0.0132	0.0208	3.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.0000	2.9362	2.9362	1.6000e-004	0.0000	2.9396
Total	**0.2359**	**0.0132**	**0.0208**	**3.0000e-005**		**5.9000e-004**	**5.9000e-004**		**5.9000e-004**	**5.9000e-004**	**0.0000**	**2.9362**	**2.9362**	**1.6000e-004**	**0.0000**	**2.9396**

3.8 Architectural Coating - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0400e-003	2.5800e-003	0.0242	1.0000e-004	8.3000e-003	6.0000e-005	8.3600e-003	2.2100e-003	6.0000e-005	2.2600e-003	0.0000	6.1435	6.1435	2.6000e-004	0.0000	6.1490
Total	**2.0400e-003**	**2.5800e-003**	**0.0242**	**1.0000e-004**	**8.3000e-003**	**6.0000e-005**	**8.3600e-003**	**2.2100e-003**	**6.0000e-005**	**2.2600e-003**	**0.0000**	**6.1435**	**6.1435**	**2.6000e-004**	**0.0000**	**6.1490**

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	0.2339					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.8000e-004	0.0156	0.0211	3.0000e-005		1.0900e-003	1.0900e-003		1.0900e-003	1.0900e-003	0.0000	2.9362	2.9362	1.6000e-004	0.0000	2.9396
Total	**0.2346**	**0.0156**	**0.0211**	**3.0000e-005**		**1.0900e-003**	**1.0900e-003**		**1.0900e-003**	**1.0900e-003**	**0.0000**	**2.9362**	**2.9362**	**1.6000e-004**	**0.0000**	**2.9396**

3.8 Architectural Coating - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0400e-003	2.5800e-003	0.0242	1.0000e-004	8.3000e-003	6.0000e-005	8.3600e-003	2.2100e-003	6.0000e-005	2.2600e-003	0.0000	6.1435	6.1435	2.6000e-004	0.0000	6.1490
Total	**2.0400e-003**	**2.5800e-003**	**0.0242**	**1.0000e-004**	**8.3000e-003**	**6.0000e-005**	**8.3600e-003**	**2.2100e-003**	**6.0000e-005**	**2.2600e-003**	**0.0000**	**6.1435**	**6.1435**	**2.6000e-004**	**0.0000**	**6.1490**

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	3.7306	8.0225	40.7652	0.1505	10.4080	0.1636	10.5717	2.7835	0.1511	2.9346	0.0000	9,896.8999	9,896.8999	0.3300	0.0000	9,903.8291
Unmitigated	3.7306	8.0225	40.7652	0.1505	10.4080	0.1636	10.5717	2.7835	0.1511	2.9346	0.0000	9,896.8999	9,896.8999	0.3300	0.0000	9,903.8291

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	211.50	211.50	211.50	521,602	521,602
Condo/Townhouse	1,968.00	1,968.00	1968.00	7,282,900	7,282,900
Single Family Housing	5,340.00	5,340.00	5340.00	19,761,528	19,761,528
User Defined Commercial	50.00	50.00	50.00	113,203	113,203
Total	7,569.50	7,569.50	7,569.50	27,679,233	27,679,233

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
City Park	14.70	6.60	6.60	33.00	48.00	19.00	66	28	6
Condo/Townhouse	16.80	7.10	7.90	41.60	18.80	39.60	86	11	3
Single Family Housing	16.80	7.10	7.90	41.60	18.80	39.60	86	11	3
User Defined Commercial	14.70	6.60	6.60	5.00	90.00	5.00	86	11	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.511923	0.073395	0.191568	0.130918	0.036235	0.005199	0.012665	0.023708	0.001889	0.002027	0.006511	0.000534	0.003431

4.4 Fleet Mix

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,741.3447	1,741.3447	0.0701	0.0145	1,747.3120
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,743.4609	1,743.4609	0.0702	0.0145	1,749.4355
NaturalGas Mitigated	0.0987	0.8439	0.3621	5.3800e-003		0.0682	0.0682		0.0682	0.0682	0.0000	976.8545	976.8545	0.0187	0.0179	982.7995
NaturalGas Unmitigated	0.0987	0.8439	0.3621	5.3800e-003		0.0682	0.0682		0.0682	0.0682	0.0000	976.8545	976.8545	0.0187	0.0179	982.7995

