

APPENDIX F
GREENHOUSE GAS ASSESSMENT

Draft Technical Report for the Property Specific Requests General Plan Amendment and Rezone Greenhouse Gas Assessment

**County of San Diego
Planning & Development Services
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October 2017

Draft Greenhouse Gas Assessment

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Rezone**

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ACRONYMS AND ABBREVIATIONS

°C	degrees Celsius
°F	degrees Fahrenheit
2017 Scoping Plan Update	2017 Climate Change Scoping Plan Update
AB	Assembly Bill
CAA	federal Clean Air Act
CalEEMod	California Emissions Estimator Model
CalRecycle	California Department of Resources Recycling and Recovery
CAP	Climate Action Plan
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CGSP	Champagne Gardens Specific Plan
Checklist	Climate Action Plan Consistency Review Checklist
CNRA	California Natural Resources Agency
CO ₂	carbon dioxide
CO ₂ e	carbon dioxide-equivalent
County	County of San Diego
CPA	Community Planning Area
Crest/Dehesa	Crest/Dehesa/Harbison Canyon/Granite Hills
EO	Executive Order
EPA	U.S. Environmental Protection Agency
GHG	greenhouse gas
GPA	General Plan Amendment project
GPU	General Plan Update
Guidelines	Draft 2017 Guidelines for Determining Significance and Report Format and Content Requirements
IPCC	Intergovernmental Panel on Climate Change
MMT	million metric tons
MPO	metropolitan planning organization
MT	metric tons
MTCO ₂ e/year	MTCO ₂ e per year
NHTSA	National Highway Traffic Safety Administration
PEIR	Program Environmental Impact Report
Project	Property Specific Requests General Plan Amendment and Rezone Project
Proposed Project	Property Specific Requests General Plan Amendment and Rezone Project
PSR	Property Specific Requests

RCP	Regional Comprehensive Plan
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
SANDAG	San Diego Association of Governments
SB	Senate Bill
SCAQMD	South Coast Air Quality Management District
SCS	Sustainable Communities Strategy
SDAPCD	San Diego Air Pollution Control District
SDG&E	San Diego Gas & Electric
SEIR	Supplemental Environmental Impact Report

1 INTRODUCTION

The Greenhouse Gas (GHG) Analysis identifies and analyzes the potential environmental impacts associated with the Property Specific Requests (PSR) General Plan Amendment and Rezone Project (herein referred to as “Proposed Project” or “Project”) related to GHG emissions. The information and analysis in this document is organized in accordance with the checklist in Appendix G of the California Environmental Quality Act (CEQA) Guidelines and in accordance with current State and local guidance.

2 PROJECT DESCRIPTION

The County of San Diego (County) is located in southwestern California and has a total land area of approximately 2.9 million acres. Eighteen incorporated cities are located within the County, with the remainder of lands being unincorporated, and totaling approximately 2.3 million acres. The County is bordered by Riverside County and Orange County to the north; Imperial County to the east; Mexico to the south; and the Pacific Ocean to the west.

The unincorporated County lands are divided into 24 planning areas. Fifteen of the planning areas are identified as Community Planning Areas (CPAs); the remaining nine are identified as Subregions (County 2011). The northwest and southwest portions of the unincorporated County generally support a greater level of development than locations further to the east. In the northwest, the CPAs and Subregions affected by the Proposed Project include Pala/Pauma Valley, Fallbrook, Valley Center, North County Metro, Bonsall, and San Dieguito. In the southwest, the CPA affected by the Proposed Project is Crest/Dehesa/Harbison Canyon/Granite Hills (also referred to as “Crest/Dehesa”). In the east, referred to as the “backcountry,” which is largely undeveloped and supports lands that are generally more environmentally constrained, the Subregions affected by the Proposed Project include the Desert and Mountain Empire Subregions. The Proposed Project would result in revisions to the adopted General Plan land use and zoning designations on private properties, identified in this document as PSR Analysis Areas, totaling approximately 9,336 acres on 882 parcels throughout the unincorporated County. Primarily, the Proposed Project will amend certain land use designations within the following CPAs, Subregions, and associated PSR Analysis Areas:

- ▲ Bonsall CPA: One PSR Analysis Area (BO18+)
- ▲ Crest/Dehesa CPA: One PSR Analysis Area (CD14)
- ▲ Desert Subregion (specifically within the Borrego Springs CPA): Two PSR Analysis Areas (DS8 and DS24)
- ▲ Fallbrook CPA: Four PSR Analysis Areas (FB2+, FB17, FB19+, and FB21+)
- ▲ Mountain Empire Subregion (specifically within the Campo/Lake Morena Subregional Group Area): Two PSR Analysis Areas (ME26 and ME30A)
- ▲ North County Metropolitan (Metro) Subregion:
 - North County Metro Subregion (but not within in a Subregional Group Area): One PSR Analysis Area (NC18A)
 - Hidden Meadows Subregional Group Area: One PSR Analysis Area (NC3A)
 - Twin Oaks Valley Subregional Group Area: Three PSR Analysis Areas (NC22, NC37, and NC38+)
- ▲ Pala/Pauma Subregion: One PSR Analysis Area (PP30)
- ▲ San Dieguito CPA: One PSR Analysis Area (SD15)
- ▲ Valley Center CPA: Four PSR Analysis Areas (VC7+, VC51, VC57+, and VC67)

Generally, the Proposed Project would create amendments to land use designations that would result in increased residential densities; however, some proposed land use amendments would result in reassignment from current residential designations to commercial or industrial designations. Additionally, the Proposed Project would include an update to the land use designations and zoning for properties within the area of the former Champagne Gardens Specific Plan (CGSP) for consistency with the adopted General Plan.

3 REGULATORY BACKGROUND

This section includes a discussion of GHGs and climate change, a summary of applicable regulations, and an analysis of the GHG emissions associated with construction- and operational-related activities that would result from buildout of the Proposed Project. In California, GHG emissions are primarily regulated through the California Air Resources Board (CARB), local air districts, and local jurisdictions, as discussed below. The method of analysis is consistent with the recommendations of the San Diego Air Pollution Control District (SDAPCD).

3.1 FEDERAL PLANS, POLICIES, REGULATIONS, AND LAWS

Supreme Court Ruling of Carbon Dioxide as a Pollutant

The U.S. Environmental Protection Agency (EPA) is the federal agency responsible for implementing the federal Clean Air Act (CAA) and its amendments. The Supreme Court of the U.S. ruled on April 2, 2007 that carbon dioxide (CO₂) is an air pollutant as defined under the CAA, and that EPA has the authority to regulate emissions of GHGs. The ruling in this case resulted in EPA taking steps to regulate GHG emissions and lent support for State and local agencies' efforts to reduce GHG emissions.

National Program to Cut Greenhouse Gas Emissions and Improve Fuel Economy for Cars and Trucks

On August 28, 2014, the EPA and the U.S. Department of Transportation's National Highway Traffic Safety Administration (NHTSA) finalized a new national program that would reduce GHG emissions and improve fuel economy for all new cars and trucks sold in the U.S. (NHTSA 2012). EPA proposed the first-ever national GHG emissions standards under the CAA, and NHTSA proposed Corporate Average Fuel Economy standards under the Energy Policy and Conservation Act. This national program requires automobile manufacturers to build a single light-duty national fleet that meets all requirements under both federal programs and the standards of California and other states. This program will increase fuel economy to the equivalent of 54.5 miles per gallon for the fleet of cars and light-duty trucks by model year 2025, and, as of 2016, NHTSA and EPA are developing additional phases to address GHG emission standards for new medium- and heavy-duty trucks (NHTSA 2016).

3.2 STATE PLANS, POLICIES, REGULATIONS, AND LAWS

Executive Order S-3-05

Executive Order (EO) S-3-05, signed by Governor Arnold Schwarzenegger in 2005, proclaims that California is vulnerable to the impacts of climate change. It declares that increased temperatures could reduce the Sierra Nevada snowpack, further exacerbate California's air quality problems, and potentially cause a rise in sea levels. To combat those concerns, the EO established total GHG emission targets for the State. Specifically, emissions are to be reduced to the 2000 level by 2010, the 1990 level by 2020, and to 80 percent below the 1990 level by 2050.

On July 13, 2017, the California Supreme Court addressed the use of California's long-range GHG reductions goal included in EO S-3-05 as a threshold of significance in its decision, *Cleveland National Forest Foundation*

v. *San Diego Association of Governments* (November 24, 2014) 231 Cal.App.4th 1056. The Court ruled that the San Diego Association of Governments (SANDAG) did not abuse its discretion by declining “to adopt the 2050 goal as a measure of significance in light of the fact that the Executive Order does not specify any plan or implementation measures to achieve its goal.” The Court emphasized the narrowness of its ruling in deciding on the sole question of use of the EO goal as a measure of significance for 2050 emissions. The Court also recognized the goal of a 40 percent reduction in 1990 GHG levels by 2030 is a “widely acknowledged” as a “necessary interim target to ensure that California meets its longer-range goal of reducing greenhouse gas emissions 80 percent below 1990 levels by the year 2050.”

Assembly Bill 32, the California Global Warming Solutions Act of 2006

In September 2006, Governor Schwarzenegger signed the California Global Warming Solutions Act of 2006, Assembly Bill (AB) 32. AB 32 establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and a cap on statewide GHG emissions. AB 32 requires that statewide GHG emissions be reduced to 1990 levels by 2020. AB 32 also requires that these reductions “...shall remain in effect unless otherwise amended or repealed. (b) It is the intent of the Legislature that the statewide greenhouse gas emissions limit continue in existence and be used to maintain and continue reductions in emissions of greenhouse gases beyond 2020. (c) The [California Air Resources Board] shall make recommendations to the Governor and the Legislature on how to continue reductions of greenhouse gas emissions beyond 2020.” [California Health and Safety Code, Division 25.5, Part 3, Section 38551]

Assembly Bill 32 Climate Change Scoping Plan and Updates

In December 2008, CARB adopted its Climate Change Scoping Plan, which contains the main strategies California will implement to achieve reduction of approximately 118 million metric tons (MMT) of carbon dioxide-equivalent (CO₂e) emissions, or approximately 21.7 percent from the State’s projected 2020 emission level of 545 MMTCO₂e under a business-as-usual scenario (this is a reduction of 47 MMTCO₂e, or almost 10 percent, from 2008 emissions). In May 2014, CARB released and subsequently adopted the *First Update to the Climate Change Scoping Plan* to identify the next steps in reaching AB 32 goals and evaluate progress that has been made between 2000 and 2012 (CARB 2014a:4 and 5). According to the update, California is on track to meet the near-term 2020 GHG limit and is well positioned to maintain and continue reductions beyond 2020 (CARB 2014a: ES-2). The update also reports the trends in GHG emissions from various emissions sectors (e.g., transportation, building energy, agriculture).

On January 20, 2017, CARB released its proposed 2017 Climate Change Scoping Plan Update (2017 Scoping Plan Update), which lays out the framework for achieving the 2030 reductions as established in more recent legislation (discussed below). The proposed 2017 Scoping Plan Update identifies the GHG reductions needed by each emissions sector to achieve a Statewide emissions level that is 40 percent below 1990 levels before 2030.

The proposed update also identifies how GHGs associated with local plan-level projects could be evaluated under CEQA. Specifically, CARB recommends that local-plan level projects results in no more than 6 metric tons (MT) CO₂e per capita by 2030 and no more than 2 MTCO₂e per capita by 2050 would not result in substantial increase in GHGs or conflict with local or State plans adopted for the purpose of reducing GHG emissions. At the time of writing this environmental document, the proposed 2017 Scoping Plan Update has not been adopted.

CARB believes that the state is on a trajectory to meet the 2030 and 2050 GHG reduction targets set forth in AB 32, EO B-30-15, and EO S-3-05. This is confirmed in the 2017 Scoping Plan Update, which states:

The Proposed Plan builds upon the successful framework established by the Initial Scoping Plan and First Update, while also identifying new, technologically feasible and cost-effective strategies to ensure that California meets its GHG reduction targets in a way that promotes and rewards innovation, continues to foster economic growth, and delivers improvements to the environment and public health, including in disadvantaged communities. The Proposed Plan is developed to be consistent with requirements set forth in AB 32, SB 32, and AB 197 (CARB 2017:7).

Senate Bill 375

Senate Bill (SB) 375, signed by Governor Schwarzenegger in September 2008, aligns regional transportation planning efforts, regional GHG emission reduction targets, and land use and housing allocation. SB 375 requires metropolitan planning organizations (MPOs) to adopt a sustainable communities strategy (SCS) or Alternative Planning Strategy, showing prescribed land use allocation in each MPO's Regional Transportation Plan. CARB, in consultation with the MPOs, is to provide each affected region with reduction targets for GHGs emitted by passenger cars and light trucks in their respective regions for 2020 and 2035.

The SANDAG serves as the MPO for the San Diego region. SANDAG adopted its Regional Plan on October 9, 2015. The Regional Plan combines the two existing documents: the Regional Comprehensive Plan (RCP), and the Regional Transportation Plan and its Sustainable Communities Strategy (RTP/SCS). The SCS details how the region will reduce GHG emissions to state-mandated levels. SANDAG was tasked by CARB to achieve a 7 percent reduction in per capita GHGs from passenger cars and light trucks by 2020 and a 13 percent reduction by 2035, relative to emission levels in 2005. The region would achieve or exceed both reduction targets by implementing its SCS (SANDAG 2015).

Executive Order B-30-15

On April 20, 2015 Governor Brown signed EO B-30-15 to establish a California GHG reduction target of 40 percent below 1990 levels by 2030. The Governor's EO aligns California's GHG reduction targets with those of leading international governments such as the 28-nation European Union, which adopted the same target in October 2014. California is on track to meet or exceed the target of reducing GHG emissions to 1990 levels by 2020, as established in the California Global Warming Solutions Act of 2006 (AB 32, discussed above). California's new emission reduction target of 40 percent below 1990 levels by 2030 will make it possible to reach the ultimate goal of reducing emissions 80 percent below 1990 levels by 2050. This is in line with the scientifically established levels needed in the U.S. to limit global warming below 2 degrees Celsius (°C), the warming threshold at which major climate disruptions are projected, such as super droughts and rising sea levels.

Senate Bill 32 and Assembly Bill 197 of 2016

In August 2016, Governor Brown signed SB 32 and AB 197, which serve to extend California's GHG reduction programs beyond 2020. SB 32 amended the Health and Safety Code to include Section 38566, which contains language to authorize CARB to achieve a Statewide GHG emission reduction of at least 40 percent below 1990 levels by no later than December 31, 2030. SB 32 codified the targets established by EO B-30-15 for 2030, which set the next interim step in the State's continuing efforts to pursue the long-term target expressed in EOs S-3-05 and B-30-15 of 80 percent below 1990 emissions levels by 2050.

Advanced Clean Cars Program

In January 2012, CARB approved the Advanced Clean Cars program which combines the control of GHG emissions and criteria air pollutants, as well as requirements for greater numbers of zero-emission vehicles, into a single package of standards for vehicle model years 2017 through 2025. The new rules strengthen the GHG standard for 2017 models and beyond. This will be achieved through existing technologies, the use of stronger and lighter materials, and more efficient drivetrains and engines. The program's zero-emission vehicle regulation requires battery, fuel cell, and/or plug-in hybrid electric vehicles to account for up to 15 percent of California's new vehicle sales by 2025. The program also includes a clean fuels outlet regulation designed to support the commercialization of zero-emission hydrogen fuel cell vehicles planned by vehicle manufacturers by 2015 by requiring increased numbers of hydrogen fueling stations throughout the state. The number of stations will grow as vehicle manufacturers sell more fuel cell vehicles. By 2025, when the rules will be fully implemented, the statewide fleet of new cars and light trucks will emit 34 percent fewer GHGs and 75 percent fewer smog-forming emissions than the Statewide fleet in 2016 (CARB [no date]).

Senate Bill X1-2, the California Renewable Energy Resources Act of 2011

SB X1-2 of 2011 requires all California utilities to generate 33 percent of their electricity from renewables by 2020. SB X1-2 sets a three-stage compliance period requiring all California utilities, including independently-

owned utilities, energy service providers, and community choice aggregators, to generate 20 percent of their electricity from renewables by December 31, 2013; 25 percent by December 31, 2016; and 33 percent by December 31, 2020. SB X1-2 also requires the renewable electricity standard to be met increasingly with renewable energy that is supplied to the California grid from sources within, or directly proximate to, California. SB X1-2 mandates that renewables from these sources make up at least 50 percent of the total renewable energy for the 2011-2013 compliance period, at least 65 percent for the 2014-2016 compliance period, and at least 75 percent for 2016 and beyond. In October 2015, SB 350 was signed by Governor Brown, which requires retail sellers and publicly-owned utilities to procure 50 percent of their electricity from renewable resources by 2030.

California Building Efficiency Standards of 2016 (Title 24, Part 6)

Buildings in California are required to comply with California's Energy Efficiency Standards for Residential and Nonresidential Buildings established by California Energy Commission (CEC) regarding energy conservation standards and found in Title 24, Part 6 of the California Code of Regulations. These standards were first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption and are updated on an approximately 3-year cycle to allow consideration and possible incorporation of new energy efficient technologies and methods. All buildings for which an application for a building permit is submitted on or after January 1, 2017 must follow the 2016 standards (CEC 2015a). Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases GHG emissions.

California Integrated Waste Management Act

To minimize the amount of solid waste that must be disposed of in landfills, the State Legislature passed the California Integrated Waste Management Act of 1989 (AB 939), effective January 1990. According to AB 939, all cities and counties were required to divert 25 percent of all solid waste from landfill facilities by January 1, 1995, and 50 percent by January 1, 2000. Through other statutes and regulations, this 50 percent diversion rate also applies to State agencies. In order of priority, waste reduction efforts must promote source reduction, recycling and composting, and environmentally-safe transformation and land disposal. Per capita disposal rates for Los Angeles County are below the target disposal rates established by AB 939 (1989; California Department of Resources Recycling and Recovery [CalRecycle] 2017).

In 2011, AB 341 modified the California Integrated Waste Management Act and directed CalRecycle to develop and adopt regulations for mandatory commercial recycling. The resulting Mandatory Commercial Recycling Regulation (2012) requires that on and after July 1, 2012, certain businesses that generate four cubic yards or more of commercial solid waste per week shall arrange recycling services. To comply with this requirement, businesses may either separate recyclables and self-haul them or subscribe to a recycling service that includes mixed waste processing. AB 341 also established a Statewide recycling goal of 75 percent; the 50 percent disposal reduction mandate still applies for cities and counties under AB 939.

3.3 LOCAL PLANS, POLICIES, REGULATIONS, AND LAWS

San Diego Association of Governments

SANDAG adopted its Regional Plan on October 9, 2015. The Regional Plan combines the two existing documents: the RCP, and the RTP/SCS. The SCS details how the region will reduce GHG emissions to state-mandated levels. SANDAG was tasked by CARB to achieve a 7 percent reduction in per capita GHGs from passenger cars and light trucks by 2020 and a 13 percent reduction by 2035, relative to emission levels in 2005. The region would achieve or exceed both reduction targets by implementing its SCS. The plan will be investing \$200 billion in the region to create, maintain, and improve a balanced transportation network over the next 35 years (SANDAG 2015).

County of San Diego Climate Action Plan

The County of San Diego Draft 2017 Climate Action Plan (CAP) is a long-term programmatic plan that identifies comprehensive strategies and measures to reduce GHG emissions in the unincorporated communities of the County. The CAP outlines specific reduction measures that residents and businesses can implement to reduce GHG emissions and aiding the County in achieving State-mandated GHG reduction targets (County 2017a). The CAP also provides future developments the opportunity to use CEQA streamlining tools for analysis of GHG emissions and related impacts for projects that are consistent with the CAP. The CAP has not been approved by the Board of Supervisors at the time of this writing.

County of San Diego General Plan

The County of San Diego General Plan was adopted in 1978 and comprehensively updated in 2011. The strategies related to GHG emissions that were adopted as part of the 2011 General Plan Update (GPU) and are applicable to the Proposed Project include the following:

- ▲ Strategy A-1: Reduce vehicle trips generated, gasoline/energy consumption, and GHG emissions.
- ▲ Strategy A-2: Reduce non-renewable electrical and natural gas energy consumption and generation (energy efficiency).
- ▲ Strategy A-3: Increase generation and use of renewable energy sources.
- ▲ Strategy A-4: Reduce water consumption.
- ▲ Strategy A-5: Reduce and maximize reuse of solid wastes.
- ▲ Strategy A-6: Promote carbon dioxide consuming landscapes.
- ▲ Strategy A-7: Maximize preservation of open spaces, natural areas, and agricultural lands.

The 2011 GPU also includes climate adaptation strategies to address potential adverse effects of climate change. The climate adaptation strategies include the following:

- ▲ Strategy B-1: Reduce risk from wildfire, flooding, and other hazards resulting from climate change.
- ▲ Strategy B-2: Conserve and improve water supply due to shortages from climate change.
- ▲ Strategy B-3: Promote agricultural lands for local food production.
- ▲ Strategy B-4: Provide education and leadership.

County of San Diego Green Building Incentive Program

The County of San Diego Green Building Incentive Program is designed to promote the use of resource efficient construction materials, water conservation, and energy efficiency in new and remodeled residential and commercial buildings. The program offers incentives of reduced plan check turnaround time and a 7.5 percent reduction in plan check and building permit fees for projects meeting program requirements.

County of San Diego Construction and Demolition Recycling Ordinance

The Construction and Demolition Debris Ordinance is designed to divert debris from construction and demolition projects from the landfill disposal in the unincorporated County of San Diego. The ordinance requires that 90 percent of inerts and 70 percent of all other construction materials from a project be recycled. In order to comply with the ordinance, a Construction and Demolition Debris Management Plan must be submitted and a fully refundable Performance Guarantee prior to building permit issuance.

4 EXISTING ENVIRONMENTAL SETTING

4.1 GREENHOUSE GAS EMISSIONS AND CLIMATE CHANGE

The Physical Scientific Basis

Certain gases in the earth's atmosphere, classified as GHGs, play a critical role in determining the earth's surface temperature. Solar radiation enters the earth's atmosphere from space; a portion of the radiation is absorbed by the earth's surface and a smaller portion of this radiation is reflected back toward space. The absorbed radiation is emitted from the earth as low-frequency infrared radiation. The frequencies at which objects emit radiation are proportional to temperature. The earth has a much lower temperature than the sun; therefore, the earth emits lower frequency radiation. Most solar radiation passes through GHGs; however, infrared radiation is absorbed by these gases. As a result, radiation that otherwise would have escaped back into space is instead "trapped," resulting in a warming of the atmosphere. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate on earth.

GHGs contributing to the greenhouse effect are CO₂, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Human-caused emissions of these GHGs in excess of natural ambient concentrations are found to be responsible for intensifying the greenhouse effect and lead to a trend of unnatural warming of the earth's climate. This phenomenon is known as global climate change or global warming. It is "extremely likely" that more than half of the observed increase in global average surface temperature from 1951 to 2010 was caused by the anthropogenic increase in GHG concentrations and other anthropogenic forcing (Intergovernmental Panel on Climate Change [IPCC] 2014:3, 4).

Climate change is a global problem. GHGs are global pollutants, unlike criteria air pollutants and toxic air contaminants, which are pollutants of regional and local concern. Whereas most pollutants with localized air quality effects have relatively short atmospheric lifetimes (about one day), GHGs have long atmospheric lifetimes (one to several thousand years). GHGs persist in the atmosphere for long enough time periods to be dispersed around the globe. Although the lifetime of any particular GHG molecule is dependent on multiple variables and cannot be determined with any certainty, it is understood that more CO₂ is emitted into the atmosphere than is sequestered by ocean uptake, vegetation, and other forms of sequestration. Of the total annual human-caused CO₂ emissions, approximately 55 percent is estimated to be sequestered through ocean and land uptake every year, averaged over the last 50 years. The remaining 45 percent of human-caused CO₂ emissions remains stored in the atmosphere (IPCC 2013:467).

The quantity of GHGs in the atmosphere that ultimately result in climate change is not precisely known, but is enormous; no single project alone would measurably contribute to an incremental change in the global average temperature, or to global, local, or micro climates. Thus, from the standpoint of CEQA, GHG impacts relative to global climate change are inherently cumulative.

Greenhouse Gas Emission Sources

GHG emissions are attributable in large part to human activities associated with the transportation, industrial/manufacturing, utility, residential, commercial, and agricultural emissions sectors (CARB 2014a). In California, the transportation sector is the largest emitter of GHGs, followed by electricity generation (CARB 2014b). Emissions of CO₂ are byproducts of fossil fuel combustion. Methane, a GHG with high warming potential, primarily results from off-gassing (the release of chemicals from nonmetallic substances under ambient or greater pressure conditions) and is largely associated with agricultural practices and landfills. Nitrous oxide is also largely attributable to agricultural practices and soil management. CO₂ sinks, or reservoirs, include vegetation and the ocean, which absorb CO₂ through sequestration and dissolution (CO₂ dissolving into the water), respectively. Sequestration and dissolution are two of the most common processes for removing CO₂ from the atmosphere.

Effects of Climate Change on the Environment

The IPCC was established in 1988 by the World Meteorological Organization and the United Nations Environment Programme to provide the world with a scientific view on climate change and its potential effects. According to the IPCC, the global average temperature is expected to increase 0.3–4.8°C (0.5–8.6 degrees Fahrenheit [°F]) relative to the period of 1986-2005, by the end of the 21st century (2081-2100) (IPCC 2014:SPM-8). According to the California Natural Resources Agency (CNRA), temperatures in California are projected to increase 2.7°F above 2000 averages by 2050 and, depending on emission levels, 4.1–8.6°F by 2100 (CNRA 2012:2).

Other environmental resources could be indirectly affected by the accumulation of GHG emissions and resulting rise in global average temperature. In the recent years, California has been marked by extreme weather. According to CNRA's *Safeguarding California Plan: 2017 Update* (CNRA 2017), California experienced the driest four-year Statewide precipitation on record from 2012 through 2015; the warmest years on average in 2014, 2015, and 2016; and the smallest and second smallest Sierra snowpack on record in 2015 and 2014. In contrast, the northern Sierra Nevada mountains experienced its wettest year on record in 2016 (CNRA 2017:20). The changes in precipitation exacerbate wildfires throughout California with increasing frequency, size, and devastation. As temperatures increase, the increase in precipitation falling as rain rather than snow also could lead to increased potential for floods because water that would normally be held in the snowpack of the Sierra Nevada and Cascade mountains until spring would flow into the Central Valley concurrently with winter rainstorm events. This scenario would place more pressure on California's levee/flood control system (CNRA 2017:21). Furthermore, in the extreme scenario involving the rapid loss of the Antarctic ice sheet, sea level along the California's coastline could rise up to 10 feet by 2100, which is approximately 30 to 40 times faster than sea-level rise experienced over the last century (CNRA 2017:102).

Changes in temperature, precipitation patterns, extreme weather events, and sea-level rise have the potential to effect and decrease the efficiency of thermal power plants and substations, decrease the capacity of transmission lines, disrupt electrical demand, and threaten energy infrastructure with the increased risk of flooding (CNRA 2017:26).

Extreme heat and other severe weather events, frequent wildfires, droughts, decline in air quality, and increases in allergens and other diseases threaten the health and well-being of nearly 40 million people in California and poses challenges for advancing health equity. The individuals most vulnerable to health impacts from climate change live in communities that experience health inequities, which include low-income families, people with existing health conditions, and children and seniors (CNRA 2017:45).

The State Department of Transportation owns and operates more than 51,000 miles of roadways along 265 highways, as well as three of the busiest passenger rail lines in the nation. Sea-level rise, storm surge, and coastal erosion are imminent threats to highways, roads, bridge supports, airports, transit systems and rail lines near sea level and seaports. Shifting precipitation patterns, increased temperatures, increased risk of wildfires, and increased frequency in extreme weather events also threaten transportation systems across the State. Temperature extremes and increased precipitation can increase the risk of road and railroad track failure, decreased transportation safety, and increased maintenance costs (CNRA 2017:59).

Water availability and changing temperatures, which effects prevalence of pests, disease, and species, directly impact crop development and livestock production. Other environmental concerns include decline in water quality, groundwater security, and soil health (CNRA 2017:69). Vulnerabilities of water resources also include risks to degradation of watersheds, alteration of ecosystems and loss of habitat, impacts to coastal areas, and ocean acidification (CNRA 2017:115). The ocean absorbs approximately a third of the CO₂ released into the atmosphere every year from industrial and agricultural activities, changing the chemistry of the ocean by decreasing the pH of the seawater. Ocean acidification is harmful to marine organisms especially calcifying species including oysters, clams, sea urchins, and corals (CNRA 2017:101).

Cal-Adapt is a climate change scenario planning tool developed by CEC that downscales global climate model data to local and regional resolution under two emissions scenarios: the high-emissions scenario represents the business-as-usual future GHG emissions scenario, and the low-emissions scenario represents the lower future GHG emissions scenario. According to Cal-Adapt, annual average temperatures in San Diego County are projected to rise by 3.4–6.7 °F by 2090, with the range based on low-and high-emissions scenarios (Cal-Adapt 2017).

5 ENVIRONMENTAL IMPACTS

5.1 SIGNIFICANCE CRITERIA

The issue of global climate change is inherently a cumulative issue, as the GHG emissions of individual projects cannot be shown to have any material effect on global climate. Thus, the project's impact to climate change is addressed only as a cumulative impact.

CEQA Guidelines Section 15064 and relevant portions of Appendix G recommend that a lead agency consider a project's consistency relevant, adopted plans, and discuss any inconsistencies with applicable regional plans, including plans to reduce GHG emissions. In Appendix G of the State CEQA Guidelines, two questions are provided to help assess if the project would result in a potentially significant impact on climate change. These questions ask whether the project would:

- ▶ generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, or
- ▶ conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs?

In California, some counties, cities, and air districts have developed guidance and thresholds of significance for determining significance of GHG emissions that occur within their jurisdiction. The County of San Diego is the CEQA Lead Agency for the Proposed Project and is; therefore, responsible for determining whether an impact would be considered significant.

The County CAP includes GHG reduction measures that, if fully implemented, would achieve an emissions reduction target that is consistent with the State-mandated reduction target embodied in AB 32 and SB 32. The County has prepared the Draft 2017 Guidelines for Determining Significance and Report Format and Content Requirements (Guidelines) for addressing climate change in CEQA documents (County 2017b). The following threshold of significance is included in the Guidelines that would be used to ensure consistency of new projects with the County's CAP:

A proposed project would have a less than significant cumulatively considerable contribution to climate change impacts if it is found to be consistent with the County's Climate Action Plan; and, would normally have a cumulatively considerable contribution to climate change impacts if it is found to be inconsistent with the County's Climate Action Plan.

General Plan Amendment projects (GPAs) that intensify GHG emissions beyond current designations are required to reduce GHG emissions to ensure that CAP forecasts are not substantially altered such that attainment of the GHG reduction targets and goal could not be achieved. The Proposed Project would be required to achieve no net increase in GHG emissions from additional density above the 2011 GPU. The increase in emissions shall be reduced by demonstrating compliance with relevant CAP reduction measures identified in the CAP Consistency Review Checklist (Checklist), implement all feasible on-site design features and mitigation measures, and implement off-site mitigation, which may include purchase of carbon offsets

for the remainder GHG emissions. Therefore, GPAs would comply with the threshold of significance by showing consistency with the CAP.

5.2 METHODOLOGY

GHG emissions associated with the project would be generated during project construction and by operation of the single-family homes and general office building land uses after construction is complete. Operational emissions of GHG were estimated for the following sources: area sources (e.g., consumer products, the use of landscape maintenance equipment, architectural coating), energy use associated with single-family homes and general office buildings, water and wastewater treatment and distribution, solid waste, and mobile sources.

GHGs are global pollutants and climate change is a global problem. Any project that emits GHG emissions has the potential to contribute cumulatively to global climate change. Under CEQA, GHG impacts relative to global climate change are inherently cumulative. Specific methods for construction and operational emissions modeling are discussed separately below.

Construction Emissions

Construction-related emissions of GHGs were calculated using the California Emissions Estimator Model (CalEEMod) Version 2016.3.1 computer program (California Air Pollution Control Officers Association [CAPCOA] 2016). Modeling was based on available information (e.g., land uses, acreage, number of units); reasonable assumptions based on typical construction activities; and default values in CalEEMod that are based on the Proposed Project locations and land use types.

Construction is anticipated to begin on January 1, 2018. The construction emissions modeling included complete buildout of the Proposed Project (residential and commercial land uses) through 2050. Construction emissions modeling was also adjusted to account for future emissions standards in California for construction equipment and passenger vehicles, based on default emission factors in CalEEMod for each year of potential construction until 2050. For further details regarding modeling inputs and assumptions refer to Appendix A.

Operational Emissions

Operation-related emissions of GHG were also estimated using CalEEMod Version 2016.3.1. Operational emissions of GHGs were estimated for the following sources: area sources (e.g., consumer products, landscaping-related fuel combustion sources, architectural coating), energy use (i.e., electricity and natural gas consumption), water use, solid waste, and mobile sources. Mobile-source emissions were estimated using SANDAG's region-specific trip rates for single-family homes (SANDAG 2002). Indirect emissions associated with electricity and natural gas consumption were estimated using GHG emissions factors for San Diego Gas & Electric (SDG&E) based on the 2015 Power Content Label and adjusting for SB 350 efforts to achieve at least 50 percent renewable energy by 2030 (CEC 2016). The project's level of electricity and natural gas usage were based on 2016 Title 24-adjusted consumption provided by CalEEMod for each land use type. Adjustments were based on the CEC estimate that single-family homes are 28 percent more energy efficient than 2013 Title 24 standards and general office buildings are 5 percent more efficient than 2013 Title 24 standards (CEC 2015b).

5.3 ENVIRONMENTAL IMPACTS

Impact GHG-1: Project-generated GHG emissions

The project would generate 36,776 MTCO₂e per year (MTCO₂e/year) construction GHG emissions and 42,648 MTCO₂e/year operational GHG emissions at project buildout in 2050. The Proposed Project is inconsistent with existing General Plan land use and zoning designations and would result in a more GHG-

intensive project; therefore, the Proposed Project would be inconsistent with the CAP projections. This impact would be **potentially significant**.

GHG emissions associated with the project would be generated during the project construction and operations. Estimated levels of construction- and operation-related GHG emissions are presented below, followed by a discussion of the Proposed Project’s consistency with applicable regulations and policies established to enable the achievement of mandated Statewide GHG reduction goals.

Construction Emissions

Project construction activities would result in the generation of GHG emissions from the use of heavy-duty, off-road construction equipment, materials transport, and worker commute. Total construction emissions are presented below in Table 1.