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					
City Park	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
Condo/Townhouse	3.3926e+006	0.0183	0.1563	0.0665	1.0000e-003		0.0126	0.0126		0.0126	0.0126	0.0000	181.0420	181.0420	3.4700e-003	3.3200e-003	182.1438
Single Family Housing	1.4767e+007	0.0796	0.6804	0.2896	4.3400e-003		0.0550	0.0550		0.0550	0.0550	0.0000	788.0214	788.0214	0.0151	0.0145	792.8172
User Defined Commercial	146000	7.9000e-004	7.1600e-003	6.0100e-003	4.0000e-005		5.4000e-004	5.4000e-004		5.4000e-004	5.4000e-004	0.0000	7.7911	7.7911	1.5000e-004	1.4000e-004	7.8385
Total		**0.0987**	**0.8439**	**0.3621**	**5.3800e-003**		**0.0682**	**0.0682**		**0.0682**	**0.0682**	**0.0000**	**976.8545**	**976.8545**	**0.0187**	**0.0179**	**982.7995**

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					
City Park	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
Condo/Townhouse	3.3926e+006	0.0183	0.1563	0.0665	1.0000e-003		0.0126	0.0126		0.0126	0.0126	0.0000	181.0420	181.0420	3.4700e-003	3.3200e-003	182.1438
Single Family Housing	1.4767e+007	0.0796	0.6804	0.2896	4.3400e-003		0.0550	0.0550		0.0550	0.0550	0.0000	788.0214	788.0214	0.0151	0.0145	792.8172
User Defined Commercial	146000	7.9000e-004	7.1600e-003	6.0100e-003	4.0000e-005		5.4000e-004	5.4000e-004		5.4000e-004	5.4000e-004	0.0000	7.7911	7.7911	1.5000e-004	1.4000e-004	7.8385
Total		**0.0987**	**0.8439**	**0.3621**	**5.3800e-003**		**0.0682**	**0.0682**		**0.0682**	**0.0682**	**0.0000**	**976.8545**	**976.8545**	**0.0187**	**0.0179**	**982.7995**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	79231.3	25.8935	1.0400e-003	2.2000e-004	25.9822
Condo/Townhouse	1.06621e+006	348.4478	0.0140	2.9000e-003	349.6419
Single Family Housing	3.80436e+006	1,243.2983	0.0500	0.0104	1,247.5588
User Defined Commercial	385000	125.8214	5.0600e-003	1.0500e-003	126.2525
Total		**1,743.4609**	**0.0702**	**0.0145**	**1,749.4355**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	79231.3	25.8935	1.0400e-003	2.2000e-004	25.9822
Condo/Townhouse	1.06466e+006	347.9394	0.0140	2.9000e-003	349.1317
Single Family Housing	3.79944e+006	1,241.6904	0.0500	0.0103	1,245.9455
User Defined Commercial	385000	125.8214	5.0600e-003	1.0500e-003	126.2525
Total		**1,741.3447**	**0.0701**	**0.0145**	**1,747.3120**

6.0 Area Detail

6.1 Mitigation Measures Area

Use only Natural Gas Hearths

	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	7.7940	0.0667	5.7892	3.1000e-004		0.0707	0.0707		0.0703	0.0703	0.0000	562.3907	562.3907	0.0197	0.0101	565.9460
Unmitigated	56.6802	0.7307	66.0775	0.0239		8.5027	8.5027		8.5024	8.5024	805.7070	347.3623	1,153.0693	0.7526	0.0634	1,188.5200

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	2.0910					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	5.4734					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	48.9420	0.6640	60.2913	0.0236		8.4706	8.4706		8.4703	8.4703	805.7070	337.9018	1,143.6088	0.7435	0.0634	1,178.8692
Landscaping	0.1737	0.0667	5.7862	3.1000e-004		0.0321	0.0321		0.0321	0.0321	0.0000	9.4606	9.4606	9.0600e-003	0.0000	9.6508
Total	**56.6802**	**0.7307**	**66.0775**	**0.0239**		**8.5027**	**8.5027**		**8.5024**	**8.5024**	**805.7070**	**347.3623**	**1,153.0693**	**0.7526**	**0.0634**	**1,188.5200**

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	2.0910					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	5.4734					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0559	0.0000	3.0500e-003	0.0000		0.0386	0.0386		0.0382	0.0382	0.0000	552.9302	552.9302	0.0106	0.0101	556.2952
Landscaping	0.1737	0.0667	5.7862	3.1000e-004		0.0321	0.0321		0.0321	0.0321	0.0000	9.4606	9.4606	9.0600e-003	0.0000	9.6508
Total	**7.7940**	**0.0667**	**5.7892**	**3.1000e-004**		**0.0707**	**0.0707**		**0.0703**	**0.0703**	**0.0000**	**562.3907**	**562.3907**	**0.0197**	**0.0101**	**565.9460**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	286.9613	1.3416	0.0337	325.5827
Unmitigated	366.2406	1.6774	0.0422	414.5432

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 4.40601	15.9975	6.4000e-004	1.3000e-004	16.0524
Condo/Townhouse	16.0279 / 10.1045	109.9777	0.5265	0.0132	125.1276
Single Family Housing	34.7922 / 21.9342	238.7320	1.1429	0.0287	271.6185
User Defined Commercial	0.223478 / 0.140889	1.5334	7.3400e-003	1.8000e-004	1.7447
Total		**366.2406**	**1.6773**	**0.0422**	**414.5432**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 3.52481	12.7980	5.2000e-004	1.1000e-004	12.8419
Condo/Townhouse	12.8223 / 8.08363	86.0883	0.4211	0.0106	98.2018
Single Family Housing	27.8338 / 17.5474	186.8746	0.9141	0.0229	213.1698
User Defined Commercial	0.178783 / 0.112711	1.2003	5.8700e-003	1.5000e-004	1.3692
Total		**286.9613**	**1.3416**	**0.0337**	**325.5827**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	112.8381	6.6685	0.0000	252.8775
Unmitigated	150.4508	8.8914	0.0000	337.1700

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.36	0.0731	4.3200e-003	0.0000	0.1638
Condo/Townhouse	113.16	22.9705	1.3575	0.0000	51.4783
Single Family Housing	626.07	127.0866	7.5106	0.0000	284.8092
User Defined Commercial	1.58	0.3207	0.0190	0.0000	0.7188
Total		**150.4508**	**8.8914**	**0.0000**	**337.1700**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.27	0.0548	3.2400e-003	0.0000	0.1228
Condo/Townhouse	84.87	17.2278	1.0181	0.0000	38.6087
Single Family Housing	469.553	95.3149	5.6330	0.0000	213.6069
User Defined Commercial	1.185	0.2405	0.0142	0.0000	0.5391
Total		**112.8381**	**6.6686**	**0.0000**	**252.8775**

9.0 Operational Offroad

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

10.0 Vegetation

ATTACHMENT E

CAPCOA Mitigation Evaluation

California Air Pollution Control Officers Association (CAPCOA 2008): Mitigation Strategies Evaluation for Warner Ranch Project		
Mitigation Measure (CAPCOA 2008):[1]	**Description/Comments (CAPCOA 2008):**	**Warner Ranch Project**
Transportation		
MM T-3 Bike Parking	Long-term bicycle parking is provided at apartment complexes or condominiums without garages (e.g., one long-term bicycle parking space for each unit without a garage).	The project includes garages for all single-family and multi-family units, which can safely store bicycles. Additionally, the project includes a multi-use trail with bike path that connects the internal neighborhoods to the SR-76 public multi-use trail. As part of the project's Streetscape Plan, primary theme roads shall also include bike lanes (see Warner Ranch Specific Plan). The project also includes frontage improvements to Pala Road/SR 76 that include a painted Class II bike lane in each direction.
MM T-4 Proximity to Bike Path/Bike Lanes	Entire project is located within one-half mile of an existing/planned Class I or Class II bike lane and project design includes a comparable network that connects the project uses to the existing offsite facility.	A Class II bike lane is proposed in accordance with the San Diego County General Plan Mobility Element along the project frontage.
MM T-5 Pedestrian Network	The project provides a pedestrian access network that internally links all uses and connects to all existing/planned external streets and pedestrian facilities contiguous with the project site.	The planned pedestrian circulation network (as show in Circulation Plan of Warner Ranch Specific Plan) connects the planned neighborhoods. Pedestrian walkways are required in all primary theme roads within the specific plan area and connect residents to the clubhouse, multi-use trails, parks and fire station on site. Additionally, the project is located approximately half (½) a mile, and a 10-minute walk from Pala Reservation's central core of commercial and community uses