Table 1 Construction Unmitigated Greenhouse Gas Emissions Summary

PSR Analysis Area/Former CGSP Area	MTCO ₂ e/year
B018+	655
CD14	260
DS8	8,683
DS24	1,598
FB21+	260
FB19+	57
FB17	527
FB2+	362
ME26	369
ME30A	370
NC37	324
NC38+	530
NC3A	324
NC22	547
NC18A	527
PP30	1,524
SD15	11,795
VC51	326
VC7+	3,781
VC57+	2,649
VC67	644
CGSP	664
Total Emissions	36,776

Notes: Totals may not add due to rounding.
 CGSP = Champagne Gardens Specific Plan; MTCO₂e/year = metric tons carbon dioxide equivalent per year; PSR = Property Specific Requests
 See Appendix A for detailed input parameters and modeling results.
 Source: Modeling performed by County of San Diego Staff in 2017 using CalEEMod Version 2016.3.1

As shown in Table 1, PSR Analysis Areas DS8 and SD15 would result in the greatest annual GHG emissions and FB19+ would result in the least annual GHG emissions. SD15 shows far greater GHG emissions compared to the other PSR Analysis Areas due to the proposed commercial development within the PSR. When evaluated individually, none of the PSR Analysis Areas or former CGSP Subareas would exceed the screening level threshold of 900 MTCO₂e/year from construction emissions. All PSR future discretionary

projects would be required to comply with the CAP Consistency Review Checklist regardless of size. However, if the Draft CAP is not adopted by the Board of Supervisors and the Consistency Review Checklist is not available for future Proposed Project discretionary applications it is illustrative to note that the individual projects may fall below the screening level threshold of 900 MTCO_{2e}.

Each project would need to analyze the impacts of vegetation removal during the discretionary review process.

Operational Emissions

Operation of the Proposed Project would result in mobile-source GHG emissions associated with project-generated vehicle trips (i.e., project-generated vehicle miles traveled); area-source emissions from the combustion of natural gas for space and water heating and operation of landscape maintenance equipment; energy-source emissions from the consumption of electricity; water-source emissions from water use and the conveyance and treatment of wastewater; and waste-source emissions from the transport and disposal of solid waste. Mobile-source emissions would result from new vehicle trips generated by anticipated land use development. Mobile-source emissions were estimated using SANDAG’s region-specific trip rates for single-family homes (SANDAG 2002). It should be noted that mobile source emissions would be expected to decrease over time due to fleet turnover and State regulations requiring reductions in carbon emissions from vehicles. Project buildout is 2050 and operational emissions would be highest during the first year and would decline due to fleet turnover and implementation of additional regulations at the State level. Operational emissions are summarized below in Table 2.

Table 2 Operational Unmitigated Greenhouse Gas Emissions at Plan Buildout (2050)

PSR Analysis Area/Former CGSP Area	MTCO _{2e} /year	30-year Lifetime Operational MTCO _{2e}
B018+	934	28,020
CD14	151	4,530
DS8	6,308	189,240
DS24	3,296	98,880
FB21+	114	3,420
FB19+	5	150
FB17	535	16,050
FB2+	345	10,350
ME26	560	16,800
ME30A	625	18,750
NC37	258	7,740
NC38+	616	18,480
NC3A	178	5,340
NC22	843	25,290
NC18A	732	21,960
PP30	2,628	78,840
SD15	8,529	255,870
VC51	211	6,330
VC7+	5,450	163,500
VC57+	4,976	149,280
VC67	3,097	92,910
CGSP	2,256	67,680
Total Emissions	42,648	1,279,440

Table 2 Operational Unmitigated Greenhouse Gas Emissions at Plan Buildout (2050)

PSR Analysis Area/Former CGSP Area	MTCO _{2e} /year	30-year Lifetime Operational MTCO _{2e}
<p>Notes: Totals may not add due to rounding. CGSP = Champagne Gardens Specific Plan; MTCO_{2e}/year = metric tons carbon dioxide equivalent per year; PSR = Property Specific Requests See Appendix A for detailed input parameters and modeling results. Source: Modeling performed by County of San Diego Staff in 2017 using CalEEMod Version 2016.3.1</p>		

Unmitigated operational emissions for the PSR Analysis Areas and the former CGSP Area are presented in Table 2. When evaluated individually, PSR Analysis Areas B018+, DS8, DS24, NC22, PP30, SD15, VC7+, VC57+, VC67, and the former CGSP Subareas CG1-8 would exceed the screening level threshold of 900 MTCO_{2e}/year from operational activity. All PSR future discretionary projects would be required to comply with the CAP Consistency Review Checklist regardless of size. However, if the Draft CAP is not adopted by the Board of Supervisors and the Consistency Review Checklist is not available for future Proposed Project discretionary applications it is illustrative to note that the individual projects may fall below the screening level threshold of 900 MTCO_{2e}.

Based on the emissions modeling conducted, the project would generate 36,776 MTCO_{2e}/year construction GHG emissions and 42,648 MTCO_{2e}/year operational GHG emissions at project buildout in 2050. The Proposed Project is inconsistent with existing General Plan land use and zoning designations and would result in a more GHG-intensive project; therefore, the Proposed Project would be inconsistent with the CAP projections. If the Draft CAP is not adopted by the Board of Supervisors and the Consistency Review Checklist is not available for future Proposed Project discretionary applications, the Proposed Project would result in a **potentially significant** impact because the measures applied to individual projects through the Consistency Review Checklist would not be approved for use to reduce impacts from the Proposed Project.

Adoption of the Valley Center Community Plan Residential Policy 8 Revision would allow for additional minimum lot size flexibility for residential clustering only within SR-2 or SR-4 areas and only within the sewer service area; however, the adoption would not result in an increase in the number of allowed dwelling units. Because population would not increase, the Valley Center Community Plan Residential Policy 8 Revision would not generate additional GHG emissions, either directly or indirectly.

Mitigation Measures

Adopted General Plan Policies

Implementation of the following General Plan policies and 2011 Program Environmental Impact Report (PEIR) mitigation measures and the additional measure as listed below would reduce Proposed Project GHG emissions to a level of less than significant.

COS-15.1: Design and Construction of New Buildings. Require that new buildings be designed and constructed in accordance with “green building” programs that incorporate techniques and materials that maximize energy efficiency, incorporate the use of sustainable resources and recycled materials, and reduce emissions of greenhouse gases and toxic air contaminants.

COS-17.1: Reduction of Solid Waste Materials. Reduce greenhouse gas emissions and future landfill capacity needs through reduction, reuse, or recycling of all types of solid waste that is generated. Divert solid waste from landfills in compliance with the California Integrated Waste Management Act (AB 939) that requires each local jurisdiction in the state to divert at least 50 percent of its solid waste from being placed into landfills.

Adopted 2011 PEIR Mitigation Measures

- CC-1.1** Update the County Green Building Program to increase effectiveness of encouraging incentives for development that is energy efficient and conserves resources through incentives and education.
- CC-1.2** Prepare a County Climate Change Action Plan with an update baseline inventory of greenhouse gas emissions from all sources, more detailed greenhouse gas emissions reduction targets and deadlines; and a comprehensive and enforceable greenhouse gas emissions reduction measures that achieves a 17 percent reduction in emissions from County operations from 2006 by 2020 and a 9 percent reduction in community emissions between 2006 and 2020. Once prepared, implementation of the plan shall be monitored and progress reported on a regular basis.
- CC-1.3** Work with the San Diego Association of Governments to achieve regional goals in reducing greenhouse gas emissions associated with land use and transportation.
- CC-1.4** Review traffic operations to implement measures that improve flow and reduce idling such as improving traffic signal synchronization and decreasing stop rate and time.
- CC-1.5** Coordinate with the San Diego County Water Authority and other water agencies to better link land use planning with water supply planning with specific regard to potential impacts from climate change and continued implementation and enhancement of water conservation programs to reduce demand. Also support water conservation pricing (e.g., tiered rate structures) to encourage efficient water use.
- CC-1.6** Implement and expand County-wide recycling and composting programs for residents and businesses. Require commercial and industrial recycling.
- CC-1.9** Coordinate with the San Diego Air Pollution Control District, San Diego Gas & Electric, and the California Center for Sustainable Energy to research and possibly develop a mitigation credit program. Under this program, mitigation funds will be used to retrofit existing buildings for energy efficiency to reduce greenhouse gas emissions.
- CC-1.10** Continue to implement the County Groundwater Ordinance, Watershed Protection Ordinance, Resource Protection Ordinance, Multiple Species Conservation Program and prepare Multiple Species Conservation Plans for North and East County to further preserve wildlife habitat and corridors, wetlands, watersheds, groundwater recharge areas and other open space that provide carbon sequestration benefits and to restrict the use of water for cleaning outdoor surfaces and vehicles. The Watershed Protection Ordinance also implements low-impact development practices that maintain the existing hydrologic character of the site to manage storm water and protect the environment. (Retaining storm water runoff on-site can drastically reduce the need for energy-intensive imported water at the site.)
- CC-1.11** Revise the Ordinance Relating to Water Conservation for Landscaping to further water conservation to:
- Create water-efficient landscapes and use water-efficient irrigation systems and devices, such as soil moisture-based irrigation controls.
 - Use reclaimed water for landscape irrigation.
 - Restrict watering methods (e.g., prohibit systems that apply water to non-vegetated surfaces) and control runoff.
 - Provide education about water conservation and available programs and incentives.

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- CC-1.12** Continue to coordinate with resource agencies, California Department of Forestry and Fire Protection, and fire districts to minimize potential wildfire risks in the County and to plan for the potential increase in future risk that may result from climate change.
- CC-1.13** Continue to implement and revise as necessary the Regional Trails Plan as well as the Community Trails Master Plan to connect parks and publicly accessible open space through shared pedestrian/bike paths and trails to encourage walking and bicycling.
- CC-1.14** Provide public education and information about options for reducing greenhouse gas emissions. In addition to addressing land development, education should also address purchasing, conservation, and recycling.
- CC-1.15** Reduce vehicle miles traveled and encourage alternative modes of transportation by implementing the following measures:
- During Community Plan updates, establish policies and design guidelines that: encourage commercial centers in compact walkable configurations and discourage “strip” commercial development
 - Expand community bicycle infrastructure.
 - Revise the Off-Street Parking Design Manual to include parking placement concepts that encourage pedestrian activity and concepts for providing shared parking facilities.
 - Establish comprehensive planning principles for transit nodes such as the Sprinter Station located in North County Metro.
 - Continue to locate County facilities near transit facilities whenever feasible.
 - Coordinate with the San Diego Association of Governments, California Department of Transportation, and tribal governments to maximize opportunities to locate park and ride facilities.
 - Continue to coordinate with the San Diego Association of Governments, California Department of Transportation, and transit agencies to expand the mass transit opportunities in the unincorporated County and to review the location and design of transit stops. Establish a County of San Diego Planning & Development Services transit coordinator to ensure land use issues are being addressed.
 - Update the Zoning Ordinance to require commercial, office, and industrial development to provide preferred parking for carpools, vanpools, electric vehicles, and flex cars.
- CC-1.16** Develop and implement a Strategic Energy Plan to increase energy efficiency in existing County buildings and set standards for any new County facilities that will ultimately reduce greenhouse gas emissions. This will include implementation of the following measures as will be detailed within the plan:
- Improve energy efficiency within existing operations through retrofit projects, updated purchasing policies, updated maintenance/operations standards, and education.
 - Improve energy efficiency of new construction and major renovations by applying design criteria and participating in incentive programs.
 - Provide energy in a reliable and cost-effective manner and utilize renewable energy systems where feasible.
 - Monitor and reduce energy demand through metering, building controls, and energy monitoring systems.

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- Increase County fleet fuel efficiency by acquiring more hybrid vehicles, using alternative fuels, and by maintaining performance standards for all fleet vehicles.

CC-1.17 Develop and implement a County Operations Recycling Program. This will include implementation of the following measures as will be detailed within the Program:

- Reuse and recycle construction and demolition waste (including, but not limited to, soil, vegetation, concrete, lumber, metal, and cardboard).
- Provide interior and exterior storage areas for recyclables and green waste and adequate recycling containers located in public areas.
- Recover by-product methane to generate electricity.
- Provide education and publicity about reducing waste and available recycling services.

CC-1.18 Develop and implement a County Operations Water Conservation Program.

In addition to the 2011 GPU PEIR policies and mitigation measures listed above, the Proposed Project shall require the following additional mitigation measures. As specified in mitigation measure GHG-1 of the CAP's Draft Supplemental Environmental Impact Report (SEIR), GPAs that intensify GHG emissions beyond current designations are required to reduce GHG emissions to ensure that CAP emission forecasts are not substantially altered such that attainment of GHG reduction targets could not be achieved. As a program-level analysis, implementation of mitigation measures cannot be quantified; therefore, this discussion provides a programmatic discussion of the potential general impacts of implementing these measures.

The Proposed Project shall comply with relevant Climate Action Plan (CAP) greenhouse gas (GHG) reduction measures identified in the CAP Checklist.

Emissions from future discretionary projects resulting from the Proposed Project, if approved, would increase forecasted emissions in the County of San Diego (County) and may impede attainment of the Draft CAP GHG reduction targets.

In accordance with California Environmental Quality Act (CEQA) Guidelines Section 15126.4(c) and related guidance, the County has determined that future discretionary projects shall provide for all feasible on-site design features/mitigation measures (including the relevant requirements of new development in the CAP Consistency Review Checklist), in addition to off-site GHG mitigation (such as the purchase of carbon offset credits) under the circumstances discussed below, to reduce impacts from GHG emissions from the Proposed Project to a less-than-significant level. As such, mitigation measure M-GHG-2 (listed below) requires Property Specific Request (PSR) projects that increase density or intensity above the 2011 General Plan Update (GPU) to offset additional (Option 1) or all (Option 2) GHG emissions for a 30-year period.¹

California Air Resources Board (CARB) recommends that "lead agencies prioritize on-site design features and direct investments in GHG reductions in the vicinity of the project" (CARB 2017). CARB also recognizes that "[w]here further design or regional investments are infeasible or not proved to be effective, it may be appropriate and feasible to mitigate project emissions through purchasing and retiring carbon credits issued by a recognized and reputable accredited carbon registry" (CARB 2017). Examples of off-site mitigation include, among other mechanisms, the purchase of verifiable carbon "offsets" from a reputable carbon registry that will undertake mitigation. The use of carbon offsets to mitigate GHG emissions is expressly authorized by CEQA Guidelines section 15126.4(c)(3).

¹ A "project life" is 30 years. This methodology is consistent with the 30-year project life time frame used by the South Coast Air Quality Management District's (SCAQMD's) GHG guidance (SCAQMD 2008).

One carbon offset credit represents the past reduction or sequestration of one metric ton of carbon dioxide equivalent that is “not otherwise required” (CEQA Guidelines section 15126.4(c)(3)). Carbon offsets that reduce the net increase of GHG emissions shall achieve real, permanent, quantifiable, verifiable, and enforceable reductions (California Health & Safety Code section 38562(d)(1)).

The County shall implement the following mitigation measure to reduce significant cumulative GHG impacts and to ensure that the County can achieve its reduction targets as part of the Draft CAP:

Mitigation Measure GHG-1

The County shall require future discretionary projects resulting from the Proposed Project that increase their emissions above what is allowed in the 2011 GPU Program Environmental Impact Report (PEIR) to reduce their emissions to ensure that CAP emission forecasts are not substantially altered such that attainment of GHG reduction targets could not be achieved. Project applicants could accomplish this through two options, as outlined below:

Option 1 (No Net Increase): PSR project applicants shall achieve no net increase in GHG emissions from additional density above the 2011 GPU. Applicants shall be required in their respective CEQA documents to quantify the GHG emissions from their projects that exceed the GHG emissions for the 2011 GPU density or intensity forming the basis of the Draft CAP emission forecasts (i.e., projections). This increase in emissions shall be reduced through on-site design features and mitigation measures and off-site mitigation, including purchase of carbon offset credits by the applicant. Applicants shall demonstrate compliance with relevant CAP measures as identified in the “CAP Consistency Review Checklist” in addition to all feasible on-site design features and mitigation measures. Off-site mitigation, including purchase of carbon offset credits, would be allowed after all feasible on-site design features and mitigation measures have been incorporated. For example, if 400 residential units were allowed under the 2011 GPU and a PSR applicant proposes 500 residential units, the emissions for the additional 100 units would be calculated and offset through compliance with the CAP Consistency Review Checklist and additional feasible on-site measures and off-site measures, including the use of carbon offsets. The emissions associated with the allowable density of 400 units would be mitigated through compliance with the CAP Consistency Review Checklist.

The County will consider, to the satisfaction of the Director of Planning & Development Services (PDS), the following geographic priorities for GHG reduction features, and GHG reduction projects and programs: 1) project design features/on-site reduction measures; 2) off-site within the unincorporated areas of the County of San Diego; 3) off-site within the County of San Diego; 4) off-site within the State of California; 5) off-site within the United States; and 6) off-site internationally.

Geographic priorities would focus first on local reduction features (including projects and programs that would reduce GHG emissions) to ensure that reduction efforts achieved locally would provide co-benefits. Depending on the carbon offset project utilized, co-benefits may include reductions in criteria air pollutants, toxic air contaminants, energy demand, water consumption, health benefits, social benefits, and economic benefits. The applicant or its designee shall first pursue offset projects and programs locally within unincorporated areas of the County of San Diego to the extent such direct investment projects and programs are available and are financially feasible, as reasonably determined by the Director of PDS.

If carbon offset credits are provided as mitigation, the applicant, or its designee, shall purchase and retire carbon offsets in a quantity sufficient to offset the net increase from GHG emissions above the density or intensity allowed in the 2011 GPU. This includes all GHG emissions from construction (including sequestration loss from vegetation removal) and operations.

For the net increase of construction and operations GHG emissions, prior to County’s issuance of the project’s first grading permit (for construction GHG emissions) or first building permit (for operations GHG emissions) the applicant, or its designee, shall provide evidence to the satisfaction of the Director of PDS that the project applicant or its designee has purchased and retired carbon offsets in a quantity sufficient to offset the net increase of construction and operations GHG emissions generated by the project. Operations emissions may be offset in phases, commensurate with the overall phasing of the project.

Carbon offset credits must be purchased through any of the following: (i) a CARB-approved registry, such as the Climate Action Reserve, the American Carbon Registry, and the Verified Carbon Standard, (ii) any registry approved by CARB to act as a registry under the state's cap-and-trade program, (iii) through the California Air Pollution Control Officers Association (CAPCOA) GHG Rx and the San Diego Air Pollution Control District (SDAPCD), or (iv) if no registry is in existence as identified in options (i), (ii), or (iii), above, then any other reputable registry or entity that issues carbon offsets consistent with California Health & Safety Code section 38562(d)(1)), to the satisfaction of the Director of PDS.

Option 2 (Net Zero): PSR project applicants shall reduce all project GHG emissions to zero to achieve no net increase over baseline conditions (carbon neutrality). Project emissions shall be reduced to zero through on-site design features and mitigation measures and off-site mitigation, including purchase of carbon offset credits by the applicant or its designee. Applicants shall demonstrate compliance with relevant CAP measures as identified in the "CAP Consistency Review Checklist" before considering additional feasible on-site design features and mitigation measures. Off-site mitigation, including purchase of carbon offset credits, would be allowed after all feasible on-site design features and mitigation measures have been incorporated. The County will consider, to the satisfaction of the Director of Planning & Development Services (PDS), the following geographic priorities for GHG reduction features, and GHG reduction projects and programs: 1) project design features/on-site reduction measures; 2) off-site within the unincorporated areas of the County of San Diego; 3) off-site within the County of San Diego; 4) off-site within the State of California; 5) off-site within the United States; and 6) off-site internationally.

Geographic priorities would focus first on local reduction features (including projects and programs that would reduce GHG emissions) to ensure that reduction efforts achieved locally would provide co-benefits. Depending on the direct investment project utilized, co-benefits may include reductions in criteria air pollutants, toxic air contaminants, energy demand, water consumption, health benefits, social benefits, and economic benefits. The applicant or its designee shall first pursue offset projects and programs locally within unincorporated areas of the County of San Diego to the extent such direct investment projects and programs are available and are financially feasible, as reasonably determined by the Director of PDS.

If carbon offset credits are provided as mitigation, the applicant, or its designee, shall purchase and retire carbon offsets in a quantity sufficient to offset all GHG emissions from the project. This includes all GHG emissions from construction (including sequestration loss from vegetation removal) and operations. Prior to the County's issuance of the project's first grading permit (for construction GHG emissions) or first building permit (for operations GHG emissions) the applicant, or its designee, shall provide evidence to the satisfaction of the Director of PDS that the project applicant or its designee has purchased and retired carbon offsets in a quantity sufficient to offset all construction and operations GHG emissions generated by the project. Operations emissions may be offset in phases, commensurate with the overall phasing of the project.

Carbon offset credits must be purchased through any of the following: (i) a CARB-approved registry, such as the Climate Action Reserve, the American Carbon Registry, and the Verified Carbon Standard, (ii) any registry approved by CARB to act as a registry under the state's cap-and-trade program, (iii) through the CAPCOA GHG Rx and the SDAPCD, or (iv) if no registry is in existence as identified in options (i), (ii), or (iii), above, then any other reputable registry or entity that issues carbon offsets consistent with California Health & Safety Code section 38562(d)(1)), to the satisfaction of the Director of PDS.

Significance after Mitigation

With implementation of the above mitigation measures, the incremental increase in GHG emissions from the Proposed Project would be offset such that CAP emission forecasts would not be affected.

Implementation of the above mitigation measures and the policies and mitigation measures of the GPU PEIR listed above would reduce Proposed Project impacts associated with GHG emissions to no net increase above what is allowed in the 2011 GPU PEIR or carbon neutral (i.e., no net increase in GHG emissions).

Even though the Draft CAP and Consistency Review Checklist have not been adopted by the Board of Supervisors at time of this writing, the Proposed Project Mitigation Measure GHG-1 will be enforced through implementation of a “D” Special Area Regulation (D-Designator) with the requirement to provide all feasible on-site design measures and mitigation prior to mitigating off-site. This will ensure GHG emissions would be reduced to less-than-significant levels. Therefore, the impact would be reduced to **less than significant**.

Impact GHG-2: Conflict with applicable plan, policy, or regulation

The Proposed Project would increase forecasted emissions in the County above the emissions projected in the CAP and may impede attainment of the CAP. Therefore, the impact would be **potentially significant**.

The purpose of the plans, policies, and regulations, discussed in Section 3 above, is to reduce local GHG emissions. The Proposed Project would achieve GHG reductions through green building design that includes improved energy efficiency, water conservation, sustainable materials use, and waste reduction. As a condition of building permit approval, future land use development allowed by the Proposed Project would be required to comply with 2016 Title 24 standards, which has a goal of 100 percent residential electricity generated by renewable sources which would be applicable in 2020. Furthermore, the California Green Building Code requires a 20 percent reduction in indoor water use and 50 percent diversion of construction waste from landfills. The Proposed Project would be required to comply with the Draft CAP and Consistency Review Checklist if/when the CAP is adopted. Development of land uses associated with implementation of the Proposed Project would potentially increase forecasted emissions in the County above the emissions projected in the CAP and may impede attainment of the CAP. If the CAP is not adopted, some of the Proposed Project properties would comply with the CAPCOA 900 MTCO_{2e} screening threshold; however, some of the Proposed Project properties would result in noncompliance with screening level standards recommended by CAPCOA. Therefore, the Proposed Project would result in a **potentially significant** impact associated with applicable plans, policies, or regulations adopted for reducing the emissions of GHG.

Adoption of the Valley Center Community Plan Residential Policy 8 Revision would allow for additional minimum lot size flexibility for residential clustering only within SR-2 or SR-4 areas and only within the sewer service area; however, the adoption would not result in an increase in the number of allowed dwelling units. Therefore, adoption of the Valley Center Community Plan Residential Policy 8 Revision would not result in a conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHG.

Mitigation Measures

Implementation of the General Plan policies, 2011 PEIR mitigation measures listed above, and mitigation measure GHG-1 would achieve no net increase above what is allowed in the 2011 GPU PEIR or carbon neutrality (i.e., no net increase in GHG emissions); thus, the Proposed Project would be consistent with the CAP and would not conflict with any adopted and applicable local or State plans, policies, or regulations to reduce GHG emissions in 2020, 2030, and/or 2050.

Significance after Mitigation

Implementation of the General Plan policies, 2011 PEIR mitigation measures listed above, and mitigation measure GHG-1 would achieve no net increase above what is allowed in the 2011 GPU PEIR or carbon neutrality (i.e., no net increase in GHG emissions). Even though the Draft CAP and Consistency Review Checklist have not been adopted by the Board of Supervisors at time of this writing, the Proposed Project Mitigation Measure GHG-1 will be enforced through implementation of a “D” Special Area Regulation (D-Designator) with the requirement to provide all feasible on-site design measures and mitigation prior to mitigating off-site. This will ensure GHG emissions would be reduced to less-than-significant levels. Therefore, the impact would be reduced to **less than significant** with respect to conflicting with adopted and applicable local or State plans, policies, or regulations to reduce GHG emissions.

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Attachment A

Bonsall 18+ Unmitigated - GHG Only - San Diego County, Annual

Bonsall 18+ Unmitigated - GHG Only
San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	67.00	Dwelling Unit	21.75	120,600.00	192

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	10			Operational Year	2050
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	407.41	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

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Project Characteristics - Adjusted for RPS 50% goal.

Land Use - .

Construction Phase -

Architectural Coating - SDAPCD Rule 67.0.1 Architectural Coatings.

Vehicle Trips - Using SANDAG trip rates.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Area Coating - SDAPCD Rule 67.0.1 Architectural Coating.

Energy Use - .

Energy Mitigation - Adjust for Title 24 2016 Standards.

Grading -

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Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	50.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	50
tblAreaCoating	Area_EF_Residential_Exterior	250	50
tblAreaCoating	Area_EF_Residential_Interior	250	50
tblConstructionPhase	PhaseEndDate	12/30/2016	9/27/2019
tblConstructionPhase	PhaseEndDate	12/30/2016	8/2/2019
tblConstructionPhase	PhaseEndDate	12/30/2016	3/2/2018
tblConstructionPhase	PhaseEndDate	12/30/2016	8/30/2019
tblConstructionPhase	PhaseEndDate	12/30/2016	1/12/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	8/31/2019
tblConstructionPhase	PhaseStartDate	12/31/2016	3/3/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	1/13/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	8/3/2019
tblConstructionPhase	PhaseStartDate	12/31/2016	1/1/2018
tblProjectCharacteristics	CO2IntensityFactor	720.49	407.41
tblProjectCharacteristics	OperationalYear	2018	2050
tblVehicleTrips	ST_TR	9.91	10.41
tblVehicleTrips	SU_TR	8.62	9.05
tblVehicleTrips	WD_TR	9.52	10.00

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2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018											0.0000	416.9387	416.9387	0.1017	0.0000	419.4802
2019											0.0000	233.7079	233.7079	0.0524	0.0000	235.0188
Maximum											0.0000	416.9387	416.9387	0.1017	0.0000	419.4802

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018											0.0000	416.9382	416.9382	0.1017	0.0000	419.4798
2019											0.0000	233.7077	233.7077	0.0524	0.0000	235.0186
Maximum											0.0000	416.9382	416.9382	0.1017	0.0000	419.4798

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area											69.2082	29.8375	99.0457	0.0646	5.4400e-003	102.2840
Energy											0.0000	248.7183	248.7183	0.0108	4.1400e-003	250.2225
Mobile											0.0000	554.4721	554.4721	0.0257	0.0000	555.1151
Waste											15.9795	0.0000	15.9795	0.9444	0.0000	39.5884
Water											1.3849	16.1543	17.5392	0.1434	3.6000e-003	22.1959
Total											86.5725	849.1822	935.7548	1.1889	0.0132	969.4059

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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											69.2082	29.8375	99.0457	0.0646	5.4400e-003	102.2840
Energy											0.0000	213.8511	213.8511	9.9400e-003	3.5200e-003	215.1473
Mobile											0.0000	554.4721	554.4721	0.0257	0.0000	555.1151
Waste											15.9795	0.0000	15.9795	0.9444	0.0000	39.5884
Water											1.3849	16.1543	17.5392	0.1434	3.6000e-003	22.1959
Total											86.5725	814.3150	900.8876	1.1881	0.0126	934.3306

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.11	3.73	0.07	4.70	3.62

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	8/31/2019	9/27/2019	5	20	
2	Building Construction	Building Construction	3/3/2018	8/2/2019	5	370	
3	Grading	Grading	1/13/2018	3/2/2018	5	35	
4	Paving	Paving	8/3/2019	8/30/2019	5	20	
5	Site Preparation	Site Preparation	1/1/2018	1/12/2018	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 87.5

Acres of Paving: 0

Residential Indoor: 244,215; Residential Outdoor: 81,405; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Grading	Excavators	2	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	24.00	7.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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3.2 Architectural Coating - 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					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5587
Total											0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5587

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.3743	0.3743	1.0000e-005	0.0000	0.3746
Total											0.0000	0.3743	0.3743	1.0000e-005	0.0000	0.3746

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3.2 Architectural Coating - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5586
Total											0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5586

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.3743	0.3743	1.0000e-005	0.0000	0.3746
Total											0.0000	0.3743	0.3743	1.0000e-005	0.0000	0.3746

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3.3 Building Construction - 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					
Off-Road											0.0000	256.7886	256.7886	0.0629	0.0000	258.3614
Total											0.0000	256.7886	256.7886	0.0629	0.0000	258.3614

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
Vendor											0.0000	20.2350	20.2350	1.6700e-003	0.0000	20.2767
Worker											0.0000	20.0044	20.0044	6.9000e-004	0.0000	20.0217
Total											0.0000	40.2394	40.2394	2.3600e-003	0.0000	40.2984

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3.3 Building Construction - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	256.7883	256.7883	0.0629	0.0000	258.3611
Total											0.0000	256.7883	256.7883	0.0629	0.0000	258.3611

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
Vendor											0.0000	20.2350	20.2350	1.6700e-003	0.0000	20.2767
Worker											0.0000	20.0044	20.0044	6.9000e-004	0.0000	20.0217
Total											0.0000	40.2394	40.2394	2.3600e-003	0.0000	40.2984

Bonsall 18+ Unmitigated - GHG Only - San Diego County, Annual

3.3 Building Construction - 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											0.0000	181.0302	181.0302	0.0441	0.0000	182.1328
Total											0.0000	181.0302	181.0302	0.0441	0.0000	182.1328

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
Vendor											0.0000	14.3200	14.3200	1.1500e-003	0.0000	14.3488
Worker											0.0000	13.8322	13.8322	4.4000e-004	0.0000	13.8433
Total											0.0000	28.1523	28.1523	1.5900e-003	0.0000	28.1921

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3.3 Building Construction - 2019

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											0.0000	181.0300	181.0300	0.0441	0.0000	182.1325
Total											0.0000	181.0300	181.0300	0.0441	0.0000	182.1325

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
Vendor											0.0000	14.3200	14.3200	1.1500e-003	0.0000	14.3488
Worker											0.0000	13.8322	13.8322	4.4000e-004	0.0000	13.8433
Total											0.0000	28.1523	28.1523	1.5900e-003	0.0000	28.1921

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3.4 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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	99.1349	99.1349	0.0309	0.0000	99.9064
Total											0.0000	99.1349	99.1349	0.0309	0.0000	99.9064

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	2.7012	2.7012	9.0000e-005	0.0000	2.7035
Total											0.0000	2.7012	2.7012	9.0000e-005	0.0000	2.7035

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3.4 Grading - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	99.1348	99.1348	0.0309	0.0000	99.9063
Total											0.0000	99.1348	99.1348	0.0309	0.0000	99.9063

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	2.7012	2.7012	9.0000e-005	0.0000	2.7035
Total											0.0000	2.7012	2.7012	9.0000e-005	0.0000	2.7035

Bonsall 18+ Unmitigated - GHG Only - San Diego County, Annual

3.5 Paving - 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											0.0000	20.4752	20.4752	6.4800e-003	0.0000	20.6371
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	20.4752	20.4752	6.4800e-003	0.0000	20.6371

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.1227	1.1227	4.0000e-005	0.0000	1.1237
Total											0.0000	1.1227	1.1227	4.0000e-005	0.0000	1.1237

Bonsall 18+ Unmitigated - GHG Only - San Diego County, Annual

3.5 Paving - 2019

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											0.0000	20.4752	20.4752	6.4800e-003	0.0000	20.6371
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	20.4752	20.4752	6.4800e-003	0.0000	20.6371

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.1227	1.1227	4.0000e-005	0.0000	1.1237
Total											0.0000	1.1227	1.1227	4.0000e-005	0.0000	1.1237

Bonsall 18+ Unmitigated - GHG Only - San Diego County, Annual

3.6 Site Preparation - 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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	17.3800	17.3800	5.4100e-003	0.0000	17.5152
Total											0.0000	17.3800	17.3800	5.4100e-003	0.0000	17.5152

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.6946	0.6946	2.0000e-005	0.0000	0.6952
Total											0.0000	0.6946	0.6946	2.0000e-005	0.0000	0.6952

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3.6 Site Preparation - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	17.3799	17.3799	5.4100e-003	0.0000	17.5152
Total											0.0000	17.3799	17.3799	5.4100e-003	0.0000	17.5152

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.6946	0.6946	2.0000e-005	0.0000	0.6952
Total											0.0000	0.6946	0.6946	2.0000e-005	0.0000	0.6952

4.0 Operational Detail - Mobile

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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	554.4721	554.4721	0.0257	0.0000	555.1151
Unmitigated											0.0000	554.4721	554.4721	0.0257	0.0000	555.1151

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	670.00	697.47	606.35	1,898,295	1,898,295
Total	670.00	697.47	606.35	1,898,295	1,898,295

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.615011	0.035959	0.175734	0.096057	0.010793	0.005300	0.020678	0.029891	0.002015	0.001593	0.005502	0.000799	0.000668

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5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	112.2411	112.2411	7.9900e-003	1.6500e-003	112.9334
Electricity Unmitigated											0.0000	115.9775	115.9775	8.2600e-003	1.7100e-003	116.6929
NaturalGas Mitigated											0.0000	101.6101	101.6101	1.9500e-003	1.8600e-003	102.2139
NaturalGas Unmitigated											0.0000	132.7408	132.7408	2.5400e-003	2.4300e-003	133.5296

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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					
Single Family Housing	2.48747e+006											0.0000	132.7408	132.7408	2.5400e-003	2.4300e-003	133.5296
Total												0.0000	132.7408	132.7408	2.5400e-003	2.4300e-003	133.5296

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					
Single Family Housing	1.9041e+006											0.0000	101.6101	101.6101	1.9500e-003	1.8600e-003	102.2139
Total												0.0000	101.6101	101.6101	1.9500e-003	1.8600e-003	102.2139

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	627590	115.9775	8.2600e-003	1.7100e-003	116.6929
Total		115.9775	8.2600e-003	1.7100e-003	116.6929

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	607371	112.2411	7.9900e-003	1.6500e-003	112.9334
Total		112.2411	7.9900e-003	1.6500e-003	112.9334

6.0 Area Detail

6.1 Mitigation Measures Area

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											69.2082	29.8375	99.0457	0.0646	5.4400e-003	102.2840
Unmitigated											69.2082	29.8375	99.0457	0.0646	5.4400e-003	102.2840

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
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											69.2082	29.0249	98.2331	0.0639	5.4400e-003	101.4520
Landscaping											0.0000	0.8126	0.8126	7.7000e-004	0.0000	0.8320
Total											69.2082	29.8375	99.0457	0.0646	5.4400e-003	102.2840

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											69.2082	29.0249	98.2331	0.0639	5.4400e-003	101.4520
Landscaping											0.0000	0.8126	0.8126	7.7000e-004	0.0000	0.8320
Total											69.2082	29.8375	99.0457	0.0646	5.4400e-003	102.2840

7.0 Water Detail

7.1 Mitigation Measures Water

Bonsall 18+ Unmitigated - GHG Only - San Diego County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	17.5392	0.1434	3.6000e-003	22.1959
Unmitigated	17.5392	0.1434	3.6000e-003	22.1959

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	4.36532 / 2.75205	17.5392	0.1434	3.6000e-003	22.1959
Total		17.5392	0.1434	3.6000e-003	22.1959

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7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	4.36532 / 2.75205	17.5392	0.1434	3.6000e-003	22.1959
Total		17.5392	0.1434	3.6000e-003	22.1959

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	15.9795	0.9444	0.0000	39.5884
Unmitigated	15.9795	0.9444	0.0000	39.5884

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8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	78.72	15.9795	0.9444	0.0000	39.5884
Total		15.9795	0.9444	0.0000	39.5884

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	78.72	15.9795	0.9444	0.0000	39.5884
Total		15.9795	0.9444	0.0000	39.5884

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	7.00	Dwelling Unit	2.27	12,600.00	20

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	10			Operational Year	2050
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	407.41	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

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Project Characteristics - Adjust RPS 50% goal.