MM T-6 Pedestrian Barriers Minimized	Site design and building placement minimize barriers to pedestrian access and interconnectivity. Physical barriers such as walls, berms, landscaping, and slopes between residential and nonresidential uses that impede bicycle or pedestrian circulation are eliminated.	Pedestrian comfort within the project area is emphasized by providing shade tree canopies and appropriate street furnishings. Where walls are unavoidable, particular attention must be given to a comfortable pedestrian scale and to the provision of pilasters, plan offsets and landscaping to relieve visual monotony (see Warner Ranch Specific Plan).
MM-T-7 Bus Shelter for Existing/Planned Transit Service	Bus or streetcar service provides headways of one hour or less for stops within one-quarter mile; project provides safe and convenient bicycle/pedestrian access to transit stop(s) and provides essential transit stop improvements (i.e., shelters, route information, benches, and lighting).	North County Transit District (NCTD) provides bus route 388/389 that services the Pala community. The route's nearest bus stop is at the Pala Casino just across the street from the project site. The bus service currently provides headways or two hours or less. Once the project is built-out, NCTD may adjust routes and services to meet the needs of the community.
MM-T-8 Traffic Calming	Project design includes pedestrian/bicycle safety and traffic calming measures in excess of jurisdiction requirements. Roadways are designed to reduce motor vehicle speeds and encourage pedestrian and bicycle trips by featuring traffic calming features. All sidewalks internal and adjacent to project site are minimum of five feet wide.	The project includes ped/bike lanes and traffic calming features. All sidewalks are a minimum of five feet wide.
MM T-10 Minimum Parking	Provide minimum amount of parking required.	The project provides the parking required. The project is not over parked.
MM T-11: Parking Reduction Beyond Code/Shared Parking	Provide parking reduction less than code. This measure can be readily implemented through a shared parking strategy, wherein parking is utilized jointly among different land uses, buildings, and facilities in an area that experience peak parking needs at different times of day and day of the week.	The project is not over parked. The project proposes residential use that includes garages for every unit. The project is not able to implement shared parking. However, the project proposes a measure to coordinate with surrounding employment centers to provide a shared shuttle service.

MM T-12 Pedestrian Pathway Through Parking	Provide a parking lot design that includes clearly marked and shaded pedestrian pathways between transit facilities and building entrances.	Pedestrian comfort within the project area is emphasized by providing shade tree canopies and appropriate street furnishings. Parking lots within the site include fire station and clubhouse parking, and will be clearly marked.
MM T-13 Off-Street Parking	Parking facilities are not adjacent to street frontage.	The project proposes residential use that includes garages for every unit. Garages are setback with driveways and are not located directly adjacent to street frontage.
MM T-14 Parking Area Tree Cover	Provide parking lot areas with 50% tree cover within 10 years of construction, in particular low emitting, low maintenance, native drought resistant trees.	The Specific Plan landscape theme is meant to create a unified community reminiscent of both native and recent historical landscape traditions. This landscape theme will be created by the use of consistent introduced drought tolerant planting and landscape elements within the overall native landscape setting of the specific plan area.
MM T-16 Garage Bicycle Storage	Provide storage space in one-car garages for bicycles and bicycle trailers.	The project provides two-car garages for each unit, which will allow for storage of bicycles.
MM T-17 Preferential Parking for EVs/CNG Vehicles	Provide preferential parking space locations for EVs/CNG vehicles.	Per the project's mitigation measure M-GHG-2, The project will plumb for electric vehicle charging stations at all the residential units and include electric vehicle charging stations for 3% of the total off street, common area, parking spaces required.
Design		
MM D-2: Orientation to Existing/Planned Transit, Bikeway, or Pedestrian Corridor	Project is oriented towards existing transit, bicycle, or pedestrian corridor.	The project is located near the NCTD bus route 388/389. The project includes an interior ped/bike pathways and a multi-use trail that connect to SR-76. The project also includes frontage improvements to Pala Road/SR 76 that include a painted Class II bike lane in each direction.

MM D-4: Residential Density (Employ Sufficient Density for New Residential Development to Support the Use of Public Transit)	Project provides high-density residential development. Transit facilities must be within one quarter mile of project border. Project provides safe and convenient bicycle/pedestrian access to all transit stop(s) within one-quarter mile of project border.	The NCTD route 388/389 bus stop is at the Pala Casino just across the street from the project site. The project includes frontage improvements along SR-76 that include painted bike lanes in each direction, which will help facilitate safe and convenient access to the bus stop that is located within one-quarter mile of the project boundary.
MM D-6: Neighborhood Electric Vehicle Access	Make physical development consistent with requirements for neighborhood electric vehicles.	Per the project's mitigation measure M-GHG-2, The project will plumb for electric vehicle charging stations at all the residential units and include electric vehicle charging stations for 3% of the total off street, common area, parking spaces required.
MM D-7: Affordable Housing Component	Residential development projects of five or more dwelling units provide a deed restricted low-income housing component on-site (or as defined in the code). Developers who pay into In-Lieu Fee Programs are not considered eligible to receive credit for this measure.	The project will includes workforce housing units, which based on the Pala Competitive Market Area (CMA) Jobs/Housing Market Analysis (see Appendix S of EIR) would be affordable to employees in the area.
MM D-8: Recharging Area	Provide residential buildings with a “utility” room or space for recharging batteries, whether for use in a car, electric lawnmower, other electric landscaping equipment, or even batteries for small items such as flashlights.	The project consists of single-family and multi-family homes. Per M-GHG-3, the project will include outdoor electric outlets for all homes to facilitate use of electrical lawn and garden equipment. Per the project's mitigation measure M-GHG-2, The project will also plumb for electric vehicle charging stations at all the residential units and include electric vehicle charging stations for 3% of the total off street, common area, parking spaces required.
MM D-13: Electric Lawnmower	Provide a complimentary electric lawnmower to each residential buyer.	Although the project will not provide each homeowner with an electric lawnmower, per M-GHG-3, the project will include outdoor electric outlets for all homes to facilitate and encourage use of electrical lawn and garden equipment.

MM D-14: Enhanced Recycling/Waste Reduction, Reuse, Composting	Provide infrastructure/education that promotes the avoidance of products with excessive packaging, recycle, buying of refills, separating of food and yard waste for composting, and using rechargeable batteries.	Per M-GHG-3, the project will include outdoor electric outlets for all homes to facilitate use of electrical lawn and garden equipment. Per M-GHG-4, the applicant will develop and provide to all homeowners an informative brochure to educate homeowners regarding water conservation measures, recycling, location of the electric vehicle charging stations, location of outdoor electric outlets to promote using electrical lawn and garden equipment, and location of nearby resources such as dining and entertainment venues, small commercial centers, and civic uses to reduce vehicle miles traveled.
MM D-15: LEED Certification	LEED promotes a whole building approach to sustainability by recognizing performance in five key areas of human and environmental health: sustainable site development, water savings, energy efficiency, materials selection, and indoor environmental quality.	The project incorporates many LEED design concepts such as but not limited to water conservation, energy efficiency, solar panels, educational materials for homeowners, diverting waste from landfills.
MM D-17 Landscaping	Project shall use drought resistant native trees, trees with low emissions and high carbon sequestration potential	The project's landscape theme will be created by the use of consistent introduced drought tolerant planting and landscape elements within the overall native landscape setting of the specific plan area.
MM D-18: Local Farmers' Market	Project shall dedicate space in a centralized, accessible location for a weekly farmers' market.	The project is a residential community with common amenities such as a clubhouse and recreational parks. Should the specific plan community wish to create a weekly farmer's market, common area centrally located spaces are available. The Pala community grocery store is located less than one mile to the east, and Pala Rey Produce farmers market is located approximately 5 miles to the west.
MM D-19: Community Gardens	Project shall dedicate space for community gardens.	Two existing avocado groves are intended to remain as part of the project design. As such, they will be placed in common open space easements for agricultural uses.

Energy		
MM E-1: High Efficiency Pumps	Project shall use high-efficiency pumps.	High-efficiency pumps will be utilized in the project's onsite sewer pumps station.
MM E-2: Wood Burning Fireplaces/Stove	Project does not feature fireplaces or wood burning stoves.	Per project's mitigation measure M-AQ-3, prior to the issuance of building permits, the project applicant shall ensure that project plans show the provision of only natural gas hearths.
MM E-3: Natural Gas Stove	Project features only natural gas or electric stoves in residences.	The project will include only natural gas or electric stoves.
MM E-4: Energy Star Roof	Project installs Energy Star labeled roof materials.	The project will use Energy Star labeled roof materials.
MM E-5: Onsite Renewable Energy System	Project provides onsite renewable energy system(s). Nonpolluting and renewable energy potential includes solar, wind, geothermal, low-impact hydro, biomass and bio-gas strategies. When applying these strategies, projects may take advantage of net metering with the local utility.	Per project mitigation measure M-GHG-1, the applicant will install a photovoltaic solar system on site to produce approximately 4,756,002 kW hours of electricity per year on average. (Under current technology, this equates to up to 9,605 solar panels or an average of 12 solar panels on each single family home, 2,858 solar panels on the multi-family units, 78 solar panels on the clubhouse and 40 solar panels on the fire station with each solar panel, having an estimated rating of 285 watts.) The actual capacity and/or conversion efficiency of the photovoltaic panels may alter the actual number of roofs or non-residential roof space requirements to meet the annual 4,756,002 kW-h requirement at project build out.
MM E-6: Exceed Title 24	Project exceeds title 24 requirements by 20%.	The proposed project would increase building electricity and natural gas efficiency to at least Title 24 2016. Energy efficiency will be further increased through the implementation of the project's mitigation such as solar, per project mitigation measure M-GHG-1.