Land Use - .

Construction Phase -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Architectural Coating - SDAPCD Rule 67.0.1 Architectural Coating.

Vehicle Trips - SANDAG trip rates.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Area Coating - SDAPCD Rule 67.0.1 Architectural Coating

Energy Use - .

Energy Mitigation - Adjusted for 2016 Title 24 Standards.

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Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	50.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	50
tblAreaCoating	Area_EF_Residential_Exterior	250	50
tblAreaCoating	Area_EF_Residential_Interior	250	50
tblConstructionPhase	PhaseEndDate	12/30/2016	12/13/2018
tblConstructionPhase	PhaseEndDate	12/30/2016	11/15/2018
tblConstructionPhase	PhaseEndDate	12/30/2016	1/11/2018
tblConstructionPhase	PhaseEndDate	12/30/2016	11/29/2018
tblConstructionPhase	PhaseEndDate	12/30/2016	1/3/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	11/30/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	1/12/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	1/4/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	11/16/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	1/1/2018
tblProjectCharacteristics	CO2IntensityFactor	720.49	407.41
tblProjectCharacteristics	OperationalYear	2018	2050
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	ST_TR	9.91	10.41
tblVehicleTrips	SU_TR	8.62	9.05
tblVehicleTrips	WD_TR	9.52	10.00

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2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018											0.0000	258.9156	258.9156	0.0559	0.0000	260.3126
Maximum											0.0000	258.9156	258.9156	0.0559	0.0000	260.3126

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018											0.0000	258.9153	258.9153	0.0559	0.0000	260.3123
Maximum											0.0000	258.9153	258.9153	0.0559	0.0000	260.3123

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area											7.2307	3.1174	10.3481	6.7500e-003	5.7000e-004	10.6864
Energy											0.0000	25.9855	25.9855	1.1300e-003	4.3000e-004	26.1427
Mobile											0.0000	111.0239	111.0239	5.9200e-003	0.0000	111.1718
Waste											1.6645	0.0000	1.6645	0.0984	0.0000	4.1238
Water											0.1447	1.6878	1.8325	0.0150	3.8000e-004	2.3190
Total											9.0399	141.8145	150.8544	0.1272	1.3800e-003	154.4436

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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											7.2307	3.1174	10.3481	6.7500e-003	5.7000e-004	10.6864
Energy											0.0000	22.3427	22.3427	1.0400e-003	3.7000e-004	22.4781
Mobile											0.0000	111.0239	111.0239	5.9200e-003	0.0000	111.1718
Waste											1.6645	0.0000	1.6645	0.0984	0.0000	4.1238
Water											0.1447	1.6878	1.8325	0.0150	3.8000e-004	2.3190
Total											9.0399	138.1716	147.2116	0.1271	1.3200e-003	150.7790

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.57	2.41	0.07	4.35	2.37

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	11/30/2018	12/13/2018	5	10	
2	Building Construction	Building Construction	1/12/2018	11/15/2018	5	220	
3	Grading	Grading	1/4/2018	1/11/2018	5	6	
4	Paving	Paving	11/16/2018	11/29/2018	5	10	
5	Site Preparation	Site Preparation	1/1/2018	1/3/2018	5	3	

Acres of Grading (Site Preparation Phase): 4.5

Acres of Grading (Grading Phase): 3

Acres of Paving: 0

Residential Indoor: 25,515; Residential Outdoor: 8,505; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	1.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	3.00	1.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

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3.1 Mitigation Measures Construction

3.2 Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	1.2766	1.2766	1.2000e-004	0.0000	1.2797
Total											0.0000	1.2766	1.2766	1.2000e-004	0.0000	1.2797

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.0594	0.0594	0.0000	0.0000	0.0595
Total											0.0000	0.0594	0.0594	0.0000	0.0000	0.0595

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3.2 Architectural Coating - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	1.2766	1.2766	1.2000e-004	0.0000	1.2797
Total											0.0000	1.2766	1.2766	1.2000e-004	0.0000	1.2797

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.0594	0.0594	0.0000	0.0000	0.0595
Total											0.0000	0.0594	0.0594	0.0000	0.0000	0.0595

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3.3 Building Construction - 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					
Off-Road											0.0000	232.4891	232.4891	0.0501	0.0000	233.7412
Total											0.0000	232.4891	232.4891	0.0501	0.0000	233.7412

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
Vendor											0.0000	2.7173	2.7173	2.3000e-004	0.0000	2.7231
Worker											0.0000	3.9219	3.9219	1.3000e-004	0.0000	3.9252
Total											0.0000	6.6392	6.6392	3.6000e-004	0.0000	6.6483

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3.3 Building Construction - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	232.4888	232.4888	0.0501	0.0000	233.7409
Total											0.0000	232.4888	232.4888	0.0501	0.0000	233.7409

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
Vendor											0.0000	2.7173	2.7173	2.3000e-004	0.0000	2.7231
Worker											0.0000	3.9219	3.9219	1.3000e-004	0.0000	3.9252
Total											0.0000	6.6392	6.6392	3.6000e-004	0.0000	6.6483

Crest-Dehesa 14 Unmitigated - GHG Only - San Diego County, Annual

3.4 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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	5.6539	5.6539	1.7600e-003	0.0000	5.6979
Total											0.0000	5.6539	5.6539	1.7600e-003	0.0000	5.6979

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.3565	0.3565	1.0000e-005	0.0000	0.3568
Total											0.0000	0.3565	0.3565	1.0000e-005	0.0000	0.3568

Crest-Dehesa 14 Unmitigated - GHG Only - San Diego County, Annual

3.4 Grading - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	5.6539	5.6539	1.7600e-003	0.0000	5.6979
Total											0.0000	5.6539	5.6539	1.7600e-003	0.0000	5.6979

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.3565	0.3565	1.0000e-005	0.0000	0.3568
Total											0.0000	0.3565	0.3565	1.0000e-005	0.0000	0.3568

Crest-Dehesa 14 Unmitigated - GHG Only - San Diego County, Annual

3.5 Paving - 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					
Off-Road											0.0000	8.0478	8.0478	2.4600e-003	0.0000	8.1093
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	8.0478	8.0478	2.4600e-003	0.0000	8.1093

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.8913	0.8913	3.0000e-005	0.0000	0.8921
Total											0.0000	0.8913	0.8913	3.0000e-005	0.0000	0.8921

Crest-Dehesa 14 Unmitigated - GHG Only - San Diego County, Annual

3.5 Paving - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	8.0478	8.0478	2.4600e-003	0.0000	8.1093
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	8.0478	8.0478	2.4600e-003	0.0000	8.1093

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.8913	0.8913	3.0000e-005	0.0000	0.8921
Total											0.0000	0.8913	0.8913	3.0000e-005	0.0000	0.8921

Crest-Dehesa 14 Unmitigated - GHG Only - San Diego County, Annual

3.6 Site Preparation - 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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	3.3590	3.3590	1.0500e-003	0.0000	3.3851
Total											0.0000	3.3590	3.3590	1.0500e-003	0.0000	3.3851

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.1426	0.1426	0.0000	0.0000	0.1427
Total											0.0000	0.1426	0.1426	0.0000	0.0000	0.1427

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3.6 Site Preparation - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	3.3590	3.3590	1.0500e-003	0.0000	3.3851
Total											0.0000	3.3590	3.3590	1.0500e-003	0.0000	3.3851

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.1426	0.1426	0.0000	0.0000	0.1427
Total											0.0000	0.1426	0.1426	0.0000	0.0000	0.1427

4.0 Operational Detail - Mobile

Crest-Dehesa 14 Unmitigated - GHG Only - San Diego County, Annual

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	111.0239	111.0239	5.9200e-003	0.0000	111.1718
Unmitigated											0.0000	111.0239	111.0239	5.9200e-003	0.0000	111.1718

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	70.00	72.87	63.35	257,048	257,048
Total	70.00	72.87	63.35	257,048	257,048

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	16.80	7.10	7.90	41.60	18.80	39.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.615011	0.035959	0.175734	0.096057	0.010793	0.005300	0.020678	0.029891	0.002015	0.001593	0.005502	0.000799	0.000668

Crest-Dehesa 14 Unmitigated - GHG Only - San Diego County, Annual

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	11.7267	11.7267	8.3000e-004	1.7000e-004	11.7990
Electricity Unmitigated											0.0000	12.1171	12.1171	8.6000e-004	1.8000e-004	12.1918
NaturalGas Mitigated											0.0000	10.6160	10.6160	2.0000e-004	1.9000e-004	10.6791
NaturalGas Unmitigated											0.0000	13.8684	13.8684	2.7000e-004	2.5000e-004	13.9509

Crest-Dehesa 14 Unmitigated - GHG Only - San Diego County, Annual

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					
Single Family Housing	259885											0.0000	13.8684	13.8684	2.7000e-004	2.5000e-004	13.9509
Total												0.0000	13.8684	13.8684	2.7000e-004	2.5000e-004	13.9509

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					
Single Family Housing	198936											0.0000	10.6160	10.6160	2.0000e-004	1.9000e-004	10.6791
Total												0.0000	10.6160	10.6160	2.0000e-004	1.9000e-004	10.6791

Crest-Dehesa 14 Unmitigated - GHG Only - San Diego County, Annual

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	65569.1	12.1171	8.6000e-004	1.8000e-004	12.1918
Total		12.1171	8.6000e-004	1.8000e-004	12.1918

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	63456.7	11.7267	8.3000e-004	1.7000e-004	11.7990
Total		11.7267	8.3000e-004	1.7000e-004	11.7990

6.0 Area Detail

6.1 Mitigation Measures Area

Crest-Dehesa 14 Unmitigated - GHG Only - San Diego County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											7.2307	3.1174	10.3481	6.7500e-003	5.7000e-004	10.6864
Unmitigated											7.2307	3.1174	10.3481	6.7500e-003	5.7000e-004	10.6864

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
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											7.2307	3.0325	10.2632	6.6700e-003	5.7000e-004	10.5995
Landscaping											0.0000	0.0849	0.0849	8.0000e-005	0.0000	0.0869
Total											7.2307	3.1174	10.3481	6.7500e-003	5.7000e-004	10.6864

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											7.2307	3.0325	10.2632	6.6700e-003	5.7000e-004	10.5995
Landscaping											0.0000	0.0849	0.0849	8.0000e-005	0.0000	0.0869
Total											7.2307	3.1174	10.3481	6.7500e-003	5.7000e-004	10.6864

7.0 Water Detail

7.1 Mitigation Measures Water

Crest-Dehesa 14 Unmitigated - GHG Only - San Diego County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	1.8325	0.0150	3.8000e-004	2.3190
Unmitigated	1.8325	0.0150	3.8000e-004	2.3190

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	0.456078 / 0.287528	1.8325	0.0150	3.8000e-004	2.3190
Total		1.8325	0.0150	3.8000e-004	2.3190

Crest-Dehesa 14 Unmitigated - GHG Only - San Diego County, Annual

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	0.456078 / 0.287528	1.8325	0.0150	3.8000e-004	2.3190
Total		1.8325	0.0150	3.8000e-004	2.3190

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	1.6645	0.0984	0.0000	4.1238
Unmitigated	1.6645	0.0984	0.0000	4.1238

Crest-Dehesa 14 Unmitigated - GHG Only - San Diego County, Annual

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	8.2	1.6645	0.0984	0.0000	4.1238
Total		1.6645	0.0984	0.0000	4.1238

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	8.2	1.6645	0.0984	0.0000	4.1238
Total		1.6645	0.0984	0.0000	4.1238

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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Crest-Dehesa 14 Unmitigated - GHG Only - San Diego County, Annual

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

Desert Subregion 8 Unmitigated - GHG Only - San Diego County, Annual

Desert Subregion 8 Unmitigated - GHG Only
San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	389.00	Dwelling Unit	126.30	700,200.00	1113

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	10			Operational Year	2050
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	407.41	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Desert Subregion 8 Unmitigated - GHG Only - San Diego County, Annual

Project Characteristics - Adjusted RPS 50% goal.

Land Use - .

Construction Phase -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Architectural Coating - SDAPCD Rule 67.0.1 Architectural Coating

Vehicle Trips - SANDAG trip rates.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Area Coating - SDAPCD Rule 67.0.1 Architectural Coating

Energy Use - .

Energy Mitigation - Adjust Title 24 2016 Standards

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Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	50.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	50
tblAreaCoating	Area_EF_Residential_Exterior	250	50
tblAreaCoating	Area_EF_Residential_Interior	250	50
tblConstructionPhase	PhaseEndDate	12/30/2016	3/18/2033
tblConstructionPhase	PhaseEndDate	12/30/2016	7/11/2031
tblConstructionPhase	PhaseEndDate	12/30/2016	8/23/2019
tblConstructionPhase	PhaseEndDate	12/30/2016	5/14/2032
tblConstructionPhase	PhaseEndDate	12/30/2016	6/15/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	5/15/2032
tblConstructionPhase	PhaseStartDate	12/31/2016	8/24/2019
tblConstructionPhase	PhaseStartDate	12/31/2016	6/16/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	7/12/2031
tblConstructionPhase	PhaseStartDate	12/31/2016	1/1/2018
tblProjectCharacteristics	CO2IntensityFactor	720.49	407.41
tblProjectCharacteristics	OperationalYear	2018	2050
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	ST_TR	9.91	10.41
tblVehicleTrips	SU_TR	8.62	9.05
tblVehicleTrips	WD_TR	9.52	10.00

Desert Subregion 8 Unmitigated - GHG Only - San Diego County, Annual

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

Desert Subregion 8 Unmitigated - GHG Only - San Diego County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018											0.0000	637.5237	637.5237	0.1902	0.0000	642.2798
2019											0.0000	719.9068	719.9068	0.1821	0.0000	724.4595
2020											0.0000	642.1461	642.1461	0.0906	0.0000	644.4104
2021											0.0000	631.6483	631.6483	0.0885	0.0000	633.8614
2022											0.0000	620.8951	620.8951	0.0869	0.0000	623.0680
2023											0.0000	610.4576	610.4576	0.0851	0.0000	612.5857
2024											0.0000	607.1594	607.1594	0.0849	0.0000	609.2811
2025											0.0000	597.0522	597.0522	0.0837	0.0000	599.1449
2026											0.0000	590.1507	590.1507	0.0833	0.0000	592.2343
2027											0.0000	584.0468	584.0468	0.0830	0.0000	586.1225
2028											0.0000	576.5004	576.5004	0.0824	0.0000	578.5612
2029											0.0000	573.9765	573.9765	0.0825	0.0000	576.0393
2030											0.0000	610.2254	610.2254	0.0249	0.0000	610.8481
2031											0.0000	476.0696	476.0696	0.0202	0.0000	476.5733
2032											0.0000	160.8990	160.8990	6.7600e-003	0.0000	161.0680
2033											0.0000	12.7384	12.7384	3.9000e-004	0.0000	12.7481
Maximum											0.0000	719.9068	719.9068	0.1902	0.0000	724.4595

Desert Subregion 8 Unmitigated - GHG Only - San Diego County, Annual

2.1 Overall Construction

Mitigated Construction

Desert Subregion 8 Unmitigated - GHG Only - San Diego County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018											0.0000	637.5230	637.5230	0.1902	0.0000	642.2791
2019											0.0000	719.9061	719.9061	0.1821	0.0000	724.4588
2020											0.0000	642.1457	642.1457	0.0906	0.0000	644.4100
2021											0.0000	631.6480	631.6480	0.0885	0.0000	633.8611
2022											0.0000	620.8948	620.8948	0.0869	0.0000	623.0677
2023											0.0000	610.4573	610.4573	0.0851	0.0000	612.5854
2024											0.0000	607.1591	607.1591	0.0849	0.0000	609.2807
2025											0.0000	597.0518	597.0518	0.0837	0.0000	599.1446
2026											0.0000	590.1503	590.1503	0.0833	0.0000	592.2339
2027											0.0000	584.0465	584.0465	0.0830	0.0000	586.1221
2028											0.0000	576.5000	576.5000	0.0824	0.0000	578.5609
2029											0.0000	573.9761	573.9761	0.0825	0.0000	576.0389
2030											0.0000	610.2250	610.2250	0.0249	0.0000	610.8477
2031											0.0000	476.0692	476.0692	0.0202	0.0000	476.5729
2032											0.0000	160.8988	160.8988	6.7600e-003	0.0000	161.0678
2033											0.0000	12.7384	12.7384	3.9000e-004	0.0000	12.7481
Maximum											0.0000	719.9061	719.9061	0.1902	0.0000	724.4588

Desert Subregion 8 Unmitigated - GHG Only - San Diego County, Annual

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area											401.8206	173.2358	575.0563	0.3753	0.0316	593.8576
Energy											0.0000	1,444.0510	1,444.0510	0.0627	0.0241	1,452.7842
Mobile											0.0000	4,102.3762	4,102.3762	0.1861	0.0000	4,107.0277
Waste											92.6309	0.0000	92.6309	5.4743	0.0000	229.4891
Water											8.0408	93.7915	101.8323	0.8325	0.0209	128.8686
Total											502.4922	5,813.4544	6,315.9466	6.9309	0.0765	6,512.0272

Desert Subregion 8 Unmitigated - GHG Only - San Diego County, Annual

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											401.8206	173.2358	575.0563	0.3753	0.0316	593.8576
Energy											0.0000	1,241.613 1	1,241.613 1	0.0577	0.0204	1,249.138 5
Mobile											0.0000	4,102.376 2	4,102.376 2	0.1861	0.0000	4,107.027 7
Waste											92.6309	0.0000	92.6309	5.4743	0.0000	229.4891
Water											8.0408	93.7915	101.8323	0.8325	0.0209	128.8686
Total											502.4922	5,611.016 6	6,113.508 8	6.9259	0.0729	6,308.381 5

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.48	3.21	0.07	4.76	3.13

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	5/15/2032	3/18/2033	5	220	
2	Building Construction	Building Construction	8/24/2019	7/11/2031	5	3100	
3	Grading	Grading	6/16/2018	8/23/2019	5	310	
4	Paving	Paving	7/12/2031	5/14/2032	5	220	
5	Site Preparation	Site Preparation	1/1/2018	6/15/2018	5	120	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 775

Acres of Paving: 0

Residential Indoor: 1,417,905; Residential Outdoor: 472,635; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Grading	Excavators	2	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	28.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	140.00	42.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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3.2 Architectural Coating - 2032

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	21.0643	21.0643	8.5000e-004	0.0000	21.0857
Total											0.0000	21.0643	21.0643	8.5000e-004	0.0000	21.0857

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	17.4548	17.4548	3.3000e-004	0.0000	17.4630
Total											0.0000	17.4548	17.4548	3.3000e-004	0.0000	17.4630

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3.2 Architectural Coating - 2032

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	21.0643	21.0643	8.5000e-004	0.0000	21.0856
Total											0.0000	21.0643	21.0643	8.5000e-004	0.0000	21.0856

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	17.4548	17.4548	3.3000e-004	0.0000	17.4630
Total											0.0000	17.4548	17.4548	3.3000e-004	0.0000	17.4630

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3.2 Architectural Coating - 2033

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	7.0215	7.0215	2.8000e-004	0.0000	7.0286
Total											0.0000	7.0215	7.0215	2.8000e-004	0.0000	7.0286

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	5.7169	5.7169	1.0000e-004	0.0000	5.7195
Total											0.0000	5.7169	5.7169	1.0000e-004	0.0000	5.7195

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3.2 Architectural Coating - 2033

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	7.0214	7.0214	2.8000e-004	0.0000	7.0285
Total											0.0000	7.0214	7.0214	2.8000e-004	0.0000	7.0285

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	5.7169	5.7169	1.0000e-004	0.0000	5.7195
Total											0.0000	5.7169	5.7169	1.0000e-004	0.0000	5.7195

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3.3 Building Construction - 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											0.0000	108.1479	108.1479	0.0264	0.0000	108.8066
Total											0.0000	108.1479	108.1479	0.0264	0.0000	108.8066

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
Vendor											0.0000	47.3794	47.3794	3.9300e-003	0.0000	47.4776
Worker											0.0000	74.2251	74.2251	2.3100e-003	0.0000	74.2828
Total											0.0000	121.6044	121.6044	6.2400e-003	0.0000	121.7604

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3.3 Building Construction - 2019

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											0.0000	108.1478	108.1478	0.0264	0.0000	108.8065
Total											0.0000	108.1478	108.1478	0.0264	0.0000	108.8065

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
Vendor											0.0000	47.3794	47.3794	3.9300e-003	0.0000	47.4776
Worker											0.0000	74.2251	74.2251	2.3100e-003	0.0000	74.2828
Total											0.0000	121.6044	121.6044	6.2400e-003	0.0000	121.7604

Desert Subregion 8 Unmitigated - GHG Only - San Diego County, Annual

3.3 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											0.0000	303.4091	303.4091	0.0740	0.0000	305.2596
Total											0.0000	303.4091	303.4091	0.0740	0.0000	305.2596

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
Vendor											0.0000	134.0345	134.0345	0.0106	0.0000	134.2995
Worker											0.0000	204.7026	204.7026	5.9500e-003	0.0000	204.8513
Total											0.0000	338.7370	338.7370	0.0166	0.0000	339.1508

Desert Subregion 8 Unmitigated - GHG Only - San Diego County, Annual

3.3 Building Construction - 2020

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											0.0000	303.4087	303.4087	0.0740	0.0000	305.2592
Total											0.0000	303.4087	303.4087	0.0740	0.0000	305.2592

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
Vendor											0.0000	134.0345	134.0345	0.0106	0.0000	134.2995
Worker											0.0000	204.7026	204.7026	5.9500e-003	0.0000	204.8513
Total											0.0000	338.7370	338.7370	0.0166	0.0000	339.1508

Desert Subregion 8 Unmitigated - GHG Only - San Diego County, Annual

3.3 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											0.0000	302.2867	302.2867	0.0729	0.0000	304.1099
Total											0.0000	302.2867	302.2867	0.0729	0.0000	304.1099

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
Vendor											0.0000	132.2963	132.2963	0.0101	0.0000	132.5493
Worker											0.0000	197.0654	197.0654	5.4700e-003	0.0000	197.2022
Total											0.0000	329.3617	329.3617	0.0156	0.0000	329.7516

Desert Subregion 8 Unmitigated - GHG Only - San Diego County, Annual

3.3 Building Construction - 2021

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											0.0000	302.2863	302.2863	0.0729	0.0000	304.1095
Total											0.0000	302.2863	302.2863	0.0729	0.0000	304.1095

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
Vendor											0.0000	132.2963	132.2963	0.0101	0.0000	132.5493
Worker											0.0000	197.0654	197.0654	5.4700e-003	0.0000	197.2022
Total											0.0000	329.3617	329.3617	0.0156	0.0000	329.7516

Desert Subregion 8 Unmitigated - GHG Only - San Diego County, Annual

3.3 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											0.0000	301.2428	301.2428	0.0722	0.0000	303.0471
Total											0.0000	301.2428	301.2428	0.0722	0.0000	303.0471

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
Vendor											0.0000	130.5441	130.5441	9.7500e-003	0.0000	130.7879
Worker											0.0000	189.1082	189.1082	5.0000e-003	0.0000	189.2331
Total											0.0000	319.6523	319.6523	0.0148	0.0000	320.0210

Desert Subregion 8 Unmitigated - GHG Only - San Diego County, Annual

3.3 Building Construction - 2022

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											0.0000	301.2425	301.2425	0.0722	0.0000	303.0467
Total											0.0000	301.2425	301.2425	0.0722	0.0000	303.0467

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
Vendor											0.0000	130.5441	130.5441	9.7500e-003	0.0000	130.7879
Worker											0.0000	189.1082	189.1082	5.0000e-003	0.0000	189.2331
Total											0.0000	319.6523	319.6523	0.0148	0.0000	320.0210

Desert Subregion 8 Unmitigated - GHG Only - San Diego County, Annual

3.3 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											0.0000	301.3462	301.3462	0.0717	0.0000	303.1383
Total											0.0000	301.3462	301.3462	0.0717	0.0000	303.1383

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
Vendor											0.0000	127.2321	127.2321	8.8700e-003	0.0000	127.4537
Worker											0.0000	181.8794	181.8794	4.5700e-003	0.0000	181.9937
Total											0.0000	309.1115	309.1115	0.0134	0.0000	309.4474

Desert Subregion 8 Unmitigated - GHG Only - San Diego County, Annual

3.3 Building Construction - 2023

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											0.0000	301.3458	301.3458	0.0717	0.0000	303.1380
Total											0.0000	301.3458	301.3458	0.0717	0.0000	303.1380

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
Vendor											0.0000	127.2321	127.2321	8.8700e-003	0.0000	127.4537
Worker											0.0000	181.8794	181.8794	4.5700e-003	0.0000	181.9937
Total											0.0000	309.1115	309.1115	0.0134	0.0000	309.4474

Desert Subregion 8 Unmitigated - GHG Only - San Diego County, Annual

3.3 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											0.0000	303.7223	303.7223	0.0718	0.0000	305.5179
Total											0.0000	303.7223	303.7223	0.0718	0.0000	305.5179

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
Vendor											0.0000	127.3786	127.3786	8.8100e-003	0.0000	127.5989
Worker											0.0000	176.0585	176.0585	4.2300e-003	0.0000	176.1643
Total											0.0000	303.4371	303.4371	0.0130	0.0000	303.7632

Desert Subregion 8 Unmitigated - GHG Only - San Diego County, Annual

3.3 Building Construction - 2024

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											0.0000	303.7220	303.7220	0.0718	0.0000	305.5175
Total											0.0000	303.7220	303.7220	0.0718	0.0000	305.5175

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
Vendor											0.0000	127.3786	127.3786	8.8100e-003	0.0000	127.5989
Worker											0.0000	176.0585	176.0585	4.2300e-003	0.0000	176.1643
Total											0.0000	303.4371	303.4371	0.0130	0.0000	303.7632

Desert Subregion 8 Unmitigated - GHG Only - San Diego County, Annual

3.3 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											0.0000	302.6549	302.6549	0.0711	0.0000	304.4335
Total											0.0000	302.6549	302.6549	0.0711	0.0000	304.4335

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
Vendor											0.0000	126.1051	126.1051	8.6700e-003	0.0000	126.3219
Worker											0.0000	168.2922	168.2922	3.8900e-003	0.0000	168.3895
Total											0.0000	294.3973	294.3973	0.0126	0.0000	294.7114

Desert Subregion 8 Unmitigated - GHG Only - San Diego County, Annual

3.3 Building Construction - 2025

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											0.0000	302.6545	302.6545	0.0711	0.0000	304.4331
Total											0.0000	302.6545	302.6545	0.0711	0.0000	304.4331

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
Vendor											0.0000	126.1051	126.1051	8.6700e-003	0.0000	126.3219
Worker											0.0000	168.2922	168.2922	3.8900e-003	0.0000	168.3895
Total											0.0000	294.3973	294.3973	0.0126	0.0000	294.7114

Desert Subregion 8 Unmitigated - GHG Only - San Diego County, Annual

3.3 Building Construction - 2026

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											0.0000	302.6549	302.6549	0.0711	0.0000	304.4335
Total											0.0000	302.6549	302.6549	0.0711	0.0000	304.4335

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
Vendor											0.0000	125.3680	125.3680	8.5700e-003	0.0000	125.5823
Worker											0.0000	162.1277	162.1277	3.6300e-003	0.0000	162.2185
Total											0.0000	287.4958	287.4958	0.0122	0.0000	287.8008

Desert Subregion 8 Unmitigated - GHG Only - San Diego County, Annual

3.3 Building Construction - 2026

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											0.0000	302.6545	302.6545	0.0711	0.0000	304.4331
Total											0.0000	302.6545	302.6545	0.0711	0.0000	304.4331

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
Vendor											0.0000	125.3680	125.3680	8.5700e-003	0.0000	125.5823
Worker											0.0000	162.1277	162.1277	3.6300e-003	0.0000	162.2185
Total											0.0000	287.4958	287.4958	0.0122	0.0000	287.8008

Desert Subregion 8 Unmitigated - GHG Only - San Diego County, Annual

3.3 Building Construction - 2027

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											0.0000	302.6549	302.6549	0.0711	0.0000	304.4335
Total											0.0000	302.6549	302.6549	0.0711	0.0000	304.4335

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
Vendor											0.0000	124.6949	124.6949	8.4800e-003	0.0000	124.9070
Worker											0.0000	156.6970	156.6970	3.4000e-003	0.0000	156.7820
Total											0.0000	281.3919	281.3919	0.0119	0.0000	281.6890

Desert Subregion 8 Unmitigated - GHG Only - San Diego County, Annual

3.3 Building Construction - 2027

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											0.0000	302.6545	302.6545	0.0711	0.0000	304.4331
Total											0.0000	302.6545	302.6545	0.0711	0.0000	304.4331

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
Vendor											0.0000	124.6949	124.6949	8.4800e-003	0.0000	124.9070
Worker											0.0000	156.6970	156.6970	3.4000e-003	0.0000	156.7820
Total											0.0000	281.3919	281.3919	0.0119	0.0000	281.6890

Desert Subregion 8 Unmitigated - GHG Only - San Diego County, Annual

3.3 Building Construction - 2028

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											0.0000	301.4953	301.4953	0.0709	0.0000	303.2671
Total											0.0000	301.4953	301.4953	0.0709	0.0000	303.2671

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
Vendor											0.0000	123.6540	123.6540	8.3700e-003	0.0000	123.8633
Worker											0.0000	151.3510	151.3510	3.1900e-003	0.0000	151.4308
Total											0.0000	275.0051	275.0051	0.0116	0.0000	275.2941

Desert Subregion 8 Unmitigated - GHG Only - San Diego County, Annual

3.3 Building Construction - 2028

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											0.0000	301.4949	301.4949	0.0709	0.0000	303.2667
Total											0.0000	301.4949	301.4949	0.0709	0.0000	303.2667

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
Vendor											0.0000	123.6540	123.6540	8.3700e-003	0.0000	123.8633
Worker											0.0000	151.3510	151.3510	3.1900e-003	0.0000	151.4308
Total											0.0000	275.0051	275.0051	0.0116	0.0000	275.2941

Desert Subregion 8 Unmitigated - GHG Only - San Diego County, Annual

3.3 Building Construction - 2029

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											0.0000	302.6549	302.6549	0.0711	0.0000	304.4335
Total											0.0000	302.6549	302.6549	0.0711	0.0000	304.4335

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
Vendor											0.0000	123.5754	123.5754	8.3400e-003	0.0000	123.7840
Worker											0.0000	147.7462	147.7462	3.0200e-003	0.0000	147.8218
Total											0.0000	271.3216	271.3216	0.0114	0.0000	271.6058

Desert Subregion 8 Unmitigated - GHG Only - San Diego County, Annual

3.3 Building Construction - 2029

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											0.0000	302.6545	302.6545	0.0711	0.0000	304.4331
Total											0.0000	302.6545	302.6545	0.0711	0.0000	304.4331

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
Vendor											0.0000	123.5754	123.5754	8.3400e-003	0.0000	123.7840
Worker											0.0000	147.7462	147.7462	3.0200e-003	0.0000	147.8218
Total											0.0000	271.3216	271.3216	0.0114	0.0000	271.6058

Desert Subregion 8 Unmitigated - GHG Only - San Diego County, Annual

3.3 Building Construction - 2030

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											0.0000	343.0336	343.0336	0.0138	0.0000	343.3777
Total											0.0000	343.0336	343.0336	0.0138	0.0000	343.3777

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
Vendor											0.0000	123.1261	123.1261	8.2900e-003	0.0000	123.3334
Worker											0.0000	144.0657	144.0657	2.8500e-003	0.0000	144.1370
Total											0.0000	267.1918	267.1918	0.0111	0.0000	267.4704

Desert Subregion 8 Unmitigated - GHG Only - San Diego County, Annual

3.3 Building Construction - 2030

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											0.0000	343.0332	343.0332	0.0138	0.0000	343.3773
Total											0.0000	343.0332	343.0332	0.0138	0.0000	343.3773

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
Vendor											0.0000	123.1261	123.1261	8.2900e-003	0.0000	123.3334
Worker											0.0000	144.0657	144.0657	2.8500e-003	0.0000	144.1370
Total											0.0000	267.1918	267.1918	0.0111	0.0000	267.4704

Desert Subregion 8 Unmitigated - GHG Only - San Diego County, Annual

3.3 Building Construction - 2031

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											0.0000	181.3741	181.3741	7.2800e-003	0.0000	181.5560
Total											0.0000	181.3741	181.3741	7.2800e-003	0.0000	181.5560

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
Vendor											0.0000	64.9017	64.9017	4.3600e-003	0.0000	65.0106
Worker											0.0000	74.4702	74.4702	1.4300e-003	0.0000	74.5059
Total											0.0000	139.3718	139.3718	5.7900e-003	0.0000	139.5165

Desert Subregion 8 Unmitigated - GHG Only - San Diego County, Annual

3.3 Building Construction - 2031

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											0.0000	181.3739	181.3739	7.2800e-003	0.0000	181.5558
Total											0.0000	181.3739	181.3739	7.2800e-003	0.0000	181.5558

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
Vendor											0.0000	64.9017	64.9017	4.3600e-003	0.0000	65.0106
Worker											0.0000	74.4702	74.4702	1.4300e-003	0.0000	74.5059
Total											0.0000	139.3718	139.3718	5.7900e-003	0.0000	139.5165

Desert Subregion 8 Unmitigated - GHG Only - San Diego County, Annual

3.4 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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	399.3719	399.3719	0.1243	0.0000	402.4802
Total											0.0000	399.3719	399.3719	0.1243	0.0000	402.4802

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	16.7571	16.7571	5.6000e-004	0.0000	16.7711
Total											0.0000	16.7571	16.7571	5.6000e-004	0.0000	16.7711

Desert Subregion 8 Unmitigated - GHG Only - San Diego County, Annual

3.4 Grading - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	399.3715	399.3715	0.1243	0.0000	402.4797
Total											0.0000	399.3715	399.3715	0.1243	0.0000	402.4797

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	16.7571	16.7571	5.6000e-004	0.0000	16.7711
Total											0.0000	16.7571	16.7571	5.6000e-004	0.0000	16.7711

Desert Subregion 8 Unmitigated - GHG Only - San Diego County, Annual

3.4 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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	470.6762	470.6762	0.1489	0.0000	474.3991
Total											0.0000	470.6762	470.6762	0.1489	0.0000	474.3991