MM E-7: Solar Orientation	Project orients 75% or more of homes and/or buildings to face either north or south (within 30° of N/S). Building design includes roof overhangs that are sufficient to block the high summer sun, but not the lower winter sun, from penetrating south facing windows. Trees, other landscaping features and other buildings are sited in such a way as to maximize shade in the summer and maximize solar access to walls and windows in the winter.	A majority (over 75%) of the project's homes are north of south facing. The project includes several shading mechanisms, such as trees, arcades, covered walkways, and trellises. (see Warner Ranch Specific Plan for details).
MM E-8: Nonroof Surfaces	Provide shade (within 5 years) and/or use light-colored/high albedo materials (reflectance of at least 0.3) and/or open grid pavement for at least 30% of the site's nonroof impervious surfaces, including parking lots, walkways, plazas, etc.; OR place a minimum of 50% of parking spaces underground or covered by structured parking; OR use an open-grid pavement system (less than 50% impervious) for a minimum of 50% of the parking lot area.	A majority (over 50%) of the project's parking will be located in garages supplied for each residential unit.
MM E-9: Low Energy Cooling	Project optimizes building's thermal distribution by separating ventilation and thermal conditioning systems.	The project will separate ventilation and thermal conditioning systems.
MM E-10: Green Roof	Install a vegetated roof that covers at least 50% of roof area.	The project proposes solar on all rooftops per project mitigation measure M-GHG-1, which in turn will not allow sufficient space for vegetated roofs.
MM E-11: EV Charging Facilities	Project installs EV charging facilities.	Per the project's mitigation measure M-GHG-2, the project will plumb for electric vehicle charging stations at all the residential units and include electric vehicle charging stations for 3% of the total off street, common area, parking spaces required
MM E-12: Light-Colored Paving	Project provides light-colored paving (e.g., increased albedo pavement).	A portion of the project will provide light-colored paving.

MM E-13: Cool Roofs	Project provides cool roofs. Highly reflective, highly emissive roofing materials that stay 50-60°F cooler than a normal roof under a hot summer sun.	The project proposes solar on all rooftops per project mitigation measure M-GHG-1.
MM E-14: Solar Water Heaters	Project provides solar water heaters.	The project proposes solar on all rooftops per project mitigation measure M-GHG-1.
MM E-15: Electric Yard Equipment Compatibility	Project provides electrical outlets at building exterior areas.	Per M-GHG-3, the project will include outdoor electric outlets for all homes to facilitate use of electrical lawn and garden equipment.
MM E-16: Energy Efficient Appliance Standards	Project uses energy efficient appliances (e.g., Energy Star).	The project will be conditioned to include Energy Star appliance.
MM E-17: Green Building Materials	Project uses materials which are resource efficient, recycled, with long life cycles and manufactured in an environmentally friendly way	Per project design feature PDF-GHG-1, project design includes recycling collection service that will operate in accordance with the goals of AB 341, or separate recycling and waste containers would be provided on-site. All green waste will be diverted from landfills and recycled as mulch.
MM E-18: Shading Mechanisms	Install energy-reducing shading mechanisms for windows, porch, patio and walkway overhangs.	The project includes shading mechanisms, such as trees, arcades, covered walkways, and trellises. (see Warner Ranch Specific Plan for details).
MM E-19: Ceiling/Whole House Fans	Install energy-reducing ceiling/whole-house fans.	The project will be conditioned to provide energy efficient ceiling fans in all units.
MM E-20: Programmable Thermostats	Install energy-reducing programmable thermostats that automatically adjust temperature settings	The project will provide energy-reducing programmable thermostats.
MM E-21: Passive Heating and Cooling Systems	Install energy-reducing passive heating and cooling systems (e.g., insulation and ventilation)	The project will install energy-reducing passive heating and cooling systems
MM E-22: Day Lighting Systems	Install energy-reducing day lighting systems (e.g., skylights, light shelves and interior transom windows).	The project will consider energy reducing day lighting systems