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	19.4783	19.4783	6.1000e-004	0.0000	19.4935
Total											0.0000	19.4783	19.4783	6.1000e-004	0.0000	19.4935

Desert Subregion 8 Unmitigated - GHG Only - San Diego County, Annual

3.4 Grading - 2019

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
Off-Road											0.0000	470.6756	470.6756	0.1489	0.0000	474.3985
Total											0.0000	470.6756	470.6756	0.1489	0.0000	474.3985

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	19.4783	19.4783	6.1000e-004	0.0000	19.4935
Total											0.0000	19.4783	19.4783	6.1000e-004	0.0000	19.4935

Desert Subregion 8 Unmitigated - GHG Only - San Diego County, Annual

3.5 Paving - 2031

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											0.0000	148.2120	148.2120	6.9500e-003	0.0000	148.3857
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	148.2120	148.2120	6.9500e-003	0.0000	148.3857

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	7.1117	7.1117	1.4000e-004	0.0000	7.1151
Total											0.0000	7.1117	7.1117	1.4000e-004	0.0000	7.1151

Desert Subregion 8 Unmitigated - GHG Only - San Diego County, Annual

3.5 Paving - 2031

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											0.0000	148.2118	148.2118	6.9500e-003	0.0000	148.3855
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	148.2118	148.2118	6.9500e-003	0.0000	148.3855

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	7.1117	7.1117	1.4000e-004	0.0000	7.1151
Total											0.0000	7.1117	7.1117	1.4000e-004	0.0000	7.1151

Desert Subregion 8 Unmitigated - GHG Only - San Diego County, Annual

3.5 Paving - 2032

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											0.0000	116.8827	116.8827	5.4800e-003	0.0000	117.0196
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	116.8827	116.8827	5.4800e-003	0.0000	117.0196

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	5.4971	5.4971	1.0000e-004	0.0000	5.4997
Total											0.0000	5.4971	5.4971	1.0000e-004	0.0000	5.4997

Desert Subregion 8 Unmitigated - GHG Only - San Diego County, Annual

3.5 Paving - 2032

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											0.0000	116.8825	116.8825	5.4800e-003	0.0000	117.0195
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	116.8825	116.8825	5.4800e-003	0.0000	117.0195

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	5.4971	5.4971	1.0000e-004	0.0000	5.4997
Total											0.0000	5.4971	5.4971	1.0000e-004	0.0000	5.4997

Desert Subregion 8 Unmitigated - GHG Only - San Diego County, Annual

3.6 Site Preparation - 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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	208.5594	208.5594	0.0649	0.0000	210.1826
Total											0.0000	208.5594	208.5594	0.0649	0.0000	210.1826

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	12.8352	12.8352	4.3000e-004	0.0000	12.8459
Total											0.0000	12.8352	12.8352	4.3000e-004	0.0000	12.8459

Desert Subregion 8 Unmitigated - GHG Only - San Diego County, Annual

3.6 Site Preparation - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	208.5592	208.5592	0.0649	0.0000	210.1824
Total											0.0000	208.5592	208.5592	0.0649	0.0000	210.1824

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	12.8352	12.8352	4.3000e-004	0.0000	12.8459
Total											0.0000	12.8352	12.8352	4.3000e-004	0.0000	12.8459

4.0 Operational Detail - Mobile

Desert Subregion 8 Unmitigated - GHG Only - San Diego County, Annual

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	4,102.3762	4,102.3762	0.1861	0.0000	4,107.0277
Unmitigated											0.0000	4,102.3762	4,102.3762	0.1861	0.0000	4,107.0277

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	3,890.00	4,049.49	3520.45	14,284,518	14,284,518
Total	3,890.00	4,049.49	3,520.45	14,284,518	14,284,518

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	16.80	7.10	7.90	41.60	18.80	39.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.615011	0.035959	0.175734	0.096057	0.010793	0.005300	0.020678	0.029891	0.002015	0.001593	0.005502	0.000799	0.000668

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5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	651.6682	651.6682	0.0464	9.6000e-003	655.6879
Electricity Unmitigated											0.0000	673.3618	673.3618	0.0479	9.9200e-003	677.5153
NaturalGas Mitigated											0.0000	589.9449	589.9449	0.0113	0.0108	593.4506
NaturalGas Unmitigated											0.0000	770.6892	770.6892	0.0148	0.0141	775.2690

Desert Subregion 8 Unmitigated - GHG Only - San Diego County, Annual

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					
Single Family Housing	1.44422e+007											0.0000	770.6892	770.6892	0.0148	0.0141	775.2690
Total												0.0000	770.6892	770.6892	0.0148	0.0141	775.2690

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					
Single Family Housing	1.10551e+007											0.0000	589.9449	589.9449	0.0113	0.0108	593.4506
Total												0.0000	589.9449	589.9449	0.0113	0.0108	593.4506

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	3.64377e+006	673.3618	0.0479	9.9200e-003	677.5153
Total		673.3618	0.0479	9.9200e-003	677.5153

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	3.52638e+006	651.6682	0.0464	9.6000e-003	655.6879
Total		651.6682	0.0464	9.6000e-003	655.6879

6.0 Area Detail

6.1 Mitigation Measures Area

Desert Subregion 8 Unmitigated - GHG Only - San Diego County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											401.8206	173.2358	575.0563	0.3753	0.0316	593.8576
Unmitigated											401.8206	173.2358	575.0563	0.3753	0.0316	593.8576

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
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											401.8206	168.5177	570.3382	0.3708	0.0316	589.0272
Landscaping											0.0000	4.7181	4.7181	4.4900e-003	0.0000	4.8304
Total											401.8206	173.2358	575.0563	0.3753	0.0316	593.8576

Desert Subregion 8 Unmitigated - GHG Only - San Diego County, Annual

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											401.8206	168.5177	570.3382	0.3708	0.0316	589.0272
Landscaping											0.0000	4.7181	4.7181	4.4900e-003	0.0000	4.8304
Total											401.8206	173.2358	575.0563	0.3753	0.0316	593.8576

7.0 Water Detail

7.1 Mitigation Measures Water

Desert Subregion 8 Unmitigated - GHG Only - San Diego County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	101.8323	0.8325	0.0209	128.8686
Unmitigated	101.8323	0.8325	0.0209	128.8686

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	25.3449 / 15.9783	101.8323	0.8325	0.0209	128.8686
Total		101.8323	0.8325	0.0209	128.8686

Desert Subregion 8 Unmitigated - GHG Only - San Diego County, Annual

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	25.3449 / 15.9783	101.8323	0.8325	0.0209	128.8686
Total		101.8323	0.8325	0.0209	128.8686

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	92.6309	5.4743	0.0000	229.4891
Unmitigated	92.6309	5.4743	0.0000	229.4891

Desert Subregion 8 Unmitigated - GHG Only - San Diego County, Annual

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	456.33	92.6309	5.4743	0.0000	229.4891
Total		92.6309	5.4743	0.0000	229.4891

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	456.33	92.6309	5.4743	0.0000	229.4891
Total		92.6309	5.4743	0.0000	229.4891

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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Desert Subregion 8 Unmitigated - GHG Only - San Diego County, Annual

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

Fallbrook 2+ Unmitigated - GHG only - San Diego County, Annual

Fallbrook 2+ Unmitigated - GHG only
San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	16.00	Dwelling Unit	5.19	28,800.00	46

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	10			Operational Year	2050
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	407.41	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Fallbrook 2+ Unmitigated - GHG only - San Diego County, Annual

Project Characteristics - Adjusted RPS 50% goal.

Land Use - .

Construction Phase -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Architectural Coating - SDAPCD Rule 67.0.1 Architectural Coating

Vehicle Trips - SANDAG trip rate

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Area Coating - SDAPCD Rule 67.0.1 Architectural Coating

Energy Use - .

Energy Mitigation - Adjusted Title 24 2016 Standards

Fallbrook 2+ Unmitigated - GHG only - San Diego County, Annual

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	50.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	50
tblAreaCoating	Area_EF_Residential_Exterior	250	50
tblAreaCoating	Area_EF_Residential_Interior	250	50
tblConstructionPhase	PhaseEndDate	12/30/2016	2/22/2019
tblConstructionPhase	PhaseEndDate	12/30/2016	12/28/2018
tblConstructionPhase	PhaseEndDate	12/30/2016	2/9/2018
tblConstructionPhase	PhaseEndDate	12/30/2016	1/25/2019
tblConstructionPhase	PhaseEndDate	12/30/2016	1/12/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	1/26/2019
tblConstructionPhase	PhaseStartDate	12/31/2016	2/10/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	1/13/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	12/29/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	1/1/2018
tblProjectCharacteristics	CO2IntensityFactor	720.49	407.41
tblProjectCharacteristics	OperationalYear	2018	2050
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	ST_TR	9.91	10.41
tblVehicleTrips	SU_TR	8.62	9.05
tblVehicleTrips	WD_TR	9.52	10.00

Fallbrook 2+ Unmitigated - GHG only - San Diego County, Annual

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018											0.0000	335.7831	335.7831	0.0820	0.0000	337.8336
2019											0.0000	23.7623	23.7623	6.4200e-003	0.0000	23.9230
Maximum											0.0000	335.7831	335.7831	0.0820	0.0000	337.8336

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018											0.0000	335.7828	335.7828	0.0820	0.0000	337.8333
2019											0.0000	23.7623	23.7623	6.4200e-003	0.0000	23.9229
Maximum											0.0000	335.7828	335.7828	0.0820	0.0000	337.8333

Fallbrook 2+ Unmitigated - GHG only - San Diego County, Annual

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area											16.5273	7.1254	23.6527	0.0154	1.3000e-003	24.4260
Energy											0.0000	59.3954	59.3954	2.5800e-003	9.9000e-004	59.7546
Mobile											0.0000	253.7688	253.7688	0.0135	0.0000	254.1070
Waste											3.8284	0.0000	3.8284	0.2263	0.0000	9.4847
Water											0.3307	3.8578	4.1885	0.0342	8.6000e-004	5.3005
Total											20.6865	324.1473	344.8338	0.2920	3.1500e-003	353.0729

Fallbrook 2+ Unmitigated - GHG only - San Diego County, Annual

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											16.5273	7.1254	23.6527	0.0154	1.3000e-003	24.4260
Energy											0.0000	51.0689	51.0689	2.3700e-003	8.4000e-004	51.3785
Mobile											0.0000	253.7688	253.7688	0.0135	0.0000	254.1070
Waste											3.8284	0.0000	3.8284	0.2263	0.0000	9.4847
Water											0.3307	3.8578	4.1885	0.0342	8.6000e-004	5.3005
Total											20.6865	315.8209	336.5073	0.2918	3.0000e-003	344.6967

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.57	2.41	0.07	4.76	2.37

3.0 Construction Detail

Construction Phase

Fallbrook 2+ Unmitigated - GHG only - San Diego County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	1/26/2019	2/22/2019	5	20	
2	Building Construction	Building Construction	2/10/2018	12/28/2018	5	230	
3	Grading	Grading	1/13/2018	2/9/2018	5	20	
4	Paving	Paving	12/29/2018	1/25/2019	5	20	
5	Site Preparation	Site Preparation	1/1/2018	1/12/2018	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 0

Residential Indoor: 58,320; Residential Outdoor: 19,440; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Fallbrook 2+ Unmitigated - GHG only - San Diego County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Grading	Excavators	1	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	1.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	6.00	2.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Fallbrook 2+ Unmitigated - GHG only - San Diego County, Annual

3.2 Architectural Coating - 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					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5587
Total											0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5587

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.1153	0.1153	0.0000	0.0000	0.1154
Total											0.0000	0.1153	0.1153	0.0000	0.0000	0.1154

Fallbrook 2+ Unmitigated - GHG only - San Diego County, Annual

3.2 Architectural Coating - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5586
Total											0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5586

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.1153	0.1153	0.0000	0.0000	0.1154
Total											0.0000	0.1153	0.1153	0.0000	0.0000	0.1154

Fallbrook 2+ Unmitigated - GHG only - San Diego County, Annual

3.3 Building Construction - 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					
Off-Road											0.0000	273.4323	273.4323	0.0670	0.0000	275.1071
Total											0.0000	273.4323	273.4323	0.0670	0.0000	275.1071

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
Vendor											0.0000	5.6817	5.6817	4.8000e-004	0.0000	5.6938
Worker											0.0000	8.2003	8.2003	2.7000e-004	0.0000	8.2071
Total											0.0000	13.8820	13.8820	7.5000e-004	0.0000	13.9010

Fallbrook 2+ Unmitigated - GHG only - San Diego County, Annual

3.3 Building Construction - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	273.4320	273.4320	0.0670	0.0000	275.1068
Total											0.0000	273.4320	273.4320	0.0670	0.0000	275.1068

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
Vendor											0.0000	5.6817	5.6817	4.8000e-004	0.0000	5.6938
Worker											0.0000	8.2003	8.2003	2.7000e-004	0.0000	8.2071
Total											0.0000	13.8820	13.8820	7.5000e-004	0.0000	13.9010

Fallbrook 2+ Unmitigated - GHG only - San Diego County, Annual

3.4 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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	27.1069	27.1069	8.4400e-003	0.0000	27.3178
Total											0.0000	27.1069	27.1069	8.4400e-003	0.0000	27.3178

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.7827	1.7827	6.0000e-005	0.0000	1.7842
Total											0.0000	1.7827	1.7827	6.0000e-005	0.0000	1.7842

Fallbrook 2+ Unmitigated - GHG only - San Diego County, Annual

3.4 Grading - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	27.1068	27.1068	8.4400e-003	0.0000	27.3178
Total											0.0000	27.1068	27.1068	8.4400e-003	0.0000	27.3178

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.7827	1.7827	6.0000e-005	0.0000	1.7842
Total											0.0000	1.7827	1.7827	6.0000e-005	0.0000	1.7842

Fallbrook 2+ Unmitigated - GHG only - San Diego County, Annual

3.5 Paving - 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					
Off-Road											0.0000	1.0406	1.0406	3.2000e-004	0.0000	1.0487
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	1.0406	1.0406	3.2000e-004	0.0000	1.0487

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.0891	0.0891	0.0000	0.0000	0.0892
Total											0.0000	0.0891	0.0891	0.0000	0.0000	0.0892

Fallbrook 2+ Unmitigated - GHG only - San Diego County, Annual

3.5 Paving - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	1.0406	1.0406	3.2000e-004	0.0000	1.0487
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	1.0406	1.0406	3.2000e-004	0.0000	1.0487

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.0891	0.0891	0.0000	0.0000	0.0892
Total											0.0000	0.0891	0.0891	0.0000	0.0000	0.0892

Fallbrook 2+ Unmitigated - GHG only - San Diego County, Annual

3.5 Paving - 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											0.0000	19.4514	19.4514	6.1500e-003	0.0000	19.6053
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	19.4514	19.4514	6.1500e-003	0.0000	19.6053

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.6424	1.6424	5.0000e-005	0.0000	1.6437
Total											0.0000	1.6424	1.6424	5.0000e-005	0.0000	1.6437

Fallbrook 2+ Unmitigated - GHG only - San Diego County, Annual

3.5 Paving - 2019

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											0.0000	19.4514	19.4514	6.1500e-003	0.0000	19.6053
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	19.4514	19.4514	6.1500e-003	0.0000	19.6053

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.6424	1.6424	5.0000e-005	0.0000	1.6437
Total											0.0000	1.6424	1.6424	5.0000e-005	0.0000	1.6437

Fallbrook 2+ Unmitigated - GHG only - San Diego County, Annual

3.6 Site Preparation - 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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	17.3800	17.3800	5.4100e-003	0.0000	17.5152
Total											0.0000	17.3800	17.3800	5.4100e-003	0.0000	17.5152

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.0696	1.0696	4.0000e-005	0.0000	1.0705
Total											0.0000	1.0696	1.0696	4.0000e-005	0.0000	1.0705

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3.6 Site Preparation - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	17.3799	17.3799	5.4100e-003	0.0000	17.5152
Total											0.0000	17.3799	17.3799	5.4100e-003	0.0000	17.5152

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.0696	1.0696	4.0000e-005	0.0000	1.0705
Total											0.0000	1.0696	1.0696	4.0000e-005	0.0000	1.0705

4.0 Operational Detail - Mobile

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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	253.7688	253.7688	0.0135	0.0000	254.1070
Unmitigated											0.0000	253.7688	253.7688	0.0135	0.0000	254.1070

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	160.00	166.56	144.80	587,538	587,538
Total	160.00	166.56	144.80	587,538	587,538

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	16.80	7.10	7.90	41.60	18.80	39.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.615011	0.035959	0.175734	0.096057	0.010793	0.005300	0.020678	0.029891	0.002015	0.001593	0.005502	0.000799	0.000668

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5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	26.8038	26.8038	1.9100e-003	3.9000e-004	26.9692
Electricity Unmitigated											0.0000	27.6961	27.6961	1.9700e-003	4.1000e-004	27.8670
NaturalGas Mitigated											0.0000	24.2651	24.2651	4.7000e-004	4.4000e-004	24.4093
NaturalGas Unmitigated											0.0000	31.6993	31.6993	6.1000e-004	5.8000e-004	31.8877

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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					
Single Family Housing	594022											0.0000	31.6993	31.6993	6.1000e-004	5.8000e-004	31.8877
Total												0.0000	31.6993	31.6993	6.1000e-004	5.8000e-004	31.8877

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					
Single Family Housing	454711											0.0000	24.2651	24.2651	4.7000e-004	4.4000e-004	24.4093
Total												0.0000	24.2651	24.2651	4.7000e-004	4.4000e-004	24.4093

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	149872	27.6961	1.9700e-003	4.1000e-004	27.8670
Total		27.6961	1.9700e-003	4.1000e-004	27.8670

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	145044	26.8038	1.9100e-003	3.9000e-004	26.9692
Total		26.8038	1.9100e-003	3.9000e-004	26.9692

6.0 Area Detail

6.1 Mitigation Measures Area

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											16.5273	7.1254	23.6527	0.0154	1.3000e-003	24.4260
Unmitigated											16.5273	7.1254	23.6527	0.0154	1.3000e-003	24.4260

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
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											16.5273	6.9313	23.4586	0.0153	1.3000e-003	24.2273
Landscaping											0.0000	0.1941	0.1941	1.8000e-004	0.0000	0.1987
Total											16.5273	7.1254	23.6527	0.0154	1.3000e-003	24.4260

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											16.5273	6.9313	23.4586	0.0153	1.3000e-003	24.2273
Landscaping											0.0000	0.1941	0.1941	1.8000e-004	0.0000	0.1987
Total											16.5273	7.1254	23.6527	0.0154	1.3000e-003	24.4260

7.0 Water Detail

7.1 Mitigation Measures Water

Fallbrook 2+ Unmitigated - GHG only - San Diego County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	4.1885	0.0342	8.6000e-004	5.3005
Unmitigated	4.1885	0.0342	8.6000e-004	5.3005

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	1.04246 / 0.657206	4.1885	0.0342	8.6000e-004	5.3005
Total		4.1885	0.0342	8.6000e-004	5.3005

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7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	1.04246 / 0.657206	4.1885	0.0342	8.6000e-004	5.3005
Total		4.1885	0.0342	8.6000e-004	5.3005

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	3.8284	0.2263	0.0000	9.4847
Unmitigated	3.8284	0.2263	0.0000	9.4847

Fallbrook 2+ Unmitigated - GHG only - San Diego County, Annual

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	18.86	3.8284	0.2263	0.0000	9.4847
Total		3.8284	0.2263	0.0000	9.4847

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	18.86	3.8284	0.2263	0.0000	9.4847
Total		3.8284	0.2263	0.0000	9.4847

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

Desert Subregion 24 Unmitigated - GHG Only - San Diego County, Annual

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San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	153.00	Dwelling Unit	49.68	275,400.00	438

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	10			Operational Year	2050
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	407.41	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

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Project Characteristics - Adjusted RPS 50% goal.

Land Use - .

Construction Phase -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Architectural Coating - SDAPCD Rule 67.0.1 Architectural Coating

Vehicle Trips - SANDAG trip rates.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Area Coating - SDAPCD Rule 67.0.1 Architectural Coating

Energy Use - .

Energy Mitigation - Adjusted Title 24 2016 Standards.

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Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	50.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	50
tblAreaCoating	Area_EF_Residential_Exterior	250	50
tblAreaCoating	Area_EF_Residential_Interior	250	50
tblConstructionPhase	PhaseEndDate	12/30/2016	8/27/2021
tblConstructionPhase	PhaseEndDate	12/30/2016	3/26/2021
tblConstructionPhase	PhaseEndDate	12/30/2016	5/25/2018
tblConstructionPhase	PhaseEndDate	12/30/2016	6/11/2021
tblConstructionPhase	PhaseEndDate	12/30/2016	2/9/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	6/12/2021
tblConstructionPhase	PhaseStartDate	12/31/2016	5/26/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	2/10/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	3/27/2021
tblConstructionPhase	PhaseStartDate	12/31/2016	1/1/2018
tblProjectCharacteristics	CO2IntensityFactor	720.49	407.41
tblProjectCharacteristics	OperationalYear	2018	2050
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	ST_TR	9.91	10.41
tblVehicleTrips	SU_TR	8.62	9.05
tblVehicleTrips	WD_TR	9.52	10.00

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2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018											0.0000	543.9662	543.9662	0.1325	0.0000	547.2796
2019											0.0000	440.7412	440.7412	0.0816	0.0000	442.7803
2020											0.0000	434.8887	434.8887	0.0804	0.0000	436.8986
2021											0.0000	170.3206	170.3206	0.0370	0.0000	171.2444
Maximum											0.0000	543.9662	543.9662	0.1325	0.0000	547.2796

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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					
2018											0.0000	543.9657	543.9657	0.1325	0.0000	547.2791
2019											0.0000	440.7408	440.7408	0.0816	0.0000	442.7799
2020											0.0000	434.8883	434.8883	0.0804	0.0000	436.8982
2021											0.0000	170.3204	170.3204	0.0370	0.0000	171.2442
Maximum											0.0000	543.9657	543.9657	0.1325	0.0000	547.2791

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

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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											158.0425	68.1364	226.1790	0.1476	0.0124	233.5738
Energy											0.0000	567.9686	567.9686	0.0247	9.4600e-003	571.4036
Mobile											0.0000	2,426.664 2	2,426.664 2	0.1294	0.0000	2,429.898 2
Waste											36.4531	0.0000	36.4531	2.1543	0.0000	90.3111
Water											3.1626	36.8897	40.0523	0.3275	8.2100e-003	50.6861
Total											197.6582	3,099.659 0	3,297.317 2	2.7834	0.0301	3,375.872 8

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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											158.0425	68.1364	226.1790	0.1476	0.0124	233.5738
Energy											0.0000	488.3466	488.3466	0.0227	8.0300e-003	491.3064
Mobile											0.0000	2,426.664 2	2,426.664 2	0.1294	0.0000	2,429.898 2
Waste											36.4531	0.0000	36.4531	2.1543	0.0000	90.3111
Water											3.1626	36.8897	40.0523	0.3275	8.2100e-003	50.6861
Total											197.6582	3,020.036 9	3,217.695 1	2.7814	0.0287	3,295.775 6

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.57	2.41	0.07	4.75	2.37

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	6/12/2021	8/27/2021	5	55	
2	Building Construction	Building Construction	5/26/2018	3/26/2021	5	740	
3	Grading	Grading	2/10/2018	5/25/2018	5	75	
4	Paving	Paving	3/27/2021	6/11/2021	5	55	
5	Site Preparation	Site Preparation	1/1/2018	2/9/2018	5	30	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 187.5

Acres of Paving: 0

Residential Indoor: 557,685; Residential Outdoor: 185,895; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Grading	Excavators	2	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	11.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	55.00	16.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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3.2 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	7.0215	7.0215	4.8000e-004	0.0000	7.0335
Total											0.0000	7.0215	7.0215	4.8000e-004	0.0000	7.0335

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	3.2629	3.2629	9.0000e-005	0.0000	3.2651
Total											0.0000	3.2629	3.2629	9.0000e-005	0.0000	3.2651

Desert Subregion 24 Unmitigated - GHG Only - San Diego County, Annual

3.2 Architectural Coating - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	7.0214	7.0214	4.8000e-004	0.0000	7.0335
Total											0.0000	7.0214	7.0214	4.8000e-004	0.0000	7.0335

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	3.2629	3.2629	9.0000e-005	0.0000	3.2651
Total											0.0000	3.2629	3.2629	9.0000e-005	0.0000	3.2651

Desert Subregion 24 Unmitigated - GHG Only - San Diego County, Annual

3.3 Building Construction - 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					
Off-Road											0.0000	185.4584	185.4584	0.0454	0.0000	186.5944
Total											0.0000	185.4584	185.4584	0.0454	0.0000	186.5944

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
Vendor											0.0000	30.8294	30.8294	2.6300e-003	0.0000	30.8952
Worker											0.0000	50.9844	50.9844	1.7000e-003	0.0000	51.0269
Total											0.0000	81.8138	81.8138	4.3300e-003	0.0000	81.9221

Desert Subregion 24 Unmitigated - GHG Only - San Diego County, Annual

3.3 Building Construction - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	185.4582	185.4582	0.0454	0.0000	186.5942
Total											0.0000	185.4582	185.4582	0.0454	0.0000	186.5942

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
Vendor											0.0000	30.8294	30.8294	2.6300e-003	0.0000	30.8952
Worker											0.0000	50.9844	50.9844	1.7000e-003	0.0000	51.0269
Total											0.0000	81.8138	81.8138	4.3300e-003	0.0000	81.9221

Desert Subregion 24 Unmitigated - GHG Only - San Diego County, Annual

3.3 Building Construction - 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											0.0000	306.8110	306.8110	0.0747	0.0000	308.6795
Total											0.0000	306.8110	306.8110	0.0747	0.0000	308.6795

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
Vendor											0.0000	51.2050	51.2050	4.2500e-003	0.0000	51.3112
Worker											0.0000	82.7252	82.7252	2.5700e-003	0.0000	82.7895
Total											0.0000	133.9302	133.9302	6.8200e-003	0.0000	134.1007

Desert Subregion 24 Unmitigated - GHG Only - San Diego County, Annual

3.3 Building Construction - 2019

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											0.0000	306.8106	306.8106	0.0747	0.0000	308.6792
Total											0.0000	306.8106	306.8106	0.0747	0.0000	308.6792

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
Vendor											0.0000	51.2050	51.2050	4.2500e-003	0.0000	51.3112
Worker											0.0000	82.7252	82.7252	2.5700e-003	0.0000	82.7895
Total											0.0000	133.9302	133.9302	6.8200e-003	0.0000	134.1007

Desert Subregion 24 Unmitigated - GHG Only - San Diego County, Annual

3.3 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											0.0000	303.4091	303.4091	0.0740	0.0000	305.2596
Total											0.0000	303.4091	303.4091	0.0740	0.0000	305.2596

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
Vendor											0.0000	51.0608	51.0608	4.0400e-003	0.0000	51.1617
Worker											0.0000	80.4189	80.4189	2.3400e-003	0.0000	80.4773
Total											0.0000	131.4796	131.4796	6.3800e-003	0.0000	131.6390

Desert Subregion 24 Unmitigated - GHG Only - San Diego County, Annual

3.3 Building Construction - 2020

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											0.0000	303.4087	303.4087	0.0740	0.0000	305.2592
Total											0.0000	303.4087	303.4087	0.0740	0.0000	305.2592

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
Vendor											0.0000	51.0608	51.0608	4.0400e-003	0.0000	51.1617
Worker											0.0000	80.4189	80.4189	2.3400e-003	0.0000	80.4773
Total											0.0000	131.4796	131.4796	6.3800e-003	0.0000	131.6390

Desert Subregion 24 Unmitigated - GHG Only - San Diego County, Annual

3.3 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											0.0000	70.6494	70.6494	0.0170	0.0000	71.0755
Total											0.0000	70.6494	70.6494	0.0170	0.0000	71.0755

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
Vendor											0.0000	11.7790	11.7790	9.0000e-004	0.0000	11.8015
Worker											0.0000	18.0940	18.0940	5.0000e-004	0.0000	18.1066
Total											0.0000	29.8730	29.8730	1.4000e-003	0.0000	29.9081

Desert Subregion 24 Unmitigated - GHG Only - San Diego County, Annual

3.3 Building Construction - 2021

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											0.0000	70.6493	70.6493	0.0170	0.0000	71.0754
Total											0.0000	70.6493	70.6493	0.0170	0.0000	71.0754

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
Vendor											0.0000	11.7790	11.7790	9.0000e-004	0.0000	11.8015
Worker											0.0000	18.0940	18.0940	5.0000e-004	0.0000	18.1066
Total											0.0000	29.8730	29.8730	1.4000e-003	0.0000	29.9081

Desert Subregion 24 Unmitigated - GHG Only - San Diego County, Annual

3.4 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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	212.4319	212.4319	0.0661	0.0000	214.0852
Total											0.0000	212.4319	212.4319	0.0661	0.0000	214.0852

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	8.9134	8.9134	3.0000e-004	0.0000	8.9208
Total											0.0000	8.9134	8.9134	3.0000e-004	0.0000	8.9208

Desert Subregion 24 Unmitigated - GHG Only - San Diego County, Annual

3.4 Grading - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	212.4316	212.4316	0.0661	0.0000	214.0850
Total											0.0000	212.4316	212.4316	0.0661	0.0000	214.0850

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	8.9134	8.9134	3.0000e-004	0.0000	8.9208
Total											0.0000	8.9134	8.9134	3.0000e-004	0.0000	8.9208

Desert Subregion 24 Unmitigated - GHG Only - San Diego County, Annual

3.5 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	55.0646	55.0646	0.0178	0.0000	55.5098
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	55.0646	55.0646	0.0178	0.0000	55.5098

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	4.4493	4.4493	1.2000e-004	0.0000	4.4524
Total											0.0000	4.4493	4.4493	1.2000e-004	0.0000	4.4524

Desert Subregion 24 Unmitigated - GHG Only - San Diego County, Annual

3.5 Paving - 2021

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											0.0000	55.0645	55.0645	0.0178	0.0000	55.5097
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	55.0645	55.0645	0.0178	0.0000	55.5097

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	4.4493	4.4493	1.2000e-004	0.0000	4.4524
Total											0.0000	4.4493	4.4493	1.2000e-004	0.0000	4.4524

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3.6 Site Preparation - 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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	52.1399	52.1399	0.0162	0.0000	52.5457
Total											0.0000	52.1399	52.1399	0.0162	0.0000	52.5457

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	3.2088	3.2088	1.1000e-004	0.0000	3.2115
Total											0.0000	3.2088	3.2088	1.1000e-004	0.0000	3.2115

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3.6 Site Preparation - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	52.1398	52.1398	0.0162	0.0000	52.5456
Total											0.0000	52.1398	52.1398	0.0162	0.0000	52.5456

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	3.2088	3.2088	1.1000e-004	0.0000	3.2115
Total											0.0000	3.2088	3.2088	1.1000e-004	0.0000	3.2115

4.0 Operational Detail - Mobile

Desert Subregion 24 Unmitigated - GHG Only - San Diego County, Annual

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	2,426.664 2	2,426.664 2	0.1294	0.0000	2,429.898 2
Unmitigated											0.0000	2,426.664 2	2,426.664 2	0.1294	0.0000	2,429.898 2

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	1,530.00	1,592.73	1384.65	5,618,332	5,618,332
Total	1,530.00	1,592.73	1,384.65	5,618,332	5,618,332

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	16.80	7.10	7.90	41.60	18.80	39.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.615011	0.035959	0.175734	0.096057	0.010793	0.005300	0.020678	0.029891	0.002015	0.001593	0.005502	0.000799	0.000668

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5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	256.3117	256.3117	0.0182	3.7700e-003	257.8927
Electricity Unmitigated											0.0000	264.8441	264.8441	0.0189	3.9000e-003	266.4777
NaturalGas Mitigated											0.0000	232.0349	232.0349	4.4500e-003	4.2500e-003	233.4138
NaturalGas Unmitigated											0.0000	303.1245	303.1245	5.8100e-003	5.5600e-003	304.9259

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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					
Single Family Housing	5.68034e+006											0.0000	303.1245	303.1245	5.8100e-003	5.5600e-003	304.9259
Total												0.0000	303.1245	303.1245	5.8100e-003	5.5600e-003	304.9259

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					
Single Family Housing	4.34817e+006											0.0000	232.0349	232.0349	4.4500e-003	4.2500e-003	233.4138
Total												0.0000	232.0349	232.0349	4.4500e-003	4.2500e-003	233.4138

Desert Subregion 24 Unmitigated - GHG Only - San Diego County, Annual

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	1.43315e+006	264.8441	0.0189	3.9000e-003	266.4777
Total		264.8441	0.0189	3.9000e-003	266.4777

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	1.38698e+006	256.3117	0.0182	3.7700e-003	257.8927
Total		256.3117	0.0182	3.7700e-003	257.8927

6.0 Area Detail

6.1 Mitigation Measures Area

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											158.0425	68.1364	226.1790	0.1476	0.0124	233.5738
Unmitigated											158.0425	68.1364	226.1790	0.1476	0.0124	233.5738

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
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											158.0425	66.2807	224.3233	0.1459	0.0124	231.6739
Landscaping											0.0000	1.8557	1.8557	1.7700e-003	0.0000	1.8999
Total											158.0425	68.1364	226.1790	0.1476	0.0124	233.5738

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											158.0425	66.2807	224.3233	0.1459	0.0124	231.6739
Landscaping											0.0000	1.8557	1.8557	1.7700e-003	0.0000	1.8999
Total											158.0425	68.1364	226.1790	0.1476	0.0124	233.5738

7.0 Water Detail

7.1 Mitigation Measures Water

Desert Subregion 24 Unmitigated - GHG Only - San Diego County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	40.0523	0.3275	8.2100e-003	50.6861
Unmitigated	40.0523	0.3275	8.2100e-003	50.6861

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	9.96857 / 6.28453	40.0523	0.3275	8.2100e-003	50.6861
Total		40.0523	0.3275	8.2100e-003	50.6861

Desert Subregion 24 Unmitigated - GHG Only - San Diego County, Annual

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	9.96857 / 6.28453	40.0523	0.3275	8.2100e-003	50.6861
Total		40.0523	0.3275	8.2100e-003	50.6861

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	36.4531	2.1543	0.0000	90.3111
Unmitigated	36.4531	2.1543	0.0000	90.3111

Desert Subregion 24 Unmitigated - GHG Only - San Diego County, Annual

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	179.58	36.4531	2.1543	0.0000	90.3111
Total		36.4531	2.1543	0.0000	90.3111

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	179.58	36.4531	2.1543	0.0000	90.3111
Total		36.4531	2.1543	0.0000	90.3111

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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Desert Subregion 24 Unmitigated - GHG Only - San Diego County, Annual

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	33.00	Dwelling Unit	10.71	59,400.00	94

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	10			Operational Year	2050
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	407.41	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

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Project Characteristics - Adjusted for RPS 50% goal.

Land Use - .

Construction Phase -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Architectural Coating - SDAPCD Rule 67.0.1 Architectural Coating

Vehicle Trips - SANDAG Trip Rates

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Area Coating - SDAPCD Rule 67.0.1 Architectural Coating

Energy Use - .

Energy Mitigation - Adjusted Title 24 2016 Standards

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Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	50.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	50
tblAreaCoating	Area_EF_Residential_Exterior	250	50
tblAreaCoating	Area_EF_Residential_Interior	250	50
tblConstructionPhase	PhaseEndDate	12/30/2016	6/14/2019
tblConstructionPhase	PhaseEndDate	12/30/2016	4/19/2019
tblConstructionPhase	PhaseEndDate	12/30/2016	2/23/2018
tblConstructionPhase	PhaseEndDate	12/30/2016	5/17/2019
tblConstructionPhase	PhaseEndDate	12/30/2016	1/12/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	5/18/2019
tblConstructionPhase	PhaseStartDate	12/31/2016	2/24/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	1/13/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	4/20/2019
tblConstructionPhase	PhaseStartDate	12/31/2016	1/1/2018
tblProjectCharacteristics	CO2IntensityFactor	720.49	407.41
tblProjectCharacteristics	OperationalYear	2018	2050
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	ST_TR	9.91	10.41
tblVehicleTrips	SU_TR	8.62	9.05
tblVehicleTrips	WD_TR	9.52	10.00

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2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018											0.0000	396.3980	396.3980	0.0978	0.0000	398.8441
2019											0.0000	127.1918	127.1918	0.0299	0.0000	127.9385
Maximum											0.0000	396.3980	396.3980	0.0978	0.0000	398.8441

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018											0.0000	396.3976	396.3976	0.0978	0.0000	398.8437
2019											0.0000	127.1917	127.1917	0.0299	0.0000	127.9384
Maximum											0.0000	396.3976	396.3976	0.0978	0.0000	398.8437

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area											34.0876	14.6961	48.7837	0.0318	2.6800e-003	50.3787
Energy											0.0000	122.5030	122.5030	5.3200e-003	2.0400e-003	123.2439
Mobile											0.0000	348.0165	348.0165	0.0158	0.0000	348.4111
Waste											7.8233	0.0000	7.8233	0.4623	0.0000	19.3818
Water											0.6821	7.9566	8.6387	0.0706	1.7700e-003	10.9323
Total											42.5930	493.1722	535.7652	0.5859	6.4900e-003	552.3478

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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											34.0876	14.6961	48.7837	0.0318	2.6800e-003	50.3787
Energy											0.0000	105.3297	105.3297	4.8900e-003	1.7300e-003	105.9681
Mobile											0.0000	348.0165	348.0165	0.0158	0.0000	348.4111
Waste											7.8233	0.0000	7.8233	0.4623	0.0000	19.3818
Water											0.6821	7.9566	8.6387	0.0706	1.7700e-003	10.9323
Total											42.5930	475.9988	518.5918	0.5855	6.1800e-003	535.0719

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.48	3.21	0.07	4.78	3.13

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	5/18/2019	6/14/2019	5	20	
2	Building Construction	Building Construction	2/24/2018	4/19/2019	5	300	
3	Grading	Grading	1/13/2018	2/23/2018	5	30	
4	Paving	Paving	4/20/2019	5/17/2019	5	20	
5	Site Preparation	Site Preparation	1/1/2018	1/12/2018	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 0

Residential Indoor: 120,285; Residential Outdoor: 40,095; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Grading	Excavators	2	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	2.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	12.00	4.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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3.2 Architectural Coating - 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					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5587
Total											0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5587

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.2305	0.2305	1.0000e-005	0.0000	0.2307
Total											0.0000	0.2305	0.2305	1.0000e-005	0.0000	0.2307

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3.2 Architectural Coating - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5586
Total											0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5586

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.2305	0.2305	1.0000e-005	0.0000	0.2307
Total											0.0000	0.2305	0.2305	1.0000e-005	0.0000	0.2307

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3.3 Building Construction - 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					
Off-Road											0.0000	262.7328	262.7328	0.0644	0.0000	264.3420
Total											0.0000	262.7328	262.7328	0.0644	0.0000	264.3420

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
Vendor											0.0000	10.9188	10.9188	9.3000e-004	0.0000	10.9420
Worker											0.0000	15.7588	15.7588	5.3000e-004	0.0000	15.7720
Total											0.0000	26.6776	26.6776	1.4600e-003	0.0000	26.7140

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3.3 Building Construction - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	262.7325	262.7325	0.0644	0.0000	264.3417
Total											0.0000	262.7325	262.7325	0.0644	0.0000	264.3417

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
Vendor											0.0000	10.9188	10.9188	9.3000e-004	0.0000	10.9420
Worker											0.0000	15.7588	15.7588	5.3000e-004	0.0000	15.7720
Total											0.0000	26.6776	26.6776	1.4600e-003	0.0000	26.7140

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3.3 Building Construction - 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											0.0000	92.8662	92.8662	0.0226	0.0000	93.4317
Total											0.0000	92.8662	92.8662	0.0226	0.0000	93.4317

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
Vendor											0.0000	3.8747	3.8747	3.2000e-004	0.0000	3.8828
Worker											0.0000	5.4632	5.4632	1.7000e-004	0.0000	5.4674
Total											0.0000	9.3379	9.3379	4.9000e-004	0.0000	9.3502

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3.3 Building Construction - 2019

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											0.0000	92.8661	92.8661	0.0226	0.0000	93.4316
Total											0.0000	92.8661	92.8661	0.0226	0.0000	93.4316

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
Vendor											0.0000	3.8747	3.8747	3.2000e-004	0.0000	3.8828
Worker											0.0000	5.4632	5.4632	1.7000e-004	0.0000	5.4674
Total											0.0000	9.3379	9.3379	4.9000e-004	0.0000	9.3502

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3.4 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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	84.9728	84.9728	0.0265	0.0000	85.6341
Total											0.0000	84.9728	84.9728	0.0265	0.0000	85.6341

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	3.5653	3.5653	1.2000e-004	0.0000	3.5683
Total											0.0000	3.5653	3.5653	1.2000e-004	0.0000	3.5683

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3.4 Grading - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	84.9727	84.9727	0.0265	0.0000	85.6340
Total											0.0000	84.9727	84.9727	0.0265	0.0000	85.6340

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	3.5653	3.5653	1.2000e-004	0.0000	3.5683
Total											0.0000	3.5653	3.5653	1.2000e-004	0.0000	3.5683

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3.5 Paving - 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											0.0000	20.4752	20.4752	6.4800e-003	0.0000	20.6371
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	20.4752	20.4752	6.4800e-003	0.0000	20.6371

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.7288	1.7288	5.0000e-005	0.0000	1.7302
Total											0.0000	1.7288	1.7288	5.0000e-005	0.0000	1.7302

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3.5 Paving - 2019

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											0.0000	20.4752	20.4752	6.4800e-003	0.0000	20.6371
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	20.4752	20.4752	6.4800e-003	0.0000	20.6371

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.7288	1.7288	5.0000e-005	0.0000	1.7302
Total											0.0000	1.7288	1.7288	5.0000e-005	0.0000	1.7302

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3.6 Site Preparation - 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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	17.3800	17.3800	5.4100e-003	0.0000	17.5152
Total											0.0000	17.3800	17.3800	5.4100e-003	0.0000	17.5152

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.0696	1.0696	4.0000e-005	0.0000	1.0705
Total											0.0000	1.0696	1.0696	4.0000e-005	0.0000	1.0705

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3.6 Site Preparation - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	17.3799	17.3799	5.4100e-003	0.0000	17.5152
Total											0.0000	17.3799	17.3799	5.4100e-003	0.0000	17.5152

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.0696	1.0696	4.0000e-005	0.0000	1.0705
Total											0.0000	1.0696	1.0696	4.0000e-005	0.0000	1.0705

4.0 Operational Detail - Mobile

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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	348.0165	348.0165	0.0158	0.0000	348.4111
Unmitigated											0.0000	348.0165	348.0165	0.0158	0.0000	348.4111

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	330.00	343.53	298.65	1,211,797	1,211,797
Total	330.00	343.53	298.65	1,211,797	1,211,797

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	16.80	7.10	7.90	41.60	18.80	39.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.615011	0.035959	0.175734	0.096057	0.010793	0.005300	0.020678	0.029891	0.002015	0.001593	0.005502	0.000799	0.000668

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5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	55.2829	55.2829	3.9400e-003	8.1000e-004	55.6239
Electricity Unmitigated											0.0000	57.1232	57.1232	4.0700e-003	8.4000e-004	57.4756
NaturalGas Mitigated											0.0000	50.0467	50.0467	9.6000e-004	9.2000e-004	50.3441
NaturalGas Unmitigated											0.0000	65.3798	65.3798	1.2500e-003	1.2000e-003	65.7683

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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					
Single Family Housing	1.22517e+006											0.0000	65.3798	65.3798	1.2500e-003	1.2000e-003	65.7683
Total												0.0000	65.3798	65.3798	1.2500e-003	1.2000e-003	65.7683

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					
Single Family Housing	937840											0.0000	50.0467	50.0467	9.6000e-004	9.2000e-004	50.3441
Total												0.0000	50.0467	50.0467	9.6000e-004	9.2000e-004	50.3441

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	309112	57.1232	4.0700e-003	8.4000e-004	57.4756
Total		57.1232	4.0700e-003	8.4000e-004	57.4756

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	299153	55.2829	3.9400e-003	8.1000e-004	55.6239
Total		55.2829	3.9400e-003	8.1000e-004	55.6239

6.0 Area Detail

6.1 Mitigation Measures Area

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											34.0876	14.6961	48.7837	0.0318	2.6800e-003	50.3787
Unmitigated											34.0876	14.6961	48.7837	0.0318	2.6800e-003	50.3787

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
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											34.0876	14.2958	48.3835	0.0315	2.6800e-003	49.9689
Landscaping											0.0000	0.4003	0.4003	3.8000e-004	0.0000	0.4098
Total											34.0876	14.6961	48.7837	0.0318	2.6800e-003	50.3787

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											34.0876	14.2958	48.3835	0.0315	2.6800e-003	49.9689
Landscaping											0.0000	0.4003	0.4003	3.8000e-004	0.0000	0.4098
Total											34.0876	14.6961	48.7837	0.0318	2.6800e-003	50.3787

7.0 Water Detail

7.1 Mitigation Measures Water

Fallbrook 17 Unmitigated - GHG Only - San Diego County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	8.6387	0.0706	1.7700e-003	10.9323
Unmitigated	8.6387	0.0706	1.7700e-003	10.9323

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	2.15008 / 1.35549	8.6387	0.0706	1.7700e-003	10.9323
Total		8.6387	0.0706	1.7700e-003	10.9323

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7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	2.15008 / 1.35549	8.6387	0.0706	1.7700e-003	10.9323
Total		8.6387	0.0706	1.7700e-003	10.9323

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	7.8233	0.4623	0.0000	19.3818
Unmitigated	7.8233	0.4623	0.0000	19.3818

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8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	38.54	7.8233	0.4623	0.0000	19.3818
Total		7.8233	0.4623	0.0000	19.3818

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	38.54	7.8233	0.4623	0.0000	19.3818
Total		7.8233	0.4623	0.0000	19.3818

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	1.00	Dwelling Unit	0.32	1,800.00	3

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	10			Operational Year	2050
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	407.41	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Adjusted for RPS 50% goal.

Land Use - .

Construction Phase -

Off-road Equipment -

Off-road Equipment -

Architectural Coating - SDAPCD Rule 67.0.1 Architectural Coating

Vehicle Trips - SANDAG trip rates

Area Coating - SDAPCD Rule 67.0.1 architectural coating

Energy Use - .

Energy Mitigation - Adjusted Title 24 2016 Standards

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Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Parking	0.00	50.00
tblArchitecturalCoating	PhaseName		Architectural Coating
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	50
tblAreaCoating	Area_EF_Residential_Exterior	250	50
tblAreaCoating	Area_EF_Residential_Interior	250	50
tblConstructionPhase	PhaseEndDate	12/30/2016	6/6/2018
tblConstructionPhase	PhaseEndDate	12/30/2016	5/23/2018
tblConstructionPhase	PhaseEndDate	12/30/2016	1/3/2018
tblConstructionPhase	PhaseEndDate	12/30/2016	5/30/2018
tblConstructionPhase	PhaseEndDate	12/30/2016	1/1/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	5/31/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	1/4/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	1/2/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	5/24/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	1/1/2018
tblProjectCharacteristics	CO2IntensityFactor	720.49	407.41
tblProjectCharacteristics	ConstructionPhaseStartDate	1/1/2017 2:54:38 PM	1/1/2017 12:00:00 AM
tblProjectCharacteristics	OperationalYear	2018	2050
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	ST_TR	9.91	10.41
tblVehicleTrips	SU_TR	8.62	9.05
tblVehicleTrips	WD_TR	9.52	10.00

2.0 Emissions Summary

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2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018											0.0000	56.5903	56.5903	0.0173	0.0000	57.0223
Maximum											0.0000	56.5903	56.5903	0.0173	0.0000	57.0223

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018											0.0000	56.5902	56.5902	0.0173	0.0000	57.0222
Maximum											0.0000	56.5902	56.5902	0.0173	0.0000	57.0222

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area											1.0330	0.4332	1.4662	9.5000e-004	8.0000e-005	1.5142
Energy											0.0000	3.7122	3.7122	1.6000e-004	6.0000e-005	3.7347
Mobile											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
Water											0.0207	0.2411	0.2618	2.1400e-003	5.0000e-005	0.3313
Total											1.0536	4.3865	5.4402	3.2500e-003	1.9000e-004	5.5802

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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											1.0330	0.4332	1.4662	9.5000e-004	8.0000e-005	1.5142
Energy											0.0000	3.1918	3.1918	1.5000e-004	5.0000e-005	3.2112
Mobile											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
Water											0.0207	0.2411	0.2618	2.1400e-003	5.0000e-005	0.3313
Total											1.0536	3.8661	4.9198	3.2400e-003	1.8000e-004	5.0566

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.86	9.57	0.31	5.26	9.38

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	5/31/2018	6/6/2018	5	5	
2	Building Construction	Building Construction	1/4/2018	5/23/2018	5	100	
3	Grading	Grading	1/2/2018	1/3/2018	5	2	
4	Paving	Paving	5/24/2018	5/30/2018	5	5	
5	Site Preparation	Site Preparation	1/1/2018	1/1/2018	5	1	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 3,645; Residential Outdoor: 1,215; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Fallbrook 19+ Unmitigated - GHG Only - San Diego County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Grading	Rubber Tired Dozers	1	1.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	0.00	0.00				20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	0.00	0.00				20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00				20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00				20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00				20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Fallbrook 19+ Unmitigated - GHG Only - San Diego County, Annual

3.4 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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	1.0608	1.0608	2.0000e-004	0.0000	1.0659
Total											0.0000	1.0608	1.0608	2.0000e-004	0.0000	1.0659

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	2.1800e-003	2.1800e-003	0.0000	0.0000	2.1800e-003
Total											0.0000	2.1800e-003	2.1800e-003	0.0000	0.0000	2.1800e-003

Fallbrook 19+ Unmitigated - GHG Only - San Diego County, Annual

3.4 Grading - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	1.0608	1.0608	2.0000e-004	0.0000	1.0659
Total											0.0000	1.0608	1.0608	2.0000e-004	0.0000	1.0659

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	2.1800e-003	2.1800e-003	0.0000	0.0000	2.1800e-003
Total											0.0000	2.1800e-003	2.1800e-003	0.0000	0.0000	2.1800e-003

Fallbrook 19+ Unmitigated - GHG Only - San Diego County, Annual

3.5 Paving - 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					
Off-Road											0.0000	2.4270	2.4270	6.8000e-004	0.0000	2.4441
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	2.4270	2.4270	6.8000e-004	0.0000	2.4441

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	9.7900e-003	9.7900e-003	0.0000	0.0000	9.8300e-003
Total											0.0000	9.7900e-003	9.7900e-003	0.0000	0.0000	9.8300e-003

Fallbrook 19+ Unmitigated - GHG Only - San Diego County, Annual

3.5 Paving - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	2.4270	2.4270	6.8000e-004	0.0000	2.4441
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	2.4270	2.4270	6.8000e-004	0.0000	2.4441

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	9.7900e-003	9.7900e-003	0.0000	0.0000	9.8300e-003
Total											0.0000	9.7900e-003	9.7900e-003	0.0000	0.0000	9.8300e-003

Fallbrook 19+ Unmitigated - GHG Only - San Diego County, Annual

3.6 Site Preparation - 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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	0.4458	0.4458	1.4000e-004	0.0000	0.4492
Total											0.0000	0.4458	0.4458	1.4000e-004	0.0000	0.4492

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	5.4000e-004	5.4000e-004	0.0000	0.0000	5.5000e-004
Total											0.0000	5.4000e-004	5.4000e-004	0.0000	0.0000	5.5000e-004

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3.6 Site Preparation - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	0.4458	0.4458	1.4000e-004	0.0000	0.4492
Total											0.0000	0.4458	0.4458	1.4000e-004	0.0000	0.4492

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	5.4000e-004	5.4000e-004	0.0000	0.0000	5.5000e-004
Total											0.0000	5.4000e-004	5.4000e-004	0.0000	0.0000	5.5000e-004

4.0 Operational Detail - Mobile

Fallbrook 19+ Unmitigated - GHG Only - San Diego County, Annual

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
Unmitigated											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	10.00	10.41	9.05	36,721	36,721
Total	10.00	10.41	9.05	36,721	36,721

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	16.80	7.10	7.90	41.60	18.80	39.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.615011	0.035959	0.175734	0.096057	0.010793	0.005300	0.020678	0.029891	0.002015	0.001593	0.005502	0.000799	0.000668

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5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	1.6752	1.6752	1.2000e-004	2.0000e-005	1.6856
Electricity Unmitigated											0.0000	1.7310	1.7310	1.2000e-004	3.0000e-005	1.7417
NaturalGas Mitigated											0.0000	1.5166	1.5166	3.0000e-005	3.0000e-005	1.5256
NaturalGas Unmitigated											0.0000	1.9812	1.9812	4.0000e-005	4.0000e-005	1.9930

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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					
Single Family Housing	37126.4											0.0000	1.9812	1.9812	4.0000e-005	4.0000e-005	1.9930
Total												0.0000	1.9812	1.9812	4.0000e-005	4.0000e-005	1.9930

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					
Single Family Housing	28419.4											0.0000	1.5166	1.5166	3.0000e-005	3.0000e-005	1.5256
Total												0.0000	1.5166	1.5166	3.0000e-005	3.0000e-005	1.5256

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	9367.02	1.7310	1.2000e-004	3.0000e-005	1.7417
Total		1.7310	1.2000e-004	3.0000e-005	1.7417

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	9065.24	1.6752	1.2000e-004	2.0000e-005	1.6856
Total		1.6752	1.2000e-004	2.0000e-005	1.6856

6.0 Area Detail

6.1 Mitigation Measures Area

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											1.0330	0.4332	1.4662	9.5000e-004	8.0000e-005	1.5142
Unmitigated											1.0330	0.4332	1.4662	9.5000e-004	8.0000e-005	1.5142

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
Hearth											1.0330	0.4332	1.4662	9.5000e-004	8.0000e-005	1.5142
Total											1.0330	0.4332	1.4662	9.5000e-004	8.0000e-005	1.5142

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											1.0330	0.4332	1.4662	9.5000e-004	8.0000e-005	1.5142
Total											1.0330	0.4332	1.4662	9.5000e-004	8.0000e-005	1.5142

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.2618	2.1400e-003	5.0000e-005	0.3313
Unmitigated	0.2618	2.1400e-003	5.0000e-005	0.3313

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7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	0.065154 / 0.0410754	0.2618	2.1400e-003	5.0000e-005	0.3313
Total		0.2618	2.1400e-003	5.0000e-005	0.3313

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	0.065154 / 0.0410754	0.2618	2.1400e-003	5.0000e-005	0.3313
Total		0.2618	2.1400e-003	5.0000e-005	0.3313

8.0 Waste Detail

8.1 Mitigation Measures Waste

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Category/Year

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

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	1.23	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

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8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	1.23	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
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

Equipment Type	Number
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11.0 Vegetation

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	7.00	Dwelling Unit	2.27	12,600.00	20

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	10			Operational Year	2050
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	407.41	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

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Project Characteristics - Adjusted RPS 50% goal.

Land Use - .

Construction Phase -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Architectural Coating - SDAPCD Rule 67.0.1 Architectural Coating

Vehicle Trips - SANDAG trip rates

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Area Coating - SDAPCD Rule 67.0.1 Architectural Coating

Energy Use - .

Energy Mitigation - Adjusted Title 24 2016 Standards

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Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	50.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	50
tblAreaCoating	Area_EF_Residential_Exterior	250	50
tblAreaCoating	Area_EF_Residential_Interior	250	50
tblConstructionPhase	PhaseEndDate	12/30/2016	12/13/2018
tblConstructionPhase	PhaseEndDate	12/30/2016	11/15/2018
tblConstructionPhase	PhaseEndDate	12/30/2016	1/11/2018
tblConstructionPhase	PhaseEndDate	12/30/2016	11/29/2018
tblConstructionPhase	PhaseEndDate	12/30/2016	1/3/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	11/30/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	1/12/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	1/4/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	11/16/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	1/1/2018
tblProjectCharacteristics	CO2IntensityFactor	720.49	407.41
tblProjectCharacteristics	OperationalYear	2018	2050
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	ST_TR	9.91	10.41
tblVehicleTrips	SU_TR	8.62	9.05
tblVehicleTrips	WD_TR	9.52	10.00

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2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	:	:	:	:	:	:	:	:	:	:	0.0000	258.9156	258.9156	0.0559	0.0000	260.3126
Maximum											0.0000	258.9156	258.9156	0.0559	0.0000	260.3126

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	:	:	:	:	:	:	:	:	:	:	0.0000	258.9153	258.9153	0.0559	0.0000	260.3123
Maximum											0.0000	258.9153	258.9153	0.0559	0.0000	260.3123

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area											7.2307	3.1174	10.3481	6.7500e-003	5.7000e-004	10.6864
Energy											0.0000	25.9855	25.9855	1.1300e-003	4.3000e-004	26.1427
Mobile											0.0000	73.8217	73.8217	3.3500e-003	0.0000	73.9054
Waste											1.6645	0.0000	1.6645	0.0984	0.0000	4.1238
Water											0.1447	1.6878	1.8325	0.0150	3.8000e-004	2.3190
Total											9.0399	104.6123	113.6522	0.1246	1.3800e-003	117.1772

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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											7.2307	3.1174	10.3481	6.7500e-003	5.7000e-004	10.6864
Energy											0.0000	22.3427	22.3427	1.0400e-003	3.7000e-004	22.4781
Mobile											0.0000	73.8217	73.8217	3.3500e-003	0.0000	73.9054
Waste											1.6645	0.0000	1.6645	0.0984	0.0000	4.1238
Water											0.1447	1.6878	1.8325	0.0150	3.8000e-004	2.3190
Total											9.0399	100.9695	110.0094	0.1245	1.3200e-003	113.5126

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.48	3.21	0.07	4.35	3.13

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	11/30/2018	12/13/2018	5	10	
2	Building Construction	Building Construction	1/12/2018	11/15/2018	5	220	
3	Grading	Grading	1/4/2018	1/11/2018	5	6	
4	Paving	Paving	11/16/2018	11/29/2018	5	10	
5	Site Preparation	Site Preparation	1/1/2018	1/3/2018	5	3	

Acres of Grading (Site Preparation Phase): 4.5

Acres of Grading (Grading Phase): 3

Acres of Paving: 0

Residential Indoor: 25,515; Residential Outdoor: 8,505; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	1.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	3.00	1.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

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3.1 Mitigation Measures Construction

3.2 Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	1.2766	1.2766	1.2000e-004	0.0000	1.2797
Total											0.0000	1.2766	1.2766	1.2000e-004	0.0000	1.2797

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.0594	0.0594	0.0000	0.0000	0.0595
Total											0.0000	0.0594	0.0594	0.0000	0.0000	0.0595

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3.2 Architectural Coating - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	1.2766	1.2766	1.2000e-004	0.0000	1.2797
Total											0.0000	1.2766	1.2766	1.2000e-004	0.0000	1.2797

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.0594	0.0594	0.0000	0.0000	0.0595
Total											0.0000	0.0594	0.0594	0.0000	0.0000	0.0595

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3.3 Building Construction - 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					
Off-Road											0.0000	232.4891	232.4891	0.0501	0.0000	233.7412
Total											0.0000	232.4891	232.4891	0.0501	0.0000	233.7412

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
Vendor											0.0000	2.7173	2.7173	2.3000e-004	0.0000	2.7231
Worker											0.0000	3.9219	3.9219	1.3000e-004	0.0000	3.9252
Total											0.0000	6.6392	6.6392	3.6000e-004	0.0000	6.6483

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3.3 Building Construction - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	232.4888	232.4888	0.0501	0.0000	233.7409
Total											0.0000	232.4888	232.4888	0.0501	0.0000	233.7409

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
Vendor											0.0000	2.7173	2.7173	2.3000e-004	0.0000	2.7231
Worker											0.0000	3.9219	3.9219	1.3000e-004	0.0000	3.9252
Total											0.0000	6.6392	6.6392	3.6000e-004	0.0000	6.6483

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3.4 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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	5.6539	5.6539	1.7600e-003	0.0000	5.6979
Total											0.0000	5.6539	5.6539	1.7600e-003	0.0000	5.6979

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.3565	0.3565	1.0000e-005	0.0000	0.3568
Total											0.0000	0.3565	0.3565	1.0000e-005	0.0000	0.3568

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3.4 Grading - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	5.6539	5.6539	1.7600e-003	0.0000	5.6979
Total											0.0000	5.6539	5.6539	1.7600e-003	0.0000	5.6979

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.3565	0.3565	1.0000e-005	0.0000	0.3568
Total											0.0000	0.3565	0.3565	1.0000e-005	0.0000	0.3568

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3.5 Paving - 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					
Off-Road											0.0000	8.0478	8.0478	2.4600e-003	0.0000	8.1093
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	8.0478	8.0478	2.4600e-003	0.0000	8.1093

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.8913	0.8913	3.0000e-005	0.0000	0.8921
Total											0.0000	0.8913	0.8913	3.0000e-005	0.0000	0.8921

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3.5 Paving - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	8.0478	8.0478	2.4600e-003	0.0000	8.1093
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	8.0478	8.0478	2.4600e-003	0.0000	8.1093

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.8913	0.8913	3.0000e-005	0.0000	0.8921
Total											0.0000	0.8913	0.8913	3.0000e-005	0.0000	0.8921

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3.6 Site Preparation - 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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	3.3590	3.3590	1.0500e-003	0.0000	3.3851
Total											0.0000	3.3590	3.3590	1.0500e-003	0.0000	3.3851

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.1426	0.1426	0.0000	0.0000	0.1427
Total											0.0000	0.1426	0.1426	0.0000	0.0000	0.1427

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3.6 Site Preparation - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	3.3590	3.3590	1.0500e-003	0.0000	3.3851
Total											0.0000	3.3590	3.3590	1.0500e-003	0.0000	3.3851

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.1426	0.1426	0.0000	0.0000	0.1427
Total											0.0000	0.1426	0.1426	0.0000	0.0000	0.1427

4.0 Operational Detail - Mobile

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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	73.8217	73.8217	3.3500e-003	0.0000	73.9054
Unmitigated											0.0000	73.8217	73.8217	3.3500e-003	0.0000	73.9054

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	70.00	72.87	63.35	257,048	257,048
Total	70.00	72.87	63.35	257,048	257,048

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	16.80	7.10	7.90	41.60	18.80	39.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.615011	0.035959	0.175734	0.096057	0.010793	0.005300	0.020678	0.029891	0.002015	0.001593	0.005502	0.000799	0.000668

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5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	11.7267	11.7267	8.3000e-004	1.7000e-004	11.7990
Electricity Unmitigated											0.0000	12.1171	12.1171	8.6000e-004	1.8000e-004	12.1918
NaturalGas Mitigated											0.0000	10.6160	10.6160	2.0000e-004	1.9000e-004	10.6791
NaturalGas Unmitigated											0.0000	13.8684	13.8684	2.7000e-004	2.5000e-004	13.9509

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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					
Single Family Housing	259885											0.0000	13.8684	13.8684	2.7000e-004	2.5000e-004	13.9509
Total												0.0000	13.8684	13.8684	2.7000e-004	2.5000e-004	13.9509

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					
Single Family Housing	198936											0.0000	10.6160	10.6160	2.0000e-004	1.9000e-004	10.6791
Total												0.0000	10.6160	10.6160	2.0000e-004	1.9000e-004	10.6791

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	65569.1	12.1171	8.6000e-004	1.8000e-004	12.1918
Total		12.1171	8.6000e-004	1.8000e-004	12.1918

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	63456.7	11.7267	8.3000e-004	1.7000e-004	11.7990
Total		11.7267	8.3000e-004	1.7000e-004	11.7990

6.0 Area Detail

6.1 Mitigation Measures Area

Fallbrook 21+ Unmitigated - GHG Only - San Diego County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											7.2307	3.1174	10.3481	6.7500e-003	5.7000e-004	10.6864
Unmitigated											7.2307	3.1174	10.3481	6.7500e-003	5.7000e-004	10.6864

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
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											7.2307	3.0325	10.2632	6.6700e-003	5.7000e-004	10.5995
Landscaping											0.0000	0.0849	0.0849	8.0000e-005	0.0000	0.0869
Total											7.2307	3.1174	10.3481	6.7500e-003	5.7000e-004	10.6864

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											7.2307	3.0325	10.2632	6.6700e-003	5.7000e-004	10.5995
Landscaping											0.0000	0.0849	0.0849	8.0000e-005	0.0000	0.0869
Total											7.2307	3.1174	10.3481	6.7500e-003	5.7000e-004	10.6864

7.0 Water Detail

7.1 Mitigation Measures Water

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	1.8325	0.0150	3.8000e-004	2.3190
Unmitigated	1.8325	0.0150	3.8000e-004	2.3190

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	0.456078 / 0.287528	1.8325	0.0150	3.8000e-004	2.3190
Total		1.8325	0.0150	3.8000e-004	2.3190

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7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	0.456078 / 0.287528	1.8325	0.0150	3.8000e-004	2.3190
Total		1.8325	0.0150	3.8000e-004	2.3190

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	1.6645	0.0984	0.0000	4.1238
Unmitigated	1.6645	0.0984	0.0000	4.1238

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8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	8.2	1.6645	0.0984	0.0000	4.1238
Total		1.6645	0.0984	0.0000	4.1238

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	8.2	1.6645	0.0984	0.0000	4.1238
Total		1.6645	0.0984	0.0000	4.1238

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	26.00	Dwelling Unit	8.44	46,800.00	74

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	10			Operational Year	2050
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	407.41	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

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Project Characteristics - Adjusted RPS 50% goal.

Land Use - .

Construction Phase -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Architectural Coating - SDAPCD Rule 67.0.1 Architectural Coating

Vehicle Trips - SANDAG Trip Rates

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Area Coating - SDAPCD Rule 67.0.1 Architectural Coating

Energy Use - .