MM E-23: Low Water Use Appliances	Require the installation of low water use appliances.	Per project design features PDF-GHG-2, design of the proposed project includes low flow water fixtures that are compliant with the 2013 California Green Building Standards codes.
Construction		
MM C-1: ARBCertified Diesel Construction Equipment	Use ARB-certified diesel construction equipment.	The project's construction equipment will be required to adhere to the In-Use Off-Road Diesel-Fueled Fleets regulation as defined by the California Air Resource Board (CARB) codified as Title 13 CCR §2449.
MM C-2: Alternative Fuel Construction Equipment	Use alternative fuel types for construction equipment.	The project will consider alternative fuel types for construction equipment
MM C-3: Local Building Materials	Use locally made building materials for construction of the project and associated infrastructure.	The project will consider using locally made materials.
MM C-4: Recycle Demolished Construction Material	Recycle/Reuse demolished construction material. Use locally made building materials for construction of the project and associated infrastructure.	Per project design feature PDF-GHG-1, project design includes recycling collection service that will operate in accordance with the goals of AB 341, or separate recycling and waste containers would be provided on-site. All green waste will be diverted from landfills and recycled as mulch.
Miscellaneous		
MM M-1: Offsite Mitigation Fee Program	Provide/Pay into an off-site mitigation fee program, which focuses primarily on reducing emissions from existing development and buildings through retro-fit (e.g., increased insulation).	Per project mitigation measure M-GHG-5 and M-GHG-6, the applicant will purchase carbon offset credits. Credits may be derived from mechanisms such as reducing emissions from existing buildings or retro-fits.
MM M-2: Offset Purchase	Provide/purchase offsets for additional emissions by acquiring carbon credits or engaging in other market “cap and trade” systems.	Per project mitigation measure M-GHG-5 and M-GHG-6, the applicant will purchase carbon offset credits.

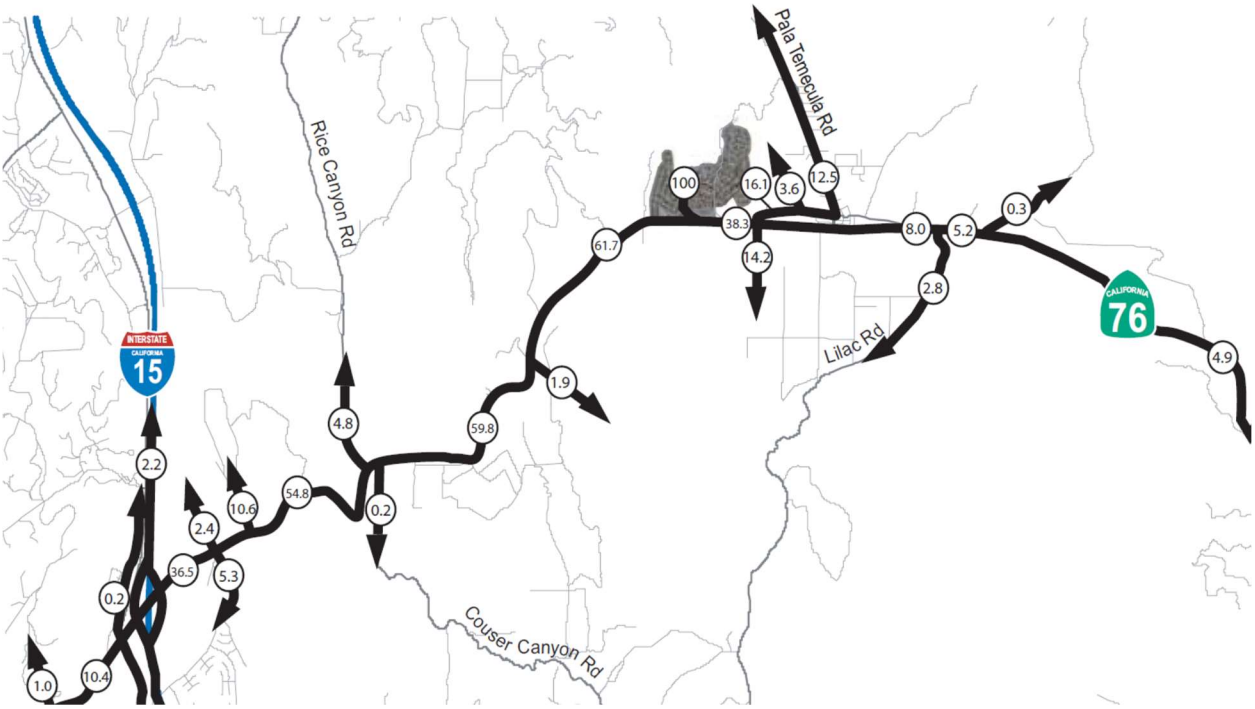
[1] Only mitigation measures applicable to the Warner Ranch project are evaluated for consistency