Energy Mitigation - Adjusted Title 24 2016 Standards

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Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	50.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	50
tblAreaCoating	Area_EF_Residential_Exterior	250	50
tblAreaCoating	Area_EF_Residential_Interior	250	50
tblConstructionPhase	PhaseEndDate	12/30/2016	2/22/2019
tblConstructionPhase	PhaseEndDate	12/30/2016	12/28/2018
tblConstructionPhase	PhaseEndDate	12/30/2016	2/9/2018
tblConstructionPhase	PhaseEndDate	12/30/2016	1/25/2019
tblConstructionPhase	PhaseEndDate	12/30/2016	1/12/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	1/26/2019
tblConstructionPhase	PhaseStartDate	12/31/2016	2/10/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	1/13/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	12/29/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	1/1/2018
tblProjectCharacteristics	CO2IntensityFactor	720.49	407.41
tblProjectCharacteristics	OperationalYear	2018	2050
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	ST_TR	9.91	10.41
tblVehicleTrips	SU_TR	8.62	9.05
tblVehicleTrips	WD_TR	9.52	10.00

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2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018											0.0000	342.7241	342.7241	0.0824	0.0000	344.7841
2019											0.0000	23.8776	23.8776	6.4300e-003	0.0000	24.0383
Maximum											0.0000	342.7241	342.7241	0.0824	0.0000	344.7841

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018											0.0000	342.7238	342.7238	0.0824	0.0000	344.7837
2019											0.0000	23.8776	23.8776	6.4300e-003	0.0000	24.0383
Maximum											0.0000	342.7238	342.7238	0.0824	0.0000	344.7837

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area											26.8569	11.5787	38.4356	0.0251	2.1100e-003	39.6923
Energy											0.0000	96.5176	96.5176	4.1900e-003	1.6100e-003	97.1013
Mobile											0.0000	412.3743	412.3743	0.0220	0.0000	412.9239
Waste											6.1588	0.0000	6.1588	0.3640	0.0000	15.2580
Water											0.5374	6.2688	6.8063	0.0557	1.4000e-003	8.6133
Total											33.5531	526.7394	560.2925	0.4709	5.1200e-003	573.5888

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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											26.8569	11.5787	38.4356	0.0251	2.1100e-003	39.6923
Energy											0.0000	82.9870	82.9870	3.8600e-003	1.3600e-003	83.4900
Mobile											0.0000	412.3743	412.3743	0.0220	0.0000	412.9239
Waste											6.1588	0.0000	6.1588	0.3640	0.0000	15.2580
Water											0.5374	6.2688	6.8063	0.0557	1.4000e-003	8.6133
Total											33.5531	513.2089	546.7620	0.4705	4.8700e-003	559.9775

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.57	2.41	0.07	4.88	2.37

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	1/26/2019	2/22/2019	5	20	
2	Building Construction	Building Construction	2/10/2018	12/28/2018	5	230	
3	Grading	Grading	1/13/2018	2/9/2018	5	20	
4	Paving	Paving	12/29/2018	1/25/2019	5	20	
5	Site Preparation	Site Preparation	1/1/2018	1/12/2018	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 0

Residential Indoor: 94,770; Residential Outdoor: 31,590; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Grading	Excavators	1	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	2.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	9.00	3.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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3.2 Architectural Coating - 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					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5587
Total											0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5587

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.2305	0.2305	1.0000e-005	0.0000	0.2307
Total											0.0000	0.2305	0.2305	1.0000e-005	0.0000	0.2307

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3.2 Architectural Coating - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5586
Total											0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5586

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.2305	0.2305	1.0000e-005	0.0000	0.2307
Total											0.0000	0.2305	0.2305	1.0000e-005	0.0000	0.2307

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3.3 Building Construction - 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					
Off-Road											0.0000	273.4323	273.4323	0.0670	0.0000	275.1071
Total											0.0000	273.4323	273.4323	0.0670	0.0000	275.1071

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
Vendor											0.0000	8.5226	8.5226	7.3000e-004	0.0000	8.5407
Worker											0.0000	12.3004	12.3004	4.1000e-004	0.0000	12.3107
Total											0.0000	20.8230	20.8230	1.1400e-003	0.0000	20.8514

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3.3 Building Construction - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	273.4320	273.4320	0.0670	0.0000	275.1068
Total											0.0000	273.4320	273.4320	0.0670	0.0000	275.1068

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
Vendor											0.0000	8.5226	8.5226	7.3000e-004	0.0000	8.5407
Worker											0.0000	12.3004	12.3004	4.1000e-004	0.0000	12.3107
Total											0.0000	20.8230	20.8230	1.1400e-003	0.0000	20.8514

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3.4 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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	27.1069	27.1069	8.4400e-003	0.0000	27.3178
Total											0.0000	27.1069	27.1069	8.4400e-003	0.0000	27.3178

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.7827	1.7827	6.0000e-005	0.0000	1.7842
Total											0.0000	1.7827	1.7827	6.0000e-005	0.0000	1.7842

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3.4 Grading - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	27.1068	27.1068	8.4400e-003	0.0000	27.3178
Total											0.0000	27.1068	27.1068	8.4400e-003	0.0000	27.3178

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.7827	1.7827	6.0000e-005	0.0000	1.7842
Total											0.0000	1.7827	1.7827	6.0000e-005	0.0000	1.7842

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3.5 Paving - 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					
Off-Road											0.0000	1.0406	1.0406	3.2000e-004	0.0000	1.0487
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	1.0406	1.0406	3.2000e-004	0.0000	1.0487

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.0891	0.0891	0.0000	0.0000	0.0892
Total											0.0000	0.0891	0.0891	0.0000	0.0000	0.0892

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3.5 Paving - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	1.0406	1.0406	3.2000e-004	0.0000	1.0487
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	1.0406	1.0406	3.2000e-004	0.0000	1.0487

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.0891	0.0891	0.0000	0.0000	0.0892
Total											0.0000	0.0891	0.0891	0.0000	0.0000	0.0892

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3.5 Paving - 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											0.0000	19.4514	19.4514	6.1500e-003	0.0000	19.6053
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	19.4514	19.4514	6.1500e-003	0.0000	19.6053

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.6424	1.6424	5.0000e-005	0.0000	1.6437
Total											0.0000	1.6424	1.6424	5.0000e-005	0.0000	1.6437

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3.5 Paving - 2019

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											0.0000	19.4514	19.4514	6.1500e-003	0.0000	19.6053
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	19.4514	19.4514	6.1500e-003	0.0000	19.6053

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.6424	1.6424	5.0000e-005	0.0000	1.6437
Total											0.0000	1.6424	1.6424	5.0000e-005	0.0000	1.6437

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3.6 Site Preparation - 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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	17.3800	17.3800	5.4100e-003	0.0000	17.5152
Total											0.0000	17.3800	17.3800	5.4100e-003	0.0000	17.5152

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.0696	1.0696	4.0000e-005	0.0000	1.0705
Total											0.0000	1.0696	1.0696	4.0000e-005	0.0000	1.0705

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3.6 Site Preparation - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	17.3799	17.3799	5.4100e-003	0.0000	17.5152
Total											0.0000	17.3799	17.3799	5.4100e-003	0.0000	17.5152

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.0696	1.0696	4.0000e-005	0.0000	1.0705
Total											0.0000	1.0696	1.0696	4.0000e-005	0.0000	1.0705

4.0 Operational Detail - Mobile

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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	412.3743	412.3743	0.0220	0.0000	412.9239
Unmitigated											0.0000	412.3743	412.3743	0.0220	0.0000	412.9239

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	260.00	270.66	235.30	954,749	954,749
Total	260.00	270.66	235.30	954,749	954,749

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	16.80	7.10	7.90	41.60	18.80	39.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.615011	0.035959	0.175734	0.096057	0.010793	0.005300	0.020678	0.029891	0.002015	0.001593	0.005502	0.000799	0.000668

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5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	43.5562	43.5562	3.1000e-003	6.4000e-004	43.8249
Electricity Unmitigated											0.0000	45.0062	45.0062	3.2000e-003	6.6000e-004	45.2838
NaturalGas Mitigated											0.0000	39.4308	39.4308	7.6000e-004	7.2000e-004	39.6651
NaturalGas Unmitigated											0.0000	51.5114	51.5114	9.9000e-004	9.4000e-004	51.8175

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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					
Single Family Housing	965286											0.0000	51.5114	51.5114	9.9000e-004	9.4000e-004	51.8175
Total												0.0000	51.5114	51.5114	9.9000e-004	9.4000e-004	51.8175

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					
Single Family Housing	738905											0.0000	39.4308	39.4308	7.6000e-004	7.2000e-004	39.6651
Total												0.0000	39.4308	39.4308	7.6000e-004	7.2000e-004	39.6651

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	243543	45.0062	3.2000e-003	6.6000e-004	45.2838
Total		45.0062	3.2000e-003	6.6000e-004	45.2838

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	235696	43.5562	3.1000e-003	6.4000e-004	43.8249
Total		43.5562	3.1000e-003	6.4000e-004	43.8249

6.0 Area Detail

6.1 Mitigation Measures Area

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											26.8569	11.5787	38.4356	0.0251	2.1100e-003	39.6923
Unmitigated											26.8569	11.5787	38.4356	0.0251	2.1100e-003	39.6923

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
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											26.8569	11.2634	38.1203	0.0248	2.1100e-003	39.3694
Landscaping											0.0000	0.3154	0.3154	3.0000e-004	0.0000	0.3229
Total											26.8569	11.5787	38.4356	0.0251	2.1100e-003	39.6923

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											26.8569	11.2634	38.1203	0.0248	2.1100e-003	39.3694
Landscaping											0.0000	0.3154	0.3154	3.0000e-004	0.0000	0.3229
Total											26.8569	11.5787	38.4356	0.0251	2.1100e-003	39.6923

7.0 Water Detail

7.1 Mitigation Measures Water

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	6.8063	0.0557	1.4000e-003	8.6133
Unmitigated	6.8063	0.0557	1.4000e-003	8.6133

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	1.694 / 1.06796	6.8063	0.0557	1.4000e-003	8.6133
Total		6.8063	0.0557	1.4000e-003	8.6133

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7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	1.694 / 1.06796	6.8063	0.0557	1.4000e-003	8.6133
Total		6.8063	0.0557	1.4000e-003	8.6133

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	6.1588	0.3640	0.0000	15.2580
Unmitigated	6.1588	0.3640	0.0000	15.2580

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8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	30.34	6.1588	0.3640	0.0000	15.2580
Total		6.1588	0.3640	0.0000	15.2580

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	30.34	6.1588	0.3640	0.0000	15.2580
Total		6.1588	0.3640	0.0000	15.2580

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

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Mountain Empire 30A
San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	29.00	Dwelling Unit	9.42	52,200.00	83

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	10			Operational Year	2050
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	407.41	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

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Project Characteristics - Adjusted RPS 50% goal.

Land Use - .

Construction Phase -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Architectural Coating - SDAPCD Rule 67.0.1 Architectural Coating

Vehicle Trips - SANDAG trip rates

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Area Coating - SDAPCD Rule 67.0.1 Architectural Coating

Energy Use - .

Energy Mitigation - Adjusted Title 24 2016 Standard

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Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	50.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	50
tblAreaCoating	Area_EF_Residential_Exterior	250	50
tblAreaCoating	Area_EF_Residential_Interior	250	50
tblConstructionPhase	PhaseEndDate	12/30/2016	2/22/2019
tblConstructionPhase	PhaseEndDate	12/30/2016	12/28/2018
tblConstructionPhase	PhaseEndDate	12/30/2016	2/9/2018
tblConstructionPhase	PhaseEndDate	12/30/2016	1/25/2019
tblConstructionPhase	PhaseEndDate	12/30/2016	1/12/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	1/26/2019
tblConstructionPhase	PhaseStartDate	12/31/2016	2/10/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	1/13/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	12/29/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	1/1/2018
tblProjectCharacteristics	CO2IntensityFactor	720.49	407.41
tblProjectCharacteristics	OperationalYear	2018	2050
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	ST_TR	9.91	10.41
tblVehicleTrips	SU_TR	8.62	9.05
tblVehicleTrips	WD_TR	9.52	10.00

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2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018											0.0000	344.0909	344.0909	0.0824	0.0000	346.1520
2019											0.0000	23.8776	23.8776	6.4300e-003	0.0000	24.0383
Maximum											0.0000	344.0909	344.0909	0.0824	0.0000	346.1520

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018											0.0000	344.0905	344.0905	0.0824	0.0000	346.1516
2019											0.0000	23.8776	23.8776	6.4300e-003	0.0000	24.0383
Maximum											0.0000	344.0905	344.0905	0.0824	0.0000	346.1516

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area											29.9558	12.9148	42.8705	0.0280	2.3600e-003	44.2722
Energy											0.0000	107.6542	107.6542	4.6700e-003	1.7900e-003	108.3053
Mobile											0.0000	459.9560	459.9560	0.0245	0.0000	460.5689
Waste											6.9078	0.0000	6.9078	0.4082	0.0000	17.1137
Water											0.5994	6.9922	7.5916	0.0621	1.5600e-003	9.6072
Total											37.4630	587.5171	624.9801	0.5275	5.7100e-003	639.8673

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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											29.9558	12.9148	42.8705	0.0280	2.3600e-003	44.2722
Energy											0.0000	92.5624	92.5624	4.3000e-003	1.5200e-003	93.1234
Mobile											0.0000	459.9560	459.9560	0.0245	0.0000	460.5689
Waste											6.9078	0.0000	6.9078	0.4082	0.0000	17.1137
Water											0.5994	6.9922	7.5916	0.0621	1.5600e-003	9.6072
Total											37.4630	572.4253	609.8883	0.5271	5.4400e-003	624.6855

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.57	2.41	0.07	4.73	2.37

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	1/26/2019	2/22/2019	5	20	
2	Building Construction	Building Construction	2/10/2018	12/28/2018	5	230	
3	Grading	Grading	1/13/2018	2/9/2018	5	20	
4	Paving	Paving	12/29/2018	1/25/2019	5	20	
5	Site Preparation	Site Preparation	1/1/2018	1/12/2018	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 0

Residential Indoor: 105,705; Residential Outdoor: 35,235; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Grading	Excavators	1	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	2.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	10.00	3.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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3.2 Architectural Coating - 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					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5587
Total											0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5587

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.2305	0.2305	1.0000e-005	0.0000	0.2307
Total											0.0000	0.2305	0.2305	1.0000e-005	0.0000	0.2307

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3.2 Architectural Coating - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5586
Total											0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5586

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.2305	0.2305	1.0000e-005	0.0000	0.2307
Total											0.0000	0.2305	0.2305	1.0000e-005	0.0000	0.2307

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3.3 Building Construction - 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					
Off-Road											0.0000	273.4323	273.4323	0.0670	0.0000	275.1071
Total											0.0000	273.4323	273.4323	0.0670	0.0000	275.1071

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
Vendor											0.0000	8.5226	8.5226	7.3000e-004	0.0000	8.5407
Worker											0.0000	13.6672	13.6672	4.6000e-004	0.0000	13.6786
Total											0.0000	22.1897	22.1897	1.1900e-003	0.0000	22.2193

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3.3 Building Construction - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	273.4320	273.4320	0.0670	0.0000	275.1068
Total											0.0000	273.4320	273.4320	0.0670	0.0000	275.1068

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
Vendor											0.0000	8.5226	8.5226	7.3000e-004	0.0000	8.5407
Worker											0.0000	13.6672	13.6672	4.6000e-004	0.0000	13.6786
Total											0.0000	22.1897	22.1897	1.1900e-003	0.0000	22.2193

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3.4 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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	27.1069	27.1069	8.4400e-003	0.0000	27.3178
Total											0.0000	27.1069	27.1069	8.4400e-003	0.0000	27.3178

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.7827	1.7827	6.0000e-005	0.0000	1.7842
Total											0.0000	1.7827	1.7827	6.0000e-005	0.0000	1.7842

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3.4 Grading - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	27.1068	27.1068	8.4400e-003	0.0000	27.3178
Total											0.0000	27.1068	27.1068	8.4400e-003	0.0000	27.3178

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.7827	1.7827	6.0000e-005	0.0000	1.7842
Total											0.0000	1.7827	1.7827	6.0000e-005	0.0000	1.7842

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3.5 Paving - 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					
Off-Road											0.0000	1.0406	1.0406	3.2000e-004	0.0000	1.0487
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	1.0406	1.0406	3.2000e-004	0.0000	1.0487

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.0891	0.0891	0.0000	0.0000	0.0892
Total											0.0000	0.0891	0.0891	0.0000	0.0000	0.0892

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3.5 Paving - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	1.0406	1.0406	3.2000e-004	0.0000	1.0487
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	1.0406	1.0406	3.2000e-004	0.0000	1.0487

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.0891	0.0891	0.0000	0.0000	0.0892
Total											0.0000	0.0891	0.0891	0.0000	0.0000	0.0892

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3.5 Paving - 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											0.0000	19.4514	19.4514	6.1500e-003	0.0000	19.6053
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	19.4514	19.4514	6.1500e-003	0.0000	19.6053

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.6424	1.6424	5.0000e-005	0.0000	1.6437
Total											0.0000	1.6424	1.6424	5.0000e-005	0.0000	1.6437

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3.5 Paving - 2019

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											0.0000	19.4514	19.4514	6.1500e-003	0.0000	19.6053
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	19.4514	19.4514	6.1500e-003	0.0000	19.6053

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.6424	1.6424	5.0000e-005	0.0000	1.6437
Total											0.0000	1.6424	1.6424	5.0000e-005	0.0000	1.6437

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3.6 Site Preparation - 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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	17.3800	17.3800	5.4100e-003	0.0000	17.5152
Total											0.0000	17.3800	17.3800	5.4100e-003	0.0000	17.5152

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.0696	1.0696	4.0000e-005	0.0000	1.0705
Total											0.0000	1.0696	1.0696	4.0000e-005	0.0000	1.0705

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3.6 Site Preparation - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	17.3799	17.3799	5.4100e-003	0.0000	17.5152
Total											0.0000	17.3799	17.3799	5.4100e-003	0.0000	17.5152

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.0696	1.0696	4.0000e-005	0.0000	1.0705
Total											0.0000	1.0696	1.0696	4.0000e-005	0.0000	1.0705

4.0 Operational Detail - Mobile

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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	459.9560	459.9560	0.0245	0.0000	460.5689
Unmitigated											0.0000	459.9560	459.9560	0.0245	0.0000	460.5689

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	290.00	301.89	262.45	1,064,913	1,064,913
Total	290.00	301.89	262.45	1,064,913	1,064,913

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	16.80	7.10	7.90	41.60	18.80	39.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.615011	0.035959	0.175734	0.096057	0.010793	0.005300	0.020678	0.029891	0.002015	0.001593	0.005502	0.000799	0.000668

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5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	48.5820	48.5820	3.4600e-003	7.2000e-004	48.8816
Electricity Unmitigated											0.0000	50.1992	50.1992	3.5700e-003	7.4000e-004	50.5089
NaturalGas Mitigated											0.0000	43.9805	43.9805	8.4000e-004	8.1000e-004	44.2418
NaturalGas Unmitigated											0.0000	57.4550	57.4550	1.1000e-003	1.0500e-003	57.7964

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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					
Single Family Housing	1.07667e+006											0.0000	57.4550	57.4550	1.1000e-003	1.0500e-003	57.7964
Total												0.0000	57.4550	57.4550	1.1000e-003	1.0500e-003	57.7964

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					
Single Family Housing	824163											0.0000	43.9805	43.9805	8.4000e-004	8.1000e-004	44.2418
Total												0.0000	43.9805	43.9805	8.4000e-004	8.1000e-004	44.2418

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	271644	50.1992	3.5700e-003	7.4000e-004	50.5089
Total		50.1992	3.5700e-003	7.4000e-004	50.5089

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	262892	48.5820	3.4600e-003	7.2000e-004	48.8816
Total		48.5820	3.4600e-003	7.2000e-004	48.8816

6.0 Area Detail

6.1 Mitigation Measures Area

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											29.9558	12.9148	42.8705	0.0280	2.3600e-003	44.2722
Unmitigated											29.9558	12.9148	42.8705	0.0280	2.3600e-003	44.2722

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
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											29.9558	12.5630	42.5188	0.0276	2.3600e-003	43.9121
Landscaping											0.0000	0.3517	0.3517	3.3000e-004	0.0000	0.3601
Total											29.9558	12.9148	42.8705	0.0280	2.3600e-003	44.2722

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											29.9558	12.5630	42.5188	0.0276	2.3600e-003	43.9121
Landscaping											0.0000	0.3517	0.3517	3.3000e-004	0.0000	0.3601
Total											29.9558	12.9148	42.8705	0.0280	2.3600e-003	44.2722

7.0 Water Detail

7.1 Mitigation Measures Water

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	7.5916	0.0621	1.5600e-003	9.6072
Unmitigated	7.5916	0.0621	1.5600e-003	9.6072

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	1.88947 / 1.19119	7.5916	0.0621	1.5600e-003	9.6072
Total		7.5916	0.0621	1.5600e-003	9.6072

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7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	1.88947 / 1.19119	7.5916	0.0621	1.5600e-003	9.6072
Total		7.5916	0.0621	1.5600e-003	9.6072

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	6.9078	0.4082	0.0000	17.1137
Unmitigated	6.9078	0.4082	0.0000	17.1137

Mountain Empire 30A - San Diego County, Annual

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	34.03	6.9078	0.4082	0.0000	17.1137
Total		6.9078	0.4082	0.0000	17.1137

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	34.03	6.9078	0.4082	0.0000	17.1137
Total		6.9078	0.4082	0.0000	17.1137

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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Mountain Empire 30A - San Diego County, Annual

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	11.00	Dwelling Unit	3.57	19,800.00	31

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	10			Operational Year	2050
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	407.41	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

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Project Characteristics - Adjusted RPS 50% goal

Land Use - .

Construction Phase -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Architectural Coating - SDAPCD Rule 67.0.1 Architectural Coating

Vehicle Trips - SANDAG Rule 67.0.1 Architectural Coating

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Area Coating - SDAPCD Rule 67.0.1 Architectural Coating

Energy Use - .

Energy Mitigation - Adjusted Title 24 2016 Standards

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Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	50.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	50
tblAreaCoating	Area_EF_Residential_Exterior	250	50
tblAreaCoating	Area_EF_Residential_Interior	250	50
tblConstructionPhase	PhaseEndDate	12/30/2016	1/24/2019
tblConstructionPhase	PhaseEndDate	12/30/2016	12/5/2018
tblConstructionPhase	PhaseEndDate	12/30/2016	1/17/2018
tblConstructionPhase	PhaseEndDate	12/30/2016	12/31/2018
tblConstructionPhase	PhaseEndDate	12/30/2016	1/5/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	1/1/2019
tblConstructionPhase	PhaseStartDate	12/31/2016	1/18/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	1/6/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	12/6/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	1/1/2018
tblProjectCharacteristics	CO2IntensityFactor	720.49	407.41
tblProjectCharacteristics	OperationalYear	2018	2050
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	ST_TR	9.91	10.41
tblVehicleTrips	SU_TR	8.62	9.05
tblVehicleTrips	WD_TR	9.52	10.00

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2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018											0.0000	319.9486	319.9486	0.0782	0.0000	321.9046
2019											0.0000	2.4017	2.4017	2.0000e-004	0.0000	2.4066
Maximum											0.0000	319.9486	319.9486	0.0782	0.0000	321.9046

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018											0.0000	319.9482	319.9482	0.0782	0.0000	321.9042
2019											0.0000	2.4017	2.4017	2.0000e-004	0.0000	2.4066
Maximum											0.0000	319.9482	319.9482	0.0782	0.0000	321.9042

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area											11.3625	4.8987	16.2612	0.0106	8.9000e-004	16.7929
Energy											0.0000	40.8344	40.8344	1.7700e-003	6.8000e-004	41.0813
Mobile											0.0000	116.0055	116.0055	5.2600e-003	0.0000	116.1370
Waste											2.5800	0.0000	2.5800	0.1525	0.0000	6.3919
Water											0.2274	2.6522	2.8796	0.0235	5.9000e-004	3.6441
Total											14.1699	164.3908	178.5607	0.1937	2.1600e-003	184.0472

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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											11.3625	4.8987	16.2612	0.0106	8.9000e-004	16.7929
Energy											0.0000	35.1099	35.1099	1.6300e-003	5.8000e-004	35.3227
Mobile											0.0000	116.0055	116.0055	5.2600e-003	0.0000	116.1370
Waste											2.5800	0.0000	2.5800	0.1525	0.0000	6.3919
Water											0.2274	2.6522	2.8796	0.0235	5.9000e-004	3.6441
Total											14.1699	158.6663	172.8362	0.1935	2.0600e-003	178.2886

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.48	3.21	0.07	4.63	3.13

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	1/1/2019	1/24/2019	5	18	
2	Building Construction	Building Construction	1/18/2018	12/5/2018	5	230	
3	Grading	Grading	1/6/2018	1/17/2018	5	8	
4	Paving	Paving	12/6/2018	12/31/2018	5	18	
5	Site Preparation	Site Preparation	1/1/2018	1/5/2018	5	5	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 40,095; Residential Outdoor: 13,365; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Grading	Excavators	1	8.00	158	0.38
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	2	6.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Paving	Paving Equipment	2	6.00	132	0.36
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	1.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	4.00	1.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

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3.1 Mitigation Measures Construction

3.2 Architectural Coating - 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					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	2.2979	2.2979	1.9000e-004	0.0000	2.3028
Total											0.0000	2.2979	2.2979	1.9000e-004	0.0000	2.3028

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.1037	0.1037	0.0000	0.0000	0.1038
Total											0.0000	0.1037	0.1037	0.0000	0.0000	0.1038

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3.2 Architectural Coating - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	2.2979	2.2979	1.9000e-004	0.0000	2.3028
Total											0.0000	2.2979	2.2979	1.9000e-004	0.0000	2.3028

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.1037	0.1037	0.0000	0.0000	0.1038
Total											0.0000	0.1037	0.1037	0.0000	0.0000	0.1038

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3.3 Building Construction - 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					
Off-Road											0.0000	273.4323	273.4323	0.0670	0.0000	275.1071
Total											0.0000	273.4323	273.4323	0.0670	0.0000	275.1071

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
Vendor											0.0000	2.8409	2.8409	2.4000e-004	0.0000	2.8469
Worker											0.0000	5.4669	5.4669	1.8000e-004	0.0000	5.4714
Total											0.0000	8.3077	8.3077	4.2000e-004	0.0000	8.3183

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3.3 Building Construction - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	273.4320	273.4320	0.0670	0.0000	275.1068
Total											0.0000	273.4320	273.4320	0.0670	0.0000	275.1068

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
Vendor											0.0000	2.8409	2.8409	2.4000e-004	0.0000	2.8469
Worker											0.0000	5.4669	5.4669	1.8000e-004	0.0000	5.4714
Total											0.0000	8.3077	8.3077	4.2000e-004	0.0000	8.3183

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3.4 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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	10.8428	10.8428	3.3800e-003	0.0000	10.9271
Total											0.0000	10.8428	10.8428	3.3800e-003	0.0000	10.9271

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.7131	0.7131	2.0000e-005	0.0000	0.7137
Total											0.0000	0.7131	0.7131	2.0000e-005	0.0000	0.7137

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3.4 Grading - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	10.8427	10.8427	3.3800e-003	0.0000	10.9271
Total											0.0000	10.8427	10.8427	3.3800e-003	0.0000	10.9271

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.7131	0.7131	2.0000e-005	0.0000	0.7137
Total											0.0000	0.7131	0.7131	2.0000e-005	0.0000	0.7137

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3.5 Paving - 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					
Off-Road											0.0000	15.2887	15.2887	4.6300e-003	0.0000	15.4045
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	15.2887	15.2887	4.6300e-003	0.0000	15.4045

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	2.1392	2.1392	7.0000e-005	0.0000	2.1410
Total											0.0000	2.1392	2.1392	7.0000e-005	0.0000	2.1410

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3.5 Paving - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	15.2887	15.2887	4.6300e-003	0.0000	15.4045
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	15.2887	15.2887	4.6300e-003	0.0000	15.4045

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	2.1392	2.1392	7.0000e-005	0.0000	2.1410
Total											0.0000	2.1392	2.1392	7.0000e-005	0.0000	2.1410

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3.6 Site Preparation - 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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	8.6900	8.6900	2.7100e-003	0.0000	8.7576
Total											0.0000	8.6900	8.6900	2.7100e-003	0.0000	8.7576

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.5348	0.5348	2.0000e-005	0.0000	0.5353
Total											0.0000	0.5348	0.5348	2.0000e-005	0.0000	0.5353

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3.6 Site Preparation - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	8.6900	8.6900	2.7100e-003	0.0000	8.7576
Total											0.0000	8.6900	8.6900	2.7100e-003	0.0000	8.7576

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.5348	0.5348	2.0000e-005	0.0000	0.5353
Total											0.0000	0.5348	0.5348	2.0000e-005	0.0000	0.5353

4.0 Operational Detail - Mobile

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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	116.0055	116.0055	5.2600e-003	0.0000	116.1370
Unmitigated											0.0000	116.0055	116.0055	5.2600e-003	0.0000	116.1370

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	110.00	114.51	99.55	403,932	403,932
Total	110.00	114.51	99.55	403,932	403,932

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	16.80	7.10	7.90	41.60	18.80	39.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.615011	0.035959	0.175734	0.096057	0.010793	0.005300	0.020678	0.029891	0.002015	0.001593	0.005502	0.000799	0.000668

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5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	18.4276	18.4276	1.3100e-003	2.7000e-004	18.5413
Electricity Unmitigated											0.0000	19.0411	19.0411	1.3600e-003	2.8000e-004	19.1585
NaturalGas Mitigated											0.0000	16.6823	16.6823	3.2000e-004	3.1000e-004	16.7814
NaturalGas Unmitigated											0.0000	21.7933	21.7933	4.2000e-004	4.0000e-004	21.9228

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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					
Single Family Housing	408390											0.0000	21.7933	21.7933	4.2000e-004	4.0000e-004	21.9228
Total												0.0000	21.7933	21.7933	4.2000e-004	4.0000e-004	21.9228

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					
Single Family Housing	312613											0.0000	16.6823	16.6823	3.2000e-004	3.1000e-004	16.7814
Total												0.0000	16.6823	16.6823	3.2000e-004	3.1000e-004	16.7814

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	103037	19.0411	1.3600e-003	2.8000e-004	19.1585
Total		19.0411	1.3600e-003	2.8000e-004	19.1585

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	99717.7	18.4276	1.3100e-003	2.7000e-004	18.5413
Total		18.4276	1.3100e-003	2.7000e-004	18.5413

6.0 Area Detail

6.1 Mitigation Measures Area

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											11.3625	4.8987	16.2612	0.0106	8.9000e-004	16.7929
Unmitigated											11.3625	4.8987	16.2612	0.0106	8.9000e-004	16.7929

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
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											11.3625	4.7653	16.1278	0.0105	8.9000e-004	16.6563
Landscaping											0.0000	0.1334	0.1334	1.3000e-004	0.0000	0.1366
Total											11.3625	4.8987	16.2612	0.0106	8.9000e-004	16.7929

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											11.3625	4.7653	16.1278	0.0105	8.9000e-004	16.6563
Landscaping											0.0000	0.1334	0.1334	1.3000e-004	0.0000	0.1366
Total											11.3625	4.8987	16.2612	0.0106	8.9000e-004	16.7929

7.0 Water Detail

7.1 Mitigation Measures Water

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	2.8796	0.0235	5.9000e-004	3.6441
Unmitigated	2.8796	0.0235	5.9000e-004	3.6441

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	0.716694 / 0.451829	2.8796	0.0235	5.9000e-004	3.6441
Total		2.8796	0.0235	5.9000e-004	3.6441

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7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	0.716694 / 0.451829	2.8796	0.0235	5.9000e-004	3.6441
Total		2.8796	0.0235	5.9000e-004	3.6441

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	2.5800	0.1525	0.0000	6.3919
Unmitigated	2.5800	0.1525	0.0000	6.3919

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8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	12.71	2.5800	0.1525	0.0000	6.3919
Total		2.5800	0.1525	0.0000	6.3919

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	12.71	2.5800	0.1525	0.0000	6.3919
Total		2.5800	0.1525	0.0000	6.3919

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	34.00	Dwelling Unit	11.04	61,200.00	97

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	10			Operational Year	2050
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	407.41	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

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Project Characteristics - Adjusted RPS 50% goal.

Land Use - .

Construction Phase -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Architectural Coating - SDAPCD Rule 67.0.1 Architectural Coating

Vehicle Trips - SANDAG trip rates

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Area Coating - SDAPCD Rule 67.0.1 Architectural Coating

Energy Use - .

Energy Mitigation - Adjusted Title 24 2016 Standards

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Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	50.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	50
tblAreaCoating	Area_EF_Residential_Exterior	250	50
tblAreaCoating	Area_EF_Residential_Interior	250	50
tblConstructionPhase	PhaseEndDate	12/30/2016	6/14/2019
tblConstructionPhase	PhaseEndDate	12/30/2016	4/19/2019
tblConstructionPhase	PhaseEndDate	12/30/2016	2/23/2018
tblConstructionPhase	PhaseEndDate	12/30/2016	5/17/2019
tblConstructionPhase	PhaseEndDate	12/30/2016	1/12/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	5/18/2019
tblConstructionPhase	PhaseStartDate	12/31/2016	2/24/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	1/13/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	4/20/2019
tblConstructionPhase	PhaseStartDate	12/31/2016	1/1/2018
tblProjectCharacteristics	CO2IntensityFactor	720.49	407.41
tblProjectCharacteristics	OperationalYear	2018	2050
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	ST_TR	9.91	10.41
tblVehicleTrips	SU_TR	8.62	9.05
tblVehicleTrips	WD_TR	9.52	10.00

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2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018											0.0000	396.3980	396.3980	0.0978	0.0000	398.8441
2019											0.0000	127.1918	127.1918	0.0299	0.0000	127.9385
Maximum											0.0000	396.3980	396.3980	0.0978	0.0000	398.8441

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018											0.0000	396.3976	396.3976	0.0978	0.0000	398.8437
2019											0.0000	127.1917	127.1917	0.0299	0.0000	127.9384
Maximum											0.0000	396.3976	396.3976	0.0978	0.0000	398.8437

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area											35.1206	15.1414	50.2620	0.0328	2.7600e-003	51.9053
Energy											0.0000	126.2153	126.2153	5.4800e-003	2.1000e-003	126.9786
Mobile											0.0000	539.2587	539.2587	0.0288	0.0000	539.9774
Waste											8.0730	0.0000	8.0730	0.4771	0.0000	20.0004
Water											0.7028	8.1977	8.9005	0.0728	1.8300e-003	11.2636
Total											43.8963	688.8131	732.7094	0.6169	6.6900e-003	750.1252

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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											35.1206	15.1414	50.2620	0.0328	2.7600e-003	51.9053
Energy											0.0000	108.5215	108.5215	5.0400e-003	1.7800e-003	109.1792
Mobile											0.0000	539.2587	539.2587	0.0288	0.0000	539.9774
Waste											8.0730	0.0000	8.0730	0.4771	0.0000	20.0004
Water											0.7028	8.1977	8.9005	0.0728	1.8300e-003	11.2636
Total											43.8963	671.1193	715.0156	0.6165	6.3700e-003	732.3258

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.57	2.41	0.07	4.78	2.37

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	5/18/2019	6/14/2019	5	20	
2	Building Construction	Building Construction	2/24/2018	4/19/2019	5	300	
3	Grading	Grading	1/13/2018	2/23/2018	5	30	
4	Paving	Paving	4/20/2019	5/17/2019	5	20	
5	Site Preparation	Site Preparation	1/1/2018	1/12/2018	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 0

Residential Indoor: 123,930; Residential Outdoor: 41,310; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Grading	Excavators	2	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	2.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	12.00	4.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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3.2 Architectural Coating - 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					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5587
Total											0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5587

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.2305	0.2305	1.0000e-005	0.0000	0.2307
Total											0.0000	0.2305	0.2305	1.0000e-005	0.0000	0.2307

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3.2 Architectural Coating - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5586
Total											0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5586

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.2305	0.2305	1.0000e-005	0.0000	0.2307
Total											0.0000	0.2305	0.2305	1.0000e-005	0.0000	0.2307

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3.3 Building Construction - 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					
Off-Road											0.0000	262.7328	262.7328	0.0644	0.0000	264.3420
Total											0.0000	262.7328	262.7328	0.0644	0.0000	264.3420

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
Vendor											0.0000	10.9188	10.9188	9.3000e-004	0.0000	10.9420
Worker											0.0000	15.7588	15.7588	5.3000e-004	0.0000	15.7720
Total											0.0000	26.6776	26.6776	1.4600e-003	0.0000	26.7140

North County 18A Unmitigated - GHG Only - San Diego County, Annual

3.3 Building Construction - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	262.7325	262.7325	0.0644	0.0000	264.3417
Total											0.0000	262.7325	262.7325	0.0644	0.0000	264.3417

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
Vendor											0.0000	10.9188	10.9188	9.3000e-004	0.0000	10.9420
Worker											0.0000	15.7588	15.7588	5.3000e-004	0.0000	15.7720
Total											0.0000	26.6776	26.6776	1.4600e-003	0.0000	26.7140

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3.3 Building Construction - 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											0.0000	92.8662	92.8662	0.0226	0.0000	93.4317
Total											0.0000	92.8662	92.8662	0.0226	0.0000	93.4317

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
Vendor											0.0000	3.8747	3.8747	3.2000e-004	0.0000	3.8828
Worker											0.0000	5.4632	5.4632	1.7000e-004	0.0000	5.4674
Total											0.0000	9.3379	9.3379	4.9000e-004	0.0000	9.3502

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3.3 Building Construction - 2019

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											0.0000	92.8661	92.8661	0.0226	0.0000	93.4316
Total											0.0000	92.8661	92.8661	0.0226	0.0000	93.4316

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
Vendor											0.0000	3.8747	3.8747	3.2000e-004	0.0000	3.8828
Worker											0.0000	5.4632	5.4632	1.7000e-004	0.0000	5.4674
Total											0.0000	9.3379	9.3379	4.9000e-004	0.0000	9.3502

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3.4 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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	84.9728	84.9728	0.0265	0.0000	85.6341
Total											0.0000	84.9728	84.9728	0.0265	0.0000	85.6341

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	3.5653	3.5653	1.2000e-004	0.0000	3.5683
Total											0.0000	3.5653	3.5653	1.2000e-004	0.0000	3.5683

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3.4 Grading - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	84.9727	84.9727	0.0265	0.0000	85.6340
Total											0.0000	84.9727	84.9727	0.0265	0.0000	85.6340

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	3.5653	3.5653	1.2000e-004	0.0000	3.5683
Total											0.0000	3.5653	3.5653	1.2000e-004	0.0000	3.5683

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3.5 Paving - 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											0.0000	20.4752	20.4752	6.4800e-003	0.0000	20.6371
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	20.4752	20.4752	6.4800e-003	0.0000	20.6371

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.7288	1.7288	5.0000e-005	0.0000	1.7302
Total											0.0000	1.7288	1.7288	5.0000e-005	0.0000	1.7302

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3.5 Paving - 2019

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											0.0000	20.4752	20.4752	6.4800e-003	0.0000	20.6371
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	20.4752	20.4752	6.4800e-003	0.0000	20.6371

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.7288	1.7288	5.0000e-005	0.0000	1.7302
Total											0.0000	1.7288	1.7288	5.0000e-005	0.0000	1.7302

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3.6 Site Preparation - 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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	17.3800	17.3800	5.4100e-003	0.0000	17.5152
Total											0.0000	17.3800	17.3800	5.4100e-003	0.0000	17.5152

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.0696	1.0696	4.0000e-005	0.0000	1.0705
Total											0.0000	1.0696	1.0696	4.0000e-005	0.0000	1.0705

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3.6 Site Preparation - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	17.3799	17.3799	5.4100e-003	0.0000	17.5152
Total											0.0000	17.3799	17.3799	5.4100e-003	0.0000	17.5152

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.0696	1.0696	4.0000e-005	0.0000	1.0705
Total											0.0000	1.0696	1.0696	4.0000e-005	0.0000	1.0705

4.0 Operational Detail - Mobile

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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	539.2587	539.2587	0.0288	0.0000	539.9774
Unmitigated											0.0000	539.2587	539.2587	0.0288	0.0000	539.9774

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	340.00	353.94	307.70	1,248,518	1,248,518
Total	340.00	353.94	307.70	1,248,518	1,248,518

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	16.80	7.10	7.90	41.60	18.80	39.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.615011	0.035959	0.175734	0.096057	0.010793	0.005300	0.020678	0.029891	0.002015	0.001593	0.005502	0.000799	0.000668

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5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	56.9582	56.9582	4.0500e-003	8.4000e-004	57.3095
Electricity Unmitigated											0.0000	58.8542	58.8542	4.1900e-003	8.7000e-004	59.2173
NaturalGas Mitigated											0.0000	51.5633	51.5633	9.9000e-004	9.5000e-004	51.8697
NaturalGas Unmitigated											0.0000	67.3610	67.3610	1.2900e-003	1.2300e-003	67.7613

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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					
Single Family Housing	1.2623e+006											0.0000	67.3610	67.3610	1.2900e-003	1.2300e-003	67.7613
Total												0.0000	67.3610	67.3610	1.2900e-003	1.2300e-003	67.7613

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					
Single Family Housing	966260											0.0000	51.5633	51.5633	9.9000e-004	9.5000e-004	51.8697
Total												0.0000	51.5633	51.5633	9.9000e-004	9.5000e-004	51.8697

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	318479	58.8542	4.1900e-003	8.7000e-004	59.2173
Total		58.8542	4.1900e-003	8.7000e-004	59.2173

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	308218	56.9582	4.0500e-003	8.4000e-004	57.3095
Total		56.9582	4.0500e-003	8.4000e-004	57.3095

6.0 Area Detail

6.1 Mitigation Measures Area

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											35.1206	15.1414	50.2620	0.0328	2.7600e-003	51.9053
Unmitigated											35.1206	15.1414	50.2620	0.0328	2.7600e-003	51.9053

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
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											35.1206	14.7291	49.8496	0.0324	2.7600e-003	51.4831
Landscaping											0.0000	0.4124	0.4124	3.9000e-004	0.0000	0.4222
Total											35.1206	15.1414	50.2620	0.0328	2.7600e-003	51.9053

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											35.1206	14.7291	49.8496	0.0324	2.7600e-003	51.4831
Landscaping											0.0000	0.4124	0.4124	3.9000e-004	0.0000	0.4222
Total											35.1206	15.1414	50.2620	0.0328	2.7600e-003	51.9053

7.0 Water Detail

7.1 Mitigation Measures Water

North County 18A Unmitigated - GHG Only - San Diego County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	8.9005	0.0728	1.8300e-003	11.2636
Unmitigated	8.9005	0.0728	1.8300e-003	11.2636

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	2.21524 / 1.39656	8.9005	0.0728	1.8300e-003	11.2636
Total		8.9005	0.0728	1.8300e-003	11.2636

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7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	2.21524 / 1.39656	8.9005	0.0728	1.8300e-003	11.2636
Total		8.9005	0.0728	1.8300e-003	11.2636

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	8.0730	0.4771	0.0000	20.0004
Unmitigated	8.0730	0.4771	0.0000	20.0004

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8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	39.77	8.0730	0.4771	0.0000	20.0004
Total		8.0730	0.4771	0.0000	20.0004

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	39.77	8.0730	0.4771	0.0000	20.0004
Total		8.0730	0.4771	0.0000	20.0004

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

North County 22 Unmitigated - GHG Only - San Diego County, Annual

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	52.00	Dwelling Unit	16.88	93,600.00	149

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	10			Operational Year	2050
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	407.41	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

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Project Characteristics - Adjusted RPS 50% goal.

Land Use - .

Construction Phase -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Architectural Coating - SDAPCD Rule 67.0.1 Architectural Coating

Vehicle Trips - SANDAG trip rates

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Area Coating - SDAPCD Rule 67.0.1 Architectural Coating

Energy Use - .

Energy Mitigation - Adjusted 2016 Title 24 Standards

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Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	50.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	50
tblAreaCoating	Area_EF_Residential_Exterior	250	50
tblAreaCoating	Area_EF_Residential_Interior	250	50
tblConstructionPhase	PhaseEndDate	12/30/2016	6/14/2019
tblConstructionPhase	PhaseEndDate	12/30/2016	4/19/2019
tblConstructionPhase	PhaseEndDate	12/30/2016	2/23/2018
tblConstructionPhase	PhaseEndDate	12/30/2016	5/17/2019
tblConstructionPhase	PhaseEndDate	12/30/2016	1/12/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	5/18/2019
tblConstructionPhase	PhaseStartDate	12/31/2016	2/24/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	1/13/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	4/20/2019
tblConstructionPhase	PhaseStartDate	12/31/2016	1/1/2018
tblProjectCharacteristics	CO2IntensityFactor	720.49	407.41
tblProjectCharacteristics	OperationalYear	2018	2050
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	ST_TR	9.91	10.41
tblVehicleTrips	SU_TR	8.62	9.05
tblVehicleTrips	WD_TR	9.52	10.00

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2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018											0.0000	411.0500	411.0500	0.0986	0.0000	413.5155
2019											0.0000	132.5465	132.5465	0.0301	0.0000	133.2999
Maximum											0.0000	411.0500	411.0500	0.0986	0.0000	413.5155

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018											0.0000	411.0496	411.0496	0.0986	0.0000	413.5150
2019											0.0000	132.5464	132.5464	0.0301	0.0000	133.2998
Maximum											0.0000	411.0496	411.0496	0.0986	0.0000	413.5150

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area											53.7138	23.1575	76.8713	0.0502	4.2200e-003	79.3846
Energy											0.0000	193.0351	193.0351	8.3800e-003	3.2100e-003	194.2025
Mobile											0.0000	548.3896	548.3896	0.0249	0.0000	549.0114
Waste											12.4007	0.0000	12.4007	0.7329	0.0000	30.7223
Water											1.0749	12.5377	13.6125	0.1113	2.7900e-003	17.2267
Total											67.1894	777.1199	844.3093	0.9276	0.0102	870.5474

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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											53.7138	23.1575	76.8713	0.0502	4.2200e-003	79.3846
Energy											0.0000	165.9740	165.9740	7.7100e-003	2.7300e-003	166.9800
Mobile											0.0000	548.3896	548.3896	0.0249	0.0000	549.0114
Waste											12.4007	0.0000	12.4007	0.7329	0.0000	30.7223
Water											1.0749	12.5377	13.6125	0.1113	2.7900e-003	17.2267
Total											67.1894	750.0588	817.2482	0.9269	9.7400e-003	843.3248

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.48	3.21	0.07	4.70	3.13

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	5/18/2019	6/14/2019	5	20	
2	Building Construction	Building Construction	2/24/2018	4/19/2019	5	300	
3	Grading	Grading	1/13/2018	2/23/2018	5	30	
4	Paving	Paving	4/20/2019	5/17/2019	5	20	
5	Site Preparation	Site Preparation	1/1/2018	1/12/2018	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 0

Residential Indoor: 189,540; Residential Outdoor: 63,180; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Grading	Excavators	2	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	4.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	19.00	6.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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3.2 Architectural Coating - 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					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5587
Total											0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5587

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.4610	0.4610	1.0000e-005	0.0000	0.4614
Total											0.0000	0.4610	0.4610	1.0000e-005	0.0000	0.4614

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3.2 Architectural Coating - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5586
Total											0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5586

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.4610	0.4610	1.0000e-005	0.0000	0.4614
Total											0.0000	0.4610	0.4610	1.0000e-005	0.0000	0.4614

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3.3 Building Construction - 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					
Off-Road											0.0000	262.7328	262.7328	0.0644	0.0000	264.3420
Total											0.0000	262.7328	262.7328	0.0644	0.0000	264.3420

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
Vendor											0.0000	16.3781	16.3781	1.4000e-003	0.0000	16.4131
Worker											0.0000	24.9515	24.9515	8.3000e-004	0.0000	24.9723
Total											0.0000	41.3296	41.3296	2.2300e-003	0.0000	41.3853

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3.3 Building Construction - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	262.7325	262.7325	0.0644	0.0000	264.3417
Total											0.0000	262.7325	262.7325	0.0644	0.0000	264.3417

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
Vendor											0.0000	16.3781	16.3781	1.4000e-003	0.0000	16.4131
Worker											0.0000	24.9515	24.9515	8.3000e-004	0.0000	24.9723
Total											0.0000	41.3296	41.3296	2.2300e-003	0.0000	41.3853

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3.3 Building Construction - 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											0.0000	92.8662	92.8662	0.0226	0.0000	93.4317
Total											0.0000	92.8662	92.8662	0.0226	0.0000	93.4317

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
Vendor											0.0000	5.8121	5.8121	4.8000e-004	0.0000	5.8241
Worker											0.0000	8.6500	8.6500	2.7000e-004	0.0000	8.6567
Total											0.0000	14.4620	14.4620	7.5000e-004	0.0000	14.4808

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3.3 Building Construction - 2019

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											0.0000	92.8661	92.8661	0.0226	0.0000	93.4316
Total											0.0000	92.8661	92.8661	0.0226	0.0000	93.4316

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
Vendor											0.0000	5.8121	5.8121	4.8000e-004	0.0000	5.8241
Worker											0.0000	8.6500	8.6500	2.7000e-004	0.0000	8.6567
Total											0.0000	14.4620	14.4620	7.5000e-004	0.0000	14.4808

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3.4 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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	84.9728	84.9728	0.0265	0.0000	85.6341
Total											0.0000	84.9728	84.9728	0.0265	0.0000	85.6341

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	3.5653	3.5653	1.2000e-004	0.0000	3.5683
Total											0.0000	3.5653	3.5653	1.2000e-004	0.0000	3.5683

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3.4 Grading - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	84.9727	84.9727	0.0265	0.0000	85.6340
Total											0.0000	84.9727	84.9727	0.0265	0.0000	85.6340

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	3.5653	3.5653	1.2000e-004	0.0000	3.5683
Total											0.0000	3.5653	3.5653	1.2000e-004	0.0000	3.5683

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3.5 Paving - 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											0.0000	20.4752	20.4752	6.4800e-003	0.0000	20.6371
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	20.4752	20.4752	6.4800e-003	0.0000	20.6371

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.7288	1.7288	5.0000e-005	0.0000	1.7302
Total											0.0000	1.7288	1.7288	5.0000e-005	0.0000	1.7302

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3.5 Paving - 2019

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											0.0000	20.4752	20.4752	6.4800e-003	0.0000	20.6371
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	20.4752	20.4752	6.4800e-003	0.0000	20.6371

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.7288	1.7288	5.0000e-005	0.0000	1.7302
Total											0.0000	1.7288	1.7288	5.0000e-005	0.0000	1.7302

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3.6 Site Preparation - 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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	17.3800	17.3800	5.4100e-003	0.0000	17.5152
Total											0.0000	17.3800	17.3800	5.4100e-003	0.0000	17.5152

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.0696	1.0696	4.0000e-005	0.0000	1.0705
Total											0.0000	1.0696	1.0696	4.0000e-005	0.0000	1.0705

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3.6 Site Preparation - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	17.3799	17.3799	5.4100e-003	0.0000	17.5152
Total											0.0000	17.3799	17.3799	5.4100e-003	0.0000	17.5152

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.0696	1.0696	4.0000e-005	0.0000	1.0705
Total											0.0000	1.0696	1.0696	4.0000e-005	0.0000	1.0705

4.0 Operational Detail - Mobile

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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	548.3896	548.3896	0.0249	0.0000	549.0114
Unmitigated											0.0000	548.3896	548.3896	0.0249	0.0000	549.0114

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	520.00	541.32	470.60	1,909,499	1,909,499
Total	520.00	541.32	470.60	1,909,499	1,909,499

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	16.80	7.10	7.90	41.60	18.80	39.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.615011	0.035959	0.175734	0.096057	0.010793	0.005300	0.020678	0.029891	0.002015	0.001593	0.005502	0.000799	0.000668

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5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	87.1125	87.1125	6.2000e-003	1.2800e-003	87.6498
Electricity Unmitigated											0.0000	90.0124	90.0124	6.4100e-003	1.3300e-003	90.5676
NaturalGas Mitigated											0.0000	78.8615	78.8615	1.5100e-003	1.4500e-003	79.3302
NaturalGas Unmitigated											0.0000	103.0227	103.0227	1.9700e-003	1.8900e-003	103.6349

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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					
Single Family Housing	1.93057e+006											0.0000	103.0227	103.0227	1.9700e-003	1.8900e-003	103.6349
Total												0.0000	103.0227	103.0227	1.9700e-003	1.8900e-003	103.6349

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					
Single Family Housing	1.47781e+006											0.0000	78.8615	78.8615	1.5100e-003	1.4500e-003	79.3302
Total												0.0000	78.8615	78.8615	1.5100e-003	1.4500e-003	79.3302

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	487085	90.0124	6.4100e-003	1.3300e-003	90.5676
Total		90.0124	6.4100e-003	1.3300e-003	90.5676

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	471393	87.1125	6.2000e-003	1.2800e-003	87.6498
Total		87.1125	6.2000e-003	1.2800e-003	87.6498

6.0 Area Detail

6.1 Mitigation Measures Area

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											53.7138	23.1575	76.8713	0.0502	4.2200e-003	79.3846
Unmitigated											53.7138	23.1575	76.8713	0.0502	4.2200e-003	79.3846

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
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											53.7138	22.5268	76.2406	0.0496	4.2200e-003	78.7389
Landscaping											0.0000	0.6307	0.6307	6.0000e-004	0.0000	0.6457
Total											53.7138	23.1575	76.8713	0.0502	4.2200e-003	79.3846

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											53.7138	22.5268	76.2406	0.0496	4.2200e-003	78.7389
Landscaping											0.0000	0.6307	0.6307	6.0000e-004	0.0000	0.6457
Total											53.7138	23.1575	76.8713	0.0502	4.2200e-003	79.3846

7.0 Water Detail

7.1 Mitigation Measures Water

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	13.6125	0.1113	2.7900e-003	17.2267
Unmitigated	13.6125	0.1113	2.7900e-003	17.2267

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	3.38801 / 2.13592	13.6125	0.1113	2.7900e-003	17.2267
Total		13.6125	0.1113	2.7900e-003	17.2267

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7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	3.38801 / 2.13592	13.6125	0.1113	2.7900e-003	17.2267
Total		13.6125	0.1113	2.7900e-003	17.2267

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	12.4007	0.7329	0.0000	30.7223
Unmitigated	12.4007	0.7329	0.0000	30.7223

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8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	61.09	12.4007	0.7329	0.0000	30.7223
Total		12.4007	0.7329	0.0000	30.7223

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	61.09	12.4007	0.7329	0.0000	30.7223
Total		12.4007	0.7329	0.0000	30.7223

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	12.00	Dwelling Unit	3.90	21,600.00	34

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	10			Operational Year	2050
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	407.41	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

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Project Characteristics - Adjusted RPS 50% goal.

Land Use - .

Construction Phase -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Architectural Coating - SDAPCD Rule 67.0.1 Architectural Coating

Vehicle Trips - SANDAG trip rates

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Area Coating - SDAPCD Rule 67.0.1 architectural coating

Energy Use - .

Energy Mitigation - Adjusted Title 24 2016 Standards

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Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	50.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	50
tblAreaCoating	Area_EF_Residential_Exterior	250	50
tblAreaCoating	Area_EF_Residential_Interior	250	50
tblConstructionPhase	PhaseEndDate	12/30/2016	1/24/2019
tblConstructionPhase	PhaseEndDate	12/30/2016	12/5/2018
tblConstructionPhase	PhaseEndDate	12/30/2016	1/17/2018
tblConstructionPhase	PhaseEndDate	12/30/2016	12/31/2018
tblConstructionPhase	PhaseEndDate	12/30/2016	1/5/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	1/1/2019
tblConstructionPhase	PhaseStartDate	12/31/2016	1/18/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	1/6/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	12/6/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	1/1/2018
tblProjectCharacteristics	CO2IntensityFactor	720.49	407.41
tblProjectCharacteristics	OperationalYear	2018	2050
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	ST_TR	9.91	10.41
tblVehicleTrips	SU_TR	8.62	9.05
tblVehicleTrips	WD_TR	9.52	10.00

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2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018											0.0000	319.9486	319.9486	0.0782	0.0000	321.9046
2019											0.0000	2.4017	2.4017	2.0000e-004	0.0000	2.4066
Maximum											0.0000	319.9486	319.9486	0.0782	0.0000	321.9046

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018											0.0000	319.9482	319.9482	0.0782	0.0000	321.9042
2019											0.0000	2.4017	2.4017	2.0000e-004	0.0000	2.4066
Maximum											0.0000	319.9482	319.9482	0.0782	0.0000	321.9042

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area											12.3955	5.3440	17.7395	0.0116	9.7000e-004	18.3195
Energy											0.0000	44.5466	44.5466	1.9300e-003	7.4000e-004	44.8160
Mobile											0.0000	190.3266	190.3266	0.0102	0.0000	190.5803
Waste											2.8297	0.0000	2.8297	0.1672	0.0000	7.0105
Water											0.2480	2.8933	3.1414	0.0257	6.4000e-004	3.9754
Total											15.4732	243.1105	258.5837	0.2166	2.3500e-003	264.7016

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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											12.3955	5.3440	17.7395	0.0116	9.7000e-004	18.3195
Energy											0.0000	38.3017	38.3017	1.7800e-003	6.3000e-004	38.5338
Mobile											0.0000	190.3266	190.3266	0.0102	0.0000	190.5803
Waste											2.8297	0.0000	2.8297	0.1672	0.0000	7.0105
Water											0.2480	2.8933	3.1414	0.0257	6.4000e-004	3.9754
Total											15.4732	236.8656	252.3389	0.2164	2.2400e-003	258.4194

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.57	2.42	0.07	4.68	2.37

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	1/1/2019	1/24/2019	5	18	
2	Building Construction	Building Construction	1/18/2018	12/5/2018	5	230	
3	Grading	Grading	1/6/2018	1/17/2018	5	8	
4	Paving	Paving	12/6/2018	12/31/2018	5	18	
5	Site Preparation	Site Preparation	1/1/2018	1/5/2018	5	5	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 43,740; Residential Outdoor: 14,580; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Grading	Excavators	1	8.00	158	0.38
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	2	6.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Paving	Paving Equipment	2	6.00	132	0.36
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	1.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	4.00	1.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

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3.1 Mitigation Measures Construction

3.2 Architectural Coating - 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					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	2.2979	2.2979	1.9000e-004	0.0000	2.3028
Total											0.0000	2.2979	2.2979	1.9000e-004	0.0000	2.3028

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.1037	0.1037	0.0000	0.0000	0.1038
Total											0.0000	0.1037	0.1037	0.0000	0.0000	0.1038

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3.2 Architectural Coating - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	2.2979	2.2979	1.9000e-004	0.0000	2.3028
Total											0.0000	2.2979	2.2979	1.9000e-004	0.0000	2.3028

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.1037	0.1037	0.0000	0.0000	0.1038
Total											0.0000	0.1037	0.1037	0.0000	0.0000	0.1038

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3.3 Building Construction - 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					
Off-Road											0.0000	273.4323	273.4323	0.0670	0.0000	275.1071
Total											0.0000	273.4323	273.4323	0.0670	0.0000	275.1071

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
Vendor											0.0000	2.8409	2.8409	2.4000e-004	0.0000	2.8469
Worker											0.0000	5.4669	5.4669	1.8000e-004	0.0000	5.4714
Total											0.0000	8.3077	8.3077	4.2000e-004	0.0000	8.3183

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3.3 Building Construction - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	273.4320	273.4320	0.0670	0.0000	275.1068
Total											0.0000	273.4320	273.4320	0.0670	0.0000	275.1068

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
Vendor											0.0000	2.8409	2.8409	2.4000e-004	0.0000	2.8469
Worker											0.0000	5.4669	5.4669	1.8000e-004	0.0000	5.4714
Total											0.0000	8.3077	8.3077	4.2000e-004	0.0000	8.3183

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3.4 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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	10.8428	10.8428	3.3800e-003	0.0000	10.9271
Total											0.0000	10.8428	10.8428	3.3800e-003	0.0000	10.9271

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.7131	0.7131	2.0000e-005	0.0000	0.7137
Total											0.0000	0.7131	0.7131	2.0000e-005	0.0000	0.7137

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3.4 Grading - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	10.8427	10.8427	3.3800e-003	0.0000	10.9271
Total											0.0000	10.8427	10.8427	3.3800e-003	0.0000	10.9271

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.7131	0.7131	2.0000e-005	0.0000	0.7137
Total											0.0000	0.7131	0.7131	2.0000e-005	0.0000	0.7137

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3.5 Paving - 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					
Off-Road											0.0000	15.2887	15.2887	4.6300e-003	0.0000	15.4045
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	15.2887	15.2887	4.6300e-003	0.0000	15.4045

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	2.1392	2.1392	7.0000e-005	0.0000	2.1410
Total											0.0000	2.1392	2.1392	7.0000e-005	0.0000	2.1410

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3.5 Paving - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	15.2887	15.2887	4.6300e-003	0.0000	15.4045
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	15.2887	15.2887	4.6300e-003	0.0000	15.4045

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	2.1392	2.1392	7.0000e-005	0.0000	2.1410
Total											0.0000	2.1392	2.1392	7.0000e-005	0.0000	2.1410

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3.6 Site Preparation - 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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	8.6900	8.6900	2.7100e-003	0.0000	8.7576
Total											0.0000	8.6900	8.6900	2.7100e-003	0.0000	8.7576

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.5348	0.5348	2.0000e-005	0.0000	0.5353
Total											0.0000	0.5348	0.5348	2.0000e-005	0.0000	0.5353

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3.6 Site Preparation - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	8.6900	8.6900	2.7100e-003	0.0000	8.7576
Total											0.0000	8.6900	8.6900	2.7100e-003	0.0000	8.7576

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.5348	0.5348	2.0000e-005	0.0000	0.5353
Total											0.0000	0.5348	0.5348	2.0000e-005	0.0000	0.5353

4.0 Operational Detail - Mobile

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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	190.3266	190.3266	0.0102	0.0000	190.5803
Unmitigated											0.0000	190.3266	190.3266	0.0102	0.0000	190.5803

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	120.00	124.92	108.60	440,654	440,654
Total	120.00	124.92	108.60	440,654	440,654

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	16.80	7.10	7.90	41.60	18.80	39.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.615011	0.035959	0.175734	0.096057	0.010793	0.005300	0.020678	0.029891	0.002015	0.001593	0.005502	0.000799	0.000668

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5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	20.1029	20.1029	1.4300e-003	3.0000e-004	20.2269
Electricity Unmitigated											0.0000	20.7721	20.7721	1.4800e-003	3.1000e-004	20.9002
NaturalGas Mitigated											0.0000	18.1988	18.1988	3.5000e-004	3.3000e-004	18.3070
NaturalGas Unmitigated											0.0000	23.7745	23.7745	4.6000e-004	4.4000e-004	23.9158

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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					
Single Family Housing	445517											0.0000	23.7745	23.7745	4.6000e-004	4.4000e-004	23.9158
Total												0.0000	23.7745	23.7745	4.6000e-004	4.4000e-004	23.9158

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					
Single Family Housing	341033											0.0000	18.1988	18.1988	3.5000e-004	3.3000e-004	18.3070
Total												0.0000	18.1988	18.1988	3.5000e-004	3.3000e-004	18.3070

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	112404	20.7721	1.4800e-003	3.1000e-004	20.9002
Total		20.7721	1.4800e-003	3.1000e-004	20.9002

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	108783	20.1029	1.4300e-003	3.0000e-004	20.2269
Total		20.1029	1.4300e-003	3.0000e-004	20.2269

6.0 Area Detail

6.1 Mitigation Measures Area

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											12.3955	5.3440	17.7395	0.0116	9.7000e-004	18.3195
Unmitigated											12.3955	5.3440	17.7395	0.0116	9.7000e-004	18.3195

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
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											12.3955	5.1985	17.5940	0.0114	9.7000e-004	18.1705
Landscaping											0.0000	0.1456	0.1456	1.4000e-004	0.0000	0.1490
Total											12.3955	5.3440	17.7395	0.0116	9.7000e-004	18.3195

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											12.3955	5.1985	17.5940	0.0114	9.7000e-004	18.1705
Landscaping											0.0000	0.1456	0.1456	1.4000e-004	0.0000	0.1490
Total											12.3955	5.3440	17.7395	0.0116	9.7000e-004	18.3195

7.0 Water Detail

7.1 Mitigation Measures Water

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	3.1414	0.0257	6.4000e-004	3.9754
Unmitigated	3.1414	0.0257	6.4000e-004	3.9754

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	0.781848 / 0.492904	3.1414	0.0257	6.4000e-004	3.9754
Total		3.1414	0.0257	6.4000e-004	3.9754

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7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	0.781848 / 0.492904	3.1414	0.0257	6.4000e-004	3.9754
Total		3.1414	0.0257	6.4000e-004	3.9754

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	2.8297	0.1672	0.0000	7.0105
Unmitigated	2.8297	0.1672	0.0000	7.0105

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8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	13.94	2.8297	0.1672	0.0000	7.0105
Total		2.8297	0.1672	0.0000	7.0105

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	13.94	2.8297	0.1672	0.0000	7.0105
Total		2.8297	0.1672	0.0000	7.0105

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	38.00	Dwelling Unit	12.34	68,400.00	109

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	10			Operational Year	2050
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	407.41	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

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Project Characteristics - Adjusted RPS 50% goal.

Land Use - .

Construction Phase -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Architectural Coating - SDAPCD Rule 67.0.1 Architectural Coating

Vehicle Trips - SANDAG trip rate

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Area Coating - SDAPCD Rule 67.0.1 Architectural Coating

Energy Use - .

Energy Mitigation - Adjusted Title 24 2016 Standards.

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Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	50.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	50
tblAreaCoating	Area_EF_Residential_Exterior	250	50
tblAreaCoating	Area_EF_Residential_Interior	250	50
tblConstructionPhase	PhaseEndDate	12/30/2016	6/14/2019
tblConstructionPhase	PhaseEndDate	12/30/2016	4/19/2019
tblConstructionPhase	PhaseEndDate	12/30/2016	2/23/2018
tblConstructionPhase	PhaseEndDate	12/30/2016	5/17/2019
tblConstructionPhase	PhaseEndDate	12/30/2016	1/12/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	5/18/2019
tblConstructionPhase	PhaseStartDate	12/31/2016	2/24/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	1/13/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	4/20/2019
tblConstructionPhase	PhaseStartDate	12/31/2016	1/1/2018
tblProjectCharacteristics	CO2IntensityFactor	720.49	407.41
tblProjectCharacteristics	OperationalYear	2018	2050
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	ST_TR	9.91	10.41
tblVehicleTrips	SU_TR	8.62	9.05
tblVehicleTrips	WD_TR	9.52	10.00

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2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018											0.0000	399.0245	399.0245	0.0979	0.0000	401.4728
2019											0.0000	128.2176	128.2176	0.0299	0.0000	128.9651
Maximum											0.0000	399.0245	399.0245	0.0979	0.0000	401.4728

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018											0.0000	399.0241	399.0241	0.0979	0.0000	401.4724
2019											0.0000	128.2175	128.2175	0.0299	0.0000	128.9650
Maximum											0.0000	399.0241	399.0241	0.0979	0.0000	401.4724

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area											39.2524	16.9228	56.1752	0.0367	3.0900e-003	58.0118
Energy											0.0000	141.0641	141.0641	6.1300e-003	2.3500e-003	141.9172
Mobile											0.0000	400.7463	400.7463	0.0182	0.0000	401.2007
Waste											9.0717	0.0000	9.0717	0.5361	0.0000	22.4747
Water											0.7855	9.1622	9.9476	0.0813	2.0400e-003	12.5887
Total											49.1095	567.8953	617.0048	0.6784	7.4800e-003	636.1931

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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											39.2524	16.9228	56.1752	0.0367	3.0900e-003	58.0118
Energy											0.0000	121.2887	121.2887	5.6400e-003	1.9900e-003	122.0238
Mobile											0.0000	400.7463	400.7463	0.0182	0.0000	401.2007
Waste											9.0717	0.0000	9.0717	0.5361	0.0000	22.4747
Water											0.7855	9.1622	9.9476	0.0813	2.0400e-003	12.5887
Total											49.1095	548.1199	597.2294	0.6779	7.1200e-003	616.2996

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.48	3.21	0.07	4.81	3.13

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	5/18/2019	6/14/2019	5	20	
2	Building Construction	Building Construction	2/24/2018	4/19/2019	5	300	
3	Grading	Grading	1/13/2018	2/23/2018	5	30	
4	Paving	Paving	4/20/2019	5/17/2019	5	20	
5	Site Preparation	Site Preparation	1/1/2018	1/12/2018	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 0

Residential Indoor: 138,510; Residential Outdoor: 46,170; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Grading	Excavators	2	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	3.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	14.00	4.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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3.2 Architectural Coating - 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					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5587
Total											0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5587

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.3458	0.3458	1.0000e-005	0.0000	0.3460
Total											0.0000	0.3458	0.3458	1.0000e-005	0.0000	0.3460

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3.2 Architectural Coating - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5586
Total											0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5586

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.3458	0.3458	1.0000e-005	0.0000	0.3460
Total											0.0000	0.3458	0.3458	1.0000e-005	0.0000	0.3460

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3.3 Building Construction - 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					
Off-Road											0.0000	262.7328	262.7328	0.0644	0.0000	264.3420
Total											0.0000	262.7328	262.7328	0.0644	0.0000	264.3420

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
Vendor											0.0000	10.9188	10.9188	9.3000e-004	0.0000	10.9420
Worker											0.0000	18.3853	18.3853	6.1000e-004	0.0000	18.4006
Total											0.0000	29.3040	29.3040	1.5400e-003	0.0000	29.3427

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3.3 Building Construction - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	262.7325	262.7325	0.0644	0.0000	264.3417
Total											0.0000	262.7325	262.7325	0.0644	0.0000	264.3417

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
Vendor											0.0000	10.9188	10.9188	9.3000e-004	0.0000	10.9420
Worker											0.0000	18.3853	18.3853	6.1000e-004	0.0000	18.4006
Total											0.0000	29.3040	29.3040	1.5400e-003	0.0000	29.3427

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3.3 Building Construction - 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											0.0000	92.8662	92.8662	0.0226	0.0000	93.4317
Total											0.0000	92.8662	92.8662	0.0226	0.0000	93.4317

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
Vendor											0.0000	3.8747	3.8747	3.2000e-004	0.0000	3.8828
Worker											0.0000	6.3737	6.3737	2.0000e-004	0.0000	6.3786
Total											0.0000	10.2484	10.2484	5.2000e-004	0.0000	10.2614

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3.3 Building Construction - 2019

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											0.0000	92.8661	92.8661	0.0226	0.0000	93.4316
Total											0.0000	92.8661	92.8661	0.0226	0.0000	93.4316

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
Vendor											0.0000	3.8747	3.8747	3.2000e-004	0.0000	3.8828
Worker											0.0000	6.3737	6.3737	2.0000e-004	0.0000	6.3786
Total											0.0000	10.2484	10.2484	5.2000e-004	0.0000	10.2614

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3.4 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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	84.9728	84.9728	0.0265	0.0000	85.6341
Total											0.0000	84.9728	84.9728	0.0265	0.0000	85.6341

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	3.5653	3.5653	1.2000e-004	0.0000	3.5683
Total											0.0000	3.5653	3.5653	1.2000e-004	0.0000	3.5683

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3.4 Grading - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	84.9727	84.9727	0.0265	0.0000	85.6340
Total											0.0000	84.9727	84.9727	0.0265	0.0000	85.6340

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	3.5653	3.5653	1.2000e-004	0.0000	3.5683
Total											0.0000	3.5653	3.5653	1.2000e-004	0.0000	3.5683

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3.5 Paving - 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											0.0000	20.4752	20.4752	6.4800e-003	0.0000	20.6371
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	20.4752	20.4752	6.4800e-003	0.0000	20.6371

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.7288	1.7288	5.0000e-005	0.0000	1.7302
Total											0.0000	1.7288	1.7288	5.0000e-005	0.0000	1.7302

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3.5 Paving - 2019

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											0.0000	20.4752	20.4752	6.4800e-003	0.0000	20.6371
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	20.4752	20.4752	6.4800e-003	0.0000	20.6371

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.7288	1.7288	5.0000e-005	0.0000	1.7302
Total											0.0000	1.7288	1.7288	5.0000e-005	0.0000	1.7302

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3.6 Site Preparation - 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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	17.3800	17.3800	5.4100e-003	0.0000	17.5152
Total											0.0000	17.3800	17.3800	5.4100e-003	0.0000	17.5152

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.0696	1.0696	4.0000e-005	0.0000	1.0705
Total											0.0000	1.0696	1.0696	4.0000e-005	0.0000	1.0705

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3.6 Site Preparation - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	17.3799	17.3799	5.4100e-003	0.0000	17.5152
Total											0.0000	17.3799	17.3799	5.4100e-003	0.0000	17.5152

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.0696	1.0696	4.0000e-005	0.0000	1.0705
Total											0.0000	1.0696	1.0696	4.0000e-005	0.0000	1.0705

4.0 Operational Detail - Mobile

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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	400.7463	400.7463	0.0182	0.0000	401.2007
Unmitigated											0.0000	400.7463	400.7463	0.0182	0.0000	401.2007

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	380.00	395.58	343.90	1,395,403	1,395,403
Total	380.00	395.58	343.90	1,395,403	1,395,403

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	16.80	7.10	7.90	41.60	18.80	39.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.615011	0.035959	0.175734	0.096057	0.010793	0.005300	0.020678	0.029891	0.002015	0.001593	0.005502	0.000799	0.000668

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5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	63.6591	63.6591	4.5300e-003	9.4000e-004	64.0518
Electricity Unmitigated											0.0000	65.7783	65.7783	4.6800e-003	9.7000e-004	66.1840
NaturalGas Mitigated											0.0000	57.6296	57.6296	1.1000e-003	1.0600e-003	57.9720
NaturalGas Unmitigated											0.0000	75.2858	75.2858	1.4400e-003	1.3800e-003	75.7332

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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					
Single Family Housing	1.4108e+006											0.0000	75.2858	75.2858	1.4400e-003	1.3800e-003	75.7332
Total												0.0000	75.2858	75.2858	1.4400e-003	1.3800e-003	75.7332

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					
Single Family Housing	1.07994e+006											0.0000	57.6296	57.6296	1.1000e-003	1.0600e-003	57.9720
Total												0.0000	57.6296	57.6296	1.1000e-003	1.0600e-003	57.9720

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	355947	65.7783	4.6800e-003	9.7000e-004	66.1840
Total		65.7783	4.6800e-003	9.7000e-004	66.1840

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	344479	63.6591	4.5300e-003	9.4000e-004	64.0518
Total		63.6591	4.5300e-003	9.4000e-004	64.0518

6.0 Area Detail

6.1 Mitigation Measures Area

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											39.2524	16.9228	56.1752	0.0367	3.0900e-003	58.0118
Unmitigated											39.2524	16.9228	56.1752	0.0367	3.0900e-003	58.0118

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
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											39.2524	16.4619	55.7143	0.0362	3.0900e-003	57.5399
Landscaping											0.0000	0.4609	0.4609	4.4000e-004	0.0000	0.4719
Total											39.2524	16.9228	56.1752	0.0367	3.0900e-003	58.0118

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											39.2524	16.4619	55.7143	0.0362	3.0900e-003	57.5399
Landscaping											0.0000	0.4609	0.4609	4.4000e-004	0.0000	0.4719
Total											39.2524	16.9228	56.1752	0.0367	3.0900e-003	58.0118

7.0 Water Detail

7.1 Mitigation Measures Water

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	9.9476	0.0813	2.0400e-003	12.5887
Unmitigated	9.9476	0.0813	2.0400e-003	12.5887

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	2.47585 / 1.56086	9.9476	0.0813	2.0400e-003	12.5887
Total		9.9476	0.0813	2.0400e-003	12.5887

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7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	2.47585 / 1.56086	9.9476	0.0813	2.0400e-003	12.5887
Total		9.9476	0.0813	2.0400e-003	12.5887

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	9.0717	0.5361	0.0000	22.4747
Unmitigated	9.0717	0.5361	0.0000	22.4747

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8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	44.69	9.0717	0.5361	0.0000	22.4747
Total		9.0717	0.5361	0.0000	22.4747

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	44.69	9.0717	0.5361	0.0000	22.4747
Total		9.0717	0.5361	0.0000	22.4747

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	122.00	Dwelling Unit	39.61	219,600.00	349

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	10			Operational Year	2050
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	407.41	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

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Project Characteristics - Adjusted RPS 50% goal.