APPENDIX O2

Assumptions for VMT Reduction for Warner Ranch

Assumptions for VMT Reduction for Warner Ranch

The Warner Ranch traffic study states that based on SANDAG's model, 61.7% of the project traffic will travel west on State Route 76 towards Interstate 15; the remaining 38.3% will travel east towards Lilac Road and Pauma Valley and will be served by jobs, schools, shopping and churches in the Pala community.



The VMT reduction analysis focuses on the employment trip assumptions because there are five casinos (Pala, Pauma, Harrah's, Valley View and Valley Center) and additional employment opportunities such as agricultural operations in Valley Center and therefore there is a potential for reductions from baseline home-work trips by potential or existing employees.

The Market Study indicates that offering homes priced primarily under $400,000 would make them affordable to workforce households employed within the Pala Competitive Market Area (CMA). The project offers 246 multifamily unit types ranging from $210,000 to $306,000, 148 small detached lots ranging from $300,000 to $360,000 and 242 detached 4,000 square foot lots ranging from $378,000 to $420,000.

Of these units affordable to workforce households, the County has conservatively estimated (and based on the County's Housing Element policies regarding affordable housing) that the 246 multi-family units would be the most likely location where employees within the CMA could take advantage of a shorter commute by living close to work, though the number of units could potentially be much greater.

The 246 multifamily units generate on average 8 trips per day for a total of 1,968 ADT. The 414 single family units generate on average 10 trips per day for a total of 4,140 ADT. Standard VMT assumptions for these trips from the air quality model would follow the following breakdown:

Trip Type	Trip Percentages	Trip Length Rural (miles)
Home-based Work	32.9	16.8
Home-based Shop	18.0	7.1
Home-based Other	49.1	7.9

Therefore the expected air quality model output for VMT of these MF units would be:

MF generates 8 trips per day

Trip Type	Trip Percentages	Trip Length Rural (miles)	Daily Trips for MF (at 246 units)	VMT Daily	VMT Annual
Home-based Work	32.9	16.8	647	10,878	2,686,750
Home-based Shop	18.0	7.1	354	2,515	621,231
Home-based Other	49.1	7.9	966	7,634	1,885,518
Total			1,968	21,026	5,193,498

Under this scenario, it is assumed that all of the units have at least one employee within the CMA. This would reduce VMT from home-work trips.

The major employers/casinos in the CMA are as follows: Pala is ~0.5 miles from site, Pauma is 7 miles, Harrah's is 11 miles, Valley View is 16 miles and the Valley Center area is approximately 17 miles. Assuming an equal amount of people from the project site are employed within each casino/employment center, the average home-work trip length would be modified to 10.3 miles. Therefore the expected air quality model output for VMT of these MF units would be:

246 Multi family (8 trips/day)

Trip Type	Trip Percentages	Trip Length Adjusted for CMA Work Trips (miles)	Daily Trips for MF (at 246 units)	VMT Daily	VMT Annual
Home-based Work	32.9	10.3	647	6,669	1,647,234
Home-based Shop	18.0	7.1	354	2,515	621,231
Home-based Other	49.1	7.9	966	7,634	1,885,518
Total			1,968	16,818	4,153,982

The total VMT for the project is reported to be 23,790,000 vehicle miles traveled. Of this total 32.9% or 7,826,910 VMT are associated with home to work related trip miles for the entire project.

Under a 10.3 mile work trip length scenario, the reduction in MF home-work VMT is from 5,193,498 to 4,153,982. The difference in annual VMT, from “standard” to “modified for multifamily”, is 1,039,516 and represents a 4.4% reduction in total VMT (1,039,516 /23,790,000).

The above work flow is conceptual and based on a reasonable scenario that employees within the CMA would choose to live in the six-plex MF units of the Warner Ranch development and benefit from proximity to casino locations including Pala.