Land Use - .

Construction Phase -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Architectural Coating - SDAPCD Rule 67.0.1 Architectural Coating

Vehicle Trips - SANDAG trip rates.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Area Coating - SDAPCD Rule 67.0.1 Architectural Coating

Energy Use - .

Energy Mitigation - Adjusted Title 24 2016 standard

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Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	50.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	50
tblAreaCoating	Area_EF_Residential_Exterior	250	50
tblAreaCoating	Area_EF_Residential_Interior	250	50
tblConstructionPhase	PhaseEndDate	12/30/2016	8/27/2021
tblConstructionPhase	PhaseEndDate	12/30/2016	3/26/2021
tblConstructionPhase	PhaseEndDate	12/30/2016	5/25/2018
tblConstructionPhase	PhaseEndDate	12/30/2016	6/11/2021
tblConstructionPhase	PhaseEndDate	12/30/2016	2/9/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	6/12/2021
tblConstructionPhase	PhaseStartDate	12/31/2016	5/26/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	2/10/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	3/27/2021
tblConstructionPhase	PhaseStartDate	12/31/2016	1/1/2018
tblProjectCharacteristics	CO2IntensityFactor	720.49	407.41
tblProjectCharacteristics	OperationalYear	2018	2050
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	ST_TR	9.91	10.41
tblVehicleTrips	SU_TR	8.62	9.05
tblVehicleTrips	WD_TR	9.52	10.00

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2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018											0.0000	527.9888	527.9888	0.1317	0.0000	531.2814
2019											0.0000	414.5952	414.5952	0.0803	0.0000	416.6015
2020											0.0000	409.2310	409.2310	0.0792	0.0000	411.2103
2021											0.0000	163.9000	163.9000	0.0367	0.0000	164.8166
Maximum											0.0000	527.9888	527.9888	0.1317	0.0000	531.2814

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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					
2018											0.0000	527.9883	527.9883	0.1317	0.0000	531.2808
2019											0.0000	414.5949	414.5949	0.0803	0.0000	416.6011
2020											0.0000	409.2307	409.2307	0.0792	0.0000	411.2100
2021											0.0000	163.8998	163.8998	0.0367	0.0000	164.8165
Maximum											0.0000	527.9883	527.9883	0.1317	0.0000	531.2808

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

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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											126.0208	54.3310	180.3519	0.1177	9.9100e-003	186.2484
Energy											0.0000	452.8900	452.8900	0.0197	7.5400e-003	455.6290
Mobile											0.0000	1,934.9871	1,934.9871	0.1032	0.0000	1,937.5659
Waste											29.0460	0.0000	29.0460	1.7166	0.0000	71.9602
Water											2.5218	29.4153	31.9371	0.2611	6.5500e-003	40.4164
Total											157.5886	2,471.6235	2,629.2121	2.2182	0.0240	2,691.8198

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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											126.0208	54.3310	180.3519	0.1177	9.9100e-003	186.2484
Energy											0.0000	389.4005	389.4005	0.0181	6.4000e-003	391.7607
Mobile											0.0000	1,934.9871	1,934.9871	0.1032	0.0000	1,937.5659
Waste											29.0460	0.0000	29.0460	1.7166	0.0000	71.9602
Water											2.5218	29.4153	31.9371	0.2611	6.5500e-003	40.4164
Total											157.5886	2,408.1340	2,565.7226	2.2166	0.0229	2,627.9515

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.57	2.41	0.07	4.75	2.37

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	6/12/2021	8/27/2021	5	55	
2	Building Construction	Building Construction	5/26/2018	3/26/2021	5	740	
3	Grading	Grading	2/10/2018	5/25/2018	5	75	
4	Paving	Paving	3/27/2021	6/11/2021	5	55	
5	Site Preparation	Site Preparation	1/1/2018	2/9/2018	5	30	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 187.5

Acres of Paving: 0

Residential Indoor: 444,690; Residential Outdoor: 148,230; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Grading	Excavators	2	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	9.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	44.00	13.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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3.2 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	7.0215	7.0215	4.8000e-004	0.0000	7.0335
Total											0.0000	7.0215	7.0215	4.8000e-004	0.0000	7.0335

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	2.6696	2.6696	7.0000e-005	0.0000	2.6715
Total											0.0000	2.6696	2.6696	7.0000e-005	0.0000	2.6715

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3.2 Architectural Coating - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	7.0214	7.0214	4.8000e-004	0.0000	7.0335
Total											0.0000	7.0214	7.0214	4.8000e-004	0.0000	7.0335

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	2.6696	2.6696	7.0000e-005	0.0000	2.6715
Total											0.0000	2.6696	2.6696	7.0000e-005	0.0000	2.6715

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3.3 Building Construction - 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					
Off-Road											0.0000	185.4584	185.4584	0.0454	0.0000	186.5944
Total											0.0000	185.4584	185.4584	0.0454	0.0000	186.5944

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
Vendor											0.0000	25.0489	25.0489	2.1400e-003	0.0000	25.1023
Worker											0.0000	40.7875	40.7875	1.3600e-003	0.0000	40.8216
Total											0.0000	65.8364	65.8364	3.5000e-003	0.0000	65.9239

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3.3 Building Construction - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	185.4582	185.4582	0.0454	0.0000	186.5942
Total											0.0000	185.4582	185.4582	0.0454	0.0000	186.5942

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
Vendor											0.0000	25.0489	25.0489	2.1400e-003	0.0000	25.1023
Worker											0.0000	40.7875	40.7875	1.3600e-003	0.0000	40.8216
Total											0.0000	65.8364	65.8364	3.5000e-003	0.0000	65.9239

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3.3 Building Construction - 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											0.0000	306.8110	306.8110	0.0747	0.0000	308.6795
Total											0.0000	306.8110	306.8110	0.0747	0.0000	308.6795

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
Vendor											0.0000	41.6041	41.6041	3.4500e-003	0.0000	41.6904
Worker											0.0000	66.1802	66.1802	2.0600e-003	0.0000	66.2316
Total											0.0000	107.7842	107.7842	5.5100e-003	0.0000	107.9220

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3.3 Building Construction - 2019

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											0.0000	306.8106	306.8106	0.0747	0.0000	308.6792
Total											0.0000	306.8106	306.8106	0.0747	0.0000	308.6792

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
Vendor											0.0000	41.6041	41.6041	3.4500e-003	0.0000	41.6904
Worker											0.0000	66.1802	66.1802	2.0600e-003	0.0000	66.2316
Total											0.0000	107.7842	107.7842	5.5100e-003	0.0000	107.9220

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3.3 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											0.0000	303.4091	303.4091	0.0740	0.0000	305.2596
Total											0.0000	303.4091	303.4091	0.0740	0.0000	305.2596

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
Vendor											0.0000	41.4869	41.4869	3.2800e-003	0.0000	41.5689
Worker											0.0000	64.3351	64.3351	1.8700e-003	0.0000	64.3818
Total											0.0000	105.8220	105.8220	5.1500e-003	0.0000	105.9507

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3.3 Building Construction - 2020

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											0.0000	303.4087	303.4087	0.0740	0.0000	305.2592
Total											0.0000	303.4087	303.4087	0.0740	0.0000	305.2592

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
Vendor											0.0000	41.4869	41.4869	3.2800e-003	0.0000	41.5689
Worker											0.0000	64.3351	64.3351	1.8700e-003	0.0000	64.3818
Total											0.0000	105.8220	105.8220	5.1500e-003	0.0000	105.9507

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3.3 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											0.0000	70.6494	70.6494	0.0170	0.0000	71.0755
Total											0.0000	70.6494	70.6494	0.0170	0.0000	71.0755

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
Vendor											0.0000	9.5704	9.5704	7.3000e-004	0.0000	9.5887
Worker											0.0000	14.4752	14.4752	4.0000e-004	0.0000	14.4852
Total											0.0000	24.0456	24.0456	1.1300e-003	0.0000	24.0740

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3.3 Building Construction - 2021

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											0.0000	70.6493	70.6493	0.0170	0.0000	71.0754
Total											0.0000	70.6493	70.6493	0.0170	0.0000	71.0754

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
Vendor											0.0000	9.5704	9.5704	7.3000e-004	0.0000	9.5887
Worker											0.0000	14.4752	14.4752	4.0000e-004	0.0000	14.4852
Total											0.0000	24.0456	24.0456	1.1300e-003	0.0000	24.0740

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3.4 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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	212.4319	212.4319	0.0661	0.0000	214.0852
Total											0.0000	212.4319	212.4319	0.0661	0.0000	214.0852

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	8.9134	8.9134	3.0000e-004	0.0000	8.9208
Total											0.0000	8.9134	8.9134	3.0000e-004	0.0000	8.9208

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3.4 Grading - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	212.4316	212.4316	0.0661	0.0000	214.0850
Total											0.0000	212.4316	212.4316	0.0661	0.0000	214.0850

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	8.9134	8.9134	3.0000e-004	0.0000	8.9208
Total											0.0000	8.9134	8.9134	3.0000e-004	0.0000	8.9208

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3.5 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	55.0646	55.0646	0.0178	0.0000	55.5098
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	55.0646	55.0646	0.0178	0.0000	55.5098

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	4.4493	4.4493	1.2000e-004	0.0000	4.4524
Total											0.0000	4.4493	4.4493	1.2000e-004	0.0000	4.4524

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3.5 Paving - 2021

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											0.0000	55.0645	55.0645	0.0178	0.0000	55.5097
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	55.0645	55.0645	0.0178	0.0000	55.5097

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	4.4493	4.4493	1.2000e-004	0.0000	4.4524
Total											0.0000	4.4493	4.4493	1.2000e-004	0.0000	4.4524

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3.6 Site Preparation - 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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	52.1399	52.1399	0.0162	0.0000	52.5457
Total											0.0000	52.1399	52.1399	0.0162	0.0000	52.5457

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	3.2088	3.2088	1.1000e-004	0.0000	3.2115
Total											0.0000	3.2088	3.2088	1.1000e-004	0.0000	3.2115

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3.6 Site Preparation - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	52.1398	52.1398	0.0162	0.0000	52.5456
Total											0.0000	52.1398	52.1398	0.0162	0.0000	52.5456

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	3.2088	3.2088	1.1000e-004	0.0000	3.2115
Total											0.0000	3.2088	3.2088	1.1000e-004	0.0000	3.2115

4.0 Operational Detail - Mobile

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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	1,934.9871	1,934.9871	0.1032	0.0000	1,937.5659
Unmitigated											0.0000	1,934.9871	1,934.9871	0.1032	0.0000	1,937.5659

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	1,220.00	1,270.02	1104.10	4,479,977	4,479,977
Total	1,220.00	1,270.02	1,104.10	4,479,977	4,479,977

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	16.80	7.10	7.90	41.60	18.80	39.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.615011	0.035959	0.175734	0.096057	0.010793	0.005300	0.020678	0.029891	0.002015	0.001593	0.005502	0.000799	0.000668

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5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	204.3792	204.3792	0.0146	3.0100e-003	205.6399
Electricity Unmitigated											0.0000	211.1829	211.1829	0.0150	3.1100e-003	212.4855
NaturalGas Mitigated											0.0000	185.0213	185.0213	3.5500e-003	3.3900e-003	186.1208
NaturalGas Unmitigated											0.0000	241.7071	241.7071	4.6300e-003	4.4300e-003	243.1435

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5.2 Energy by Land Use - Natural Gas

Unmitigated

	Natural Gas 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					
Single Family Housing	4.52942e+006											0.0000	241.7071	241.7071	4.6300e-003	4.4300e-003	243.1435
Total												0.0000	241.7071	241.7071	4.6300e-003	4.4300e-003	243.1435

Mitigated

	Natural Gas 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					
Single Family Housing	3.46717e+006											0.0000	185.0213	185.0213	3.5500e-003	3.3900e-003	186.1208
Total												0.0000	185.0213	185.0213	3.5500e-003	3.3900e-003	186.1208

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	1.14278e+006	211.1829	0.0150	3.1100e-003	212.4855
Total		211.1829	0.0150	3.1100e-003	212.4855

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	1.10596e+006	204.3792	0.0146	3.0100e-003	205.6399
Total		204.3792	0.0146	3.0100e-003	205.6399

6.0 Area Detail

6.1 Mitigation Measures Area

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											126.0208	54.3310	180.3519	0.1177	9.9100e-003	186.2484
Unmitigated											126.0208	54.3310	180.3519	0.1177	9.9100e-003	186.2484

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
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											126.0208	52.8513	178.8721	0.1163	9.9100e-003	184.7335
Landscaping											0.0000	1.4797	1.4797	1.4100e-003	0.0000	1.5149
Total											126.0208	54.3310	180.3519	0.1177	9.9100e-003	186.2484

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											126.0208	52.8513	178.8721	0.1163	9.9100e-003	184.7335
Landscaping											0.0000	1.4797	1.4797	1.4100e-003	0.0000	1.5149
Total											126.0208	54.3310	180.3519	0.1177	9.9100e-003	186.2484

7.0 Water Detail

7.1 Mitigation Measures Water

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	31.9371	0.2611	6.5500e-003	40.4164
Unmitigated	31.9371	0.2611	6.5500e-003	40.4164

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	7.94879 / 5.01119	31.9371	0.2611	6.5500e-003	40.4164
Total		31.9371	0.2611	6.5500e-003	40.4164

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7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	7.94879 / 5.01119	31.9371	0.2611	6.5500e-003	40.4164
Total		31.9371	0.2611	6.5500e-003	40.4164

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	29.0460	1.7166	0.0000	71.9602
Unmitigated	29.0460	1.7166	0.0000	71.9602

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8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	143.09	29.0460	1.7166	0.0000	71.9602
Total		29.0460	1.7166	0.0000	71.9602

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	143.09	29.0460	1.7166	0.0000	71.9602
Total		29.0460	1.7166	0.0000	71.9602

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

San Dieguito 15 Unmitigated - GHG Only - San Diego County, Annual

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	301.00	Dwelling Unit	97.73	541,800.00	861
General Office Building	378.32	1000sqft	8.69	378,320.00	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	10			Operational Year	2050
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	407.41	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

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Project Characteristics - Adjusted RPS 50% goal.

Land Use - .

Construction Phase -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Architectural Coating - SDAPCD Rule 67.0.1 Architectural Coating

Vehicle Trips - SANDAG trip rates

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Area Coating - SDAPCD Rule 67.0.1 architectural coating

Energy Use - Adjusted Title 24 2016 standard

Energy Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	50.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	50
tblAreaCoating	Area_EF_Residential_Exterior	250	50
tblAreaCoating	Area_EF_Residential_Interior	250	50

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tblConstructionPhase	PhaseEndDate	12/24/2032	3/18/2032
tblConstructionPhase	PhaseEndDate	4/18/2031	7/11/2031
tblConstructionPhase	PhaseEndDate	5/31/2019	8/23/2019
tblConstructionPhase	PhaseEndDate	2/20/2032	5/14/2032
tblConstructionPhase	PhaseEndDate	3/23/2018	6/15/2018
tblConstructionPhase	PhaseStartDate	2/21/2032	5/15/2032
tblConstructionPhase	PhaseStartDate	6/1/2019	8/24/2019
tblConstructionPhase	PhaseStartDate	3/24/2018	6/16/2018
tblConstructionPhase	PhaseStartDate	4/19/2031	7/12/2031
tblConstructionPhase	PhaseStartDate	10/7/2017	1/1/2018
tblEnergyUse	T24E	1,077.77	775.99
tblEnergyUse	T24E	3.22	3.06
tblEnergyUse	T24NG	31,096.40	22,389.41
tblEnergyUse	T24NG	3.49	3.32
tblProjectCharacteristics	CO2IntensityFactor	720.49	407.41
tblProjectCharacteristics	OperationalYear	2018	2050
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	ST_TR	9.91	10.41
tblVehicleTrips	SU_TR	8.62	9.05
tblVehicleTrips	WD_TR	9.52	10.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

San Dieguito 15 Unmitigated - GHG Only - San Diego County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018											0.0000	637.5237	637.5237	0.1902	0.0000	642.2798
2019											0.0000	825.7529	825.7529	0.1884	0.0000	830.4639
2020											0.0000	938.2259	938.2259	0.1075	0.0000	940.9128
2021											0.0000	920.7210	920.7210	0.1045	0.0000	923.3344
2022											0.0000	902.7399	902.7399	0.1022	0.0000	905.2941
2023											0.0000	883.6064	883.6064	0.0990	0.0000	886.0816
2024											0.0000	876.7892	876.7892	0.0985	0.0000	879.2509
2025											0.0000	860.1681	860.1681	0.0969	0.0000	862.5911
2026											0.0000	848.4352	848.4352	0.0963	0.0000	850.8417
2027											0.0000	838.0455	838.0455	0.0957	0.0000	840.4377
2028											0.0000	825.8119	825.8119	0.0948	0.0000	828.1825
2029											0.0000	820.8990	820.8990	0.0948	0.0000	823.2681
2030											0.0000	854.2519	854.2519	0.0370	0.0000	855.1766
2031											0.0000	603.7658	603.7658	0.0265	0.0000	604.4271
2032											0.0000	122.3798	122.3798	5.5800e-003	0.0000	122.5193
Maximum											0.0000	938.2259	938.2259	0.1902	0.0000	940.9128

2.1 Overall Construction
Mitigated Construction

San Dieguito 15 Unmitigated - GHG Only - San Diego County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018											0.0000	637.5230	637.5230	0.1902	0.0000	642.2791
2019											0.0000	825.7522	825.7522	0.1884	0.0000	830.4632
2020											0.0000	938.2255	938.2255	0.1075	0.0000	940.9125
2021											0.0000	920.7207	920.7207	0.1045	0.0000	923.3340
2022											0.0000	902.7395	902.7395	0.1022	0.0000	905.2937
2023											0.0000	883.6060	883.6060	0.0990	0.0000	886.0812
2024											0.0000	876.7888	876.7888	0.0985	0.0000	879.2505
2025											0.0000	860.1678	860.1678	0.0969	0.0000	862.5908
2026											0.0000	848.4348	848.4348	0.0963	0.0000	850.8413
2027											0.0000	838.0452	838.0452	0.0957	0.0000	840.4374
2028											0.0000	825.8115	825.8115	0.0948	0.0000	828.1822
2029											0.0000	820.8986	820.8986	0.0948	0.0000	823.2677
2030											0.0000	854.2515	854.2515	0.0370	0.0000	855.1762
2031											0.0000	603.7654	603.7654	0.0265	0.0000	604.4267
2032											0.0000	122.3797	122.3797	5.5800e-003	0.0000	122.5192
Maximum											0.0000	938.2255	938.2255	0.1902	0.0000	940.9125

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area											310.9203	134.0530	444.9732	0.2904	0.0245	459.5217
Energy											0.0000	1,698.9229	1,698.9229	0.0937	0.0269	1,709.2841
Mobile											0.0000	5,737.3263	5,737.3263	0.2633	0.0000	5,743.9078
Waste											71.6578	0.0000	71.6578	4.2349	0.0000	177.5293
Water											27.5540	318.9832	346.5372	2.8528	0.0715	439.1698
Total											410.1321	7,889.2854	8,299.4175	7.7350	0.1229	8,529.4126

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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											310.9203	134.0530	444.9732	0.2904	0.0245	459.5217
Energy											0.0000	1,698.9229	1,698.9229	0.0937	0.0269	1,709.2841
Mobile											0.0000	5,737.3263	5,737.3263	0.2633	0.0000	5,743.9078
Waste											71.6578	0.0000	71.6578	4.2349	0.0000	177.5293
Water											27.5540	318.9832	346.5372	2.8528	0.0715	439.1698
Total											410.1321	7,889.2854	8,299.4175	7.7350	0.1229	8,529.4126

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

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2018	6/15/2018	5	120	
2	Grading	Grading	6/16/2018	8/23/2019	5	310	
3	Building Construction	Building Construction	8/24/2019	7/11/2031	5	3100	
4	Paving	Paving	7/12/2031	5/14/2032	5	220	
5	Architectural Coating	Architectural Coating	5/15/2032	3/18/2032	5	220	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 775

Acres of Paving: 0

Residential Indoor: 1,097,145; Residential Outdoor: 365,715; Non-Residential Indoor: 567,480; Non-Residential Outdoor: 189,160; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Grading	Excavators	2	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	46.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	229.00	94.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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3.2 Site Preparation - 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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	208.5594	208.5594	0.0649	0.0000	210.1826
Total											0.0000	208.5594	208.5594	0.0649	0.0000	210.1826

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	12.8352	12.8352	4.3000e-004	0.0000	12.8459
Total											0.0000	12.8352	12.8352	4.3000e-004	0.0000	12.8459

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3.2 Site Preparation - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	208.5592	208.5592	0.0649	0.0000	210.1824
Total											0.0000	208.5592	208.5592	0.0649	0.0000	210.1824

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	12.8352	12.8352	4.3000e-004	0.0000	12.8459
Total											0.0000	12.8352	12.8352	4.3000e-004	0.0000	12.8459

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3.3 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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	399.3719	399.3719	0.1243	0.0000	402.4802
Total											0.0000	399.3719	399.3719	0.1243	0.0000	402.4802

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	16.7571	16.7571	5.6000e-004	0.0000	16.7711
Total											0.0000	16.7571	16.7571	5.6000e-004	0.0000	16.7711

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3.3 Grading - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	399.3715	399.3715	0.1243	0.0000	402.4797
Total											0.0000	399.3715	399.3715	0.1243	0.0000	402.4797

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	16.7571	16.7571	5.6000e-004	0.0000	16.7711
Total											0.0000	16.7571	16.7571	5.6000e-004	0.0000	16.7711

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3.3 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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	470.6762	470.6762	0.1489	0.0000	474.3991
Total											0.0000	470.6762	470.6762	0.1489	0.0000	474.3991

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	19.4783	19.4783	6.1000e-004	0.0000	19.4935
Total											0.0000	19.4783	19.4783	6.1000e-004	0.0000	19.4935

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3.3 Grading - 2019

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
Off-Road											0.0000	470.6756	470.6756	0.1489	0.0000	474.3985
Total											0.0000	470.6756	470.6756	0.1489	0.0000	474.3985

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	19.4783	19.4783	6.1000e-004	0.0000	19.4935
Total											0.0000	19.4783	19.4783	6.1000e-004	0.0000	19.4935

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3.4 Building Construction - 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											0.0000	108.1479	108.1479	0.0264	0.0000	108.8066
Total											0.0000	108.1479	108.1479	0.0264	0.0000	108.8066

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
Vendor											0.0000	106.0395	106.0395	8.8000e-003	0.0000	106.2594
Worker											0.0000	121.4110	121.4110	3.7800e-003	0.0000	121.5054
Total											0.0000	227.4505	227.4505	0.0126	0.0000	227.7648

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3.4 Building Construction - 2019

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											0.0000	108.1478	108.1478	0.0264	0.0000	108.8065
Total											0.0000	108.1478	108.1478	0.0264	0.0000	108.8065

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
Vendor											0.0000	106.0395	106.0395	8.8000e-003	0.0000	106.2594
Worker											0.0000	121.4110	121.4110	3.7800e-003	0.0000	121.5054
Total											0.0000	227.4505	227.4505	0.0126	0.0000	227.7648

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3.4 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											0.0000	303.4091	303.4091	0.0740	0.0000	305.2596
Total											0.0000	303.4091	303.4091	0.0740	0.0000	305.2596

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
Vendor											0.0000	299.9819	299.9819	0.0237	0.0000	300.5751
Worker											0.0000	334.8349	334.8349	9.7300e-003	0.0000	335.0781
Total											0.0000	634.8168	634.8168	0.0335	0.0000	635.6532

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3.4 Building Construction - 2020

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											0.0000	303.4087	303.4087	0.0740	0.0000	305.2592
Total											0.0000	303.4087	303.4087	0.0740	0.0000	305.2592

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
Vendor											0.0000	299.9819	299.9819	0.0237	0.0000	300.5751
Worker											0.0000	334.8349	334.8349	9.7300e-003	0.0000	335.0781
Total											0.0000	634.8168	634.8168	0.0335	0.0000	635.6532

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3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	302.2867	302.2867	0.0729	0.0000	304.1099
Total											0.0000	302.2867	302.2867	0.0729	0.0000	304.1099

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
Vendor											0.0000	296.0917	296.0917	0.0227	0.0000	296.6581
Worker											0.0000	322.3427	322.3427	8.9500e-003	0.0000	322.5665
Total											0.0000	618.4344	618.4344	0.0316	0.0000	619.2245

San Dieguito 15 Unmitigated - GHG Only - San Diego County, Annual

3.4 Building Construction - 2021

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											0.0000	302.2863	302.2863	0.0729	0.0000	304.1095
Total											0.0000	302.2863	302.2863	0.0729	0.0000	304.1095

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
Vendor											0.0000	296.0917	296.0917	0.0227	0.0000	296.6581
Worker											0.0000	322.3427	322.3427	8.9500e-003	0.0000	322.5665
Total											0.0000	618.4344	618.4344	0.0316	0.0000	619.2245

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3.4 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	301.2428	301.2428	0.0722	0.0000	303.0471
Total											0.0000	301.2428	301.2428	0.0722	0.0000	303.0471

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
Vendor											0.0000	292.1701	292.1701	0.0218	0.0000	292.7158
Worker											0.0000	309.3270	309.3270	8.1700e-003	0.0000	309.5313
Total											0.0000	601.4971	601.4971	0.0300	0.0000	602.2471

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3.4 Building Construction - 2022

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											0.0000	301.2425	301.2425	0.0722	0.0000	303.0467
Total											0.0000	301.2425	301.2425	0.0722	0.0000	303.0467

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
Vendor											0.0000	292.1701	292.1701	0.0218	0.0000	292.7158
Worker											0.0000	309.3270	309.3270	8.1700e-003	0.0000	309.5313
Total											0.0000	601.4971	601.4971	0.0300	0.0000	602.2471

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3.4 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											0.0000	301.3462	301.3462	0.0717	0.0000	303.1383
Total											0.0000	301.3462	301.3462	0.0717	0.0000	303.1383

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
Vendor											0.0000	284.7575	284.7575	0.0198	0.0000	285.2536
Worker											0.0000	297.5028	297.5028	7.4800e-003	0.0000	297.6897
Total											0.0000	582.2602	582.2602	0.0273	0.0000	582.9433

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3.4 Building Construction - 2023

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											0.0000	301.3458	301.3458	0.0717	0.0000	303.1380
Total											0.0000	301.3458	301.3458	0.0717	0.0000	303.1380

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
Vendor											0.0000	284.7575	284.7575	0.0198	0.0000	285.2536
Worker											0.0000	297.5028	297.5028	7.4800e-003	0.0000	297.6897
Total											0.0000	582.2602	582.2602	0.0273	0.0000	582.9433

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3.4 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											0.0000	303.7223	303.7223	0.0718	0.0000	305.5179
Total											0.0000	303.7223	303.7223	0.0718	0.0000	305.5179

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
Vendor											0.0000	285.0855	285.0855	0.0197	0.0000	285.5785
Worker											0.0000	287.9814	287.9814	6.9200e-003	0.0000	288.1545
Total											0.0000	573.0669	573.0669	0.0266	0.0000	573.7330

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3.4 Building Construction - 2024

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											0.0000	303.7220	303.7220	0.0718	0.0000	305.5175
Total											0.0000	303.7220	303.7220	0.0718	0.0000	305.5175

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
Vendor											0.0000	285.0855	285.0855	0.0197	0.0000	285.5785
Worker											0.0000	287.9814	287.9814	6.9200e-003	0.0000	288.1545
Total											0.0000	573.0669	573.0669	0.0266	0.0000	573.7330

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3.4 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											0.0000	302.6549	302.6549	0.0711	0.0000	304.4335
Total											0.0000	302.6549	302.6549	0.0711	0.0000	304.4335

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
Vendor											0.0000	282.2353	282.2353	0.0194	0.0000	282.7205
Worker											0.0000	275.2779	275.2779	6.3700e-003	0.0000	275.4371
Total											0.0000	557.5132	557.5132	0.0258	0.0000	558.1576

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3.4 Building Construction - 2025

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											0.0000	302.6545	302.6545	0.0711	0.0000	304.4331
Total											0.0000	302.6545	302.6545	0.0711	0.0000	304.4331

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
Vendor											0.0000	282.2353	282.2353	0.0194	0.0000	282.7205
Worker											0.0000	275.2779	275.2779	6.3700e-003	0.0000	275.4371
Total											0.0000	557.5132	557.5132	0.0258	0.0000	558.1576

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3.4 Building Construction - 2026

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											0.0000	302.6549	302.6549	0.0711	0.0000	304.4335
Total											0.0000	302.6549	302.6549	0.0711	0.0000	304.4335

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
Vendor											0.0000	280.5856	280.5856	0.0192	0.0000	281.0651
Worker											0.0000	265.1946	265.1946	5.9400e-003	0.0000	265.3431
Total											0.0000	545.7803	545.7803	0.0251	0.0000	546.4082

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3.4 Building Construction - 2026

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											0.0000	302.6545	302.6545	0.0711	0.0000	304.4331
Total											0.0000	302.6545	302.6545	0.0711	0.0000	304.4331

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
Vendor											0.0000	280.5856	280.5856	0.0192	0.0000	281.0651
Worker											0.0000	265.1946	265.1946	5.9400e-003	0.0000	265.3431
Total											0.0000	545.7803	545.7803	0.0251	0.0000	546.4082

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3.4 Building Construction - 2027

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											0.0000	302.6549	302.6549	0.0711	0.0000	304.4335
Total											0.0000	302.6549	302.6549	0.0711	0.0000	304.4335

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
Vendor											0.0000	279.0791	279.0791	0.0190	0.0000	279.5537
Worker											0.0000	256.3116	256.3116	5.5600e-003	0.0000	256.4506
Total											0.0000	535.3906	535.3906	0.0245	0.0000	536.0042

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3.4 Building Construction - 2027

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											0.0000	302.6545	302.6545	0.0711	0.0000	304.4331
Total											0.0000	302.6545	302.6545	0.0711	0.0000	304.4331

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
Vendor											0.0000	279.0791	279.0791	0.0190	0.0000	279.5537
Worker											0.0000	256.3116	256.3116	5.5600e-003	0.0000	256.4506
Total											0.0000	535.3906	535.3906	0.0245	0.0000	536.0042

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3.4 Building Construction - 2028

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											0.0000	301.4953	301.4953	0.0709	0.0000	303.2671
Total											0.0000	301.4953	301.4953	0.0709	0.0000	303.2671

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
Vendor											0.0000	276.7495	276.7495	0.0187	0.0000	277.2178
Worker											0.0000	247.5671	247.5671	5.2200e-003	0.0000	247.6976
Total											0.0000	524.3166	524.3166	0.0240	0.0000	524.9154

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3.4 Building Construction - 2028

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											0.0000	301.4949	301.4949	0.0709	0.0000	303.2667
Total											0.0000	301.4949	301.4949	0.0709	0.0000	303.2667

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
Vendor											0.0000	276.7495	276.7495	0.0187	0.0000	277.2178
Worker											0.0000	247.5671	247.5671	5.2200e-003	0.0000	247.6976
Total											0.0000	524.3166	524.3166	0.0240	0.0000	524.9154

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3.4 Building Construction - 2029

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											0.0000	302.6549	302.6549	0.0711	0.0000	304.4335
Total											0.0000	302.6549	302.6549	0.0711	0.0000	304.4335

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
Vendor											0.0000	276.5736	276.5736	0.0187	0.0000	277.0404
Worker											0.0000	241.6705	241.6705	4.9500e-003	0.0000	241.7942
Total											0.0000	518.2441	518.2441	0.0236	0.0000	518.8346

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3.4 Building Construction - 2029

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											0.0000	302.6545	302.6545	0.0711	0.0000	304.4331
Total											0.0000	302.6545	302.6545	0.0711	0.0000	304.4331

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
Vendor											0.0000	276.5736	276.5736	0.0187	0.0000	277.0404
Worker											0.0000	241.6705	241.6705	4.9500e-003	0.0000	241.7942
Total											0.0000	518.2441	518.2441	0.0236	0.0000	518.8346

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3.4 Building Construction - 2030

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											0.0000	343.0336	343.0336	0.0138	0.0000	343.3777
Total											0.0000	343.0336	343.0336	0.0138	0.0000	343.3777

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
Vendor											0.0000	275.5680	275.5680	0.0186	0.0000	276.0319
Worker											0.0000	235.6503	235.6503	4.6700e-003	0.0000	235.7670
Total											0.0000	511.2183	511.2183	0.0232	0.0000	511.7989

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3.4 Building Construction - 2030

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											0.0000	343.0332	343.0332	0.0138	0.0000	343.3773
Total											0.0000	343.0332	343.0332	0.0138	0.0000	343.3773

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
Vendor											0.0000	275.5680	275.5680	0.0186	0.0000	276.0319
Worker											0.0000	235.6503	235.6503	4.6700e-003	0.0000	235.7670
Total											0.0000	511.2183	511.2183	0.0232	0.0000	511.7989

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3.4 Building Construction - 2031

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											0.0000	181.3741	181.3741	7.2800e-003	0.0000	181.5560
Total											0.0000	181.3741	181.3741	7.2800e-003	0.0000	181.5560

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
Vendor											0.0000	145.2561	145.2561	9.7600e-003	0.0000	145.5000
Worker											0.0000	121.8119	121.8119	2.3400e-003	0.0000	121.8703
Total											0.0000	267.0680	267.0680	0.0121	0.0000	267.3703

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3.4 Building Construction - 2031

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											0.0000	181.3739	181.3739	7.2800e-003	0.0000	181.5558
Total											0.0000	181.3739	181.3739	7.2800e-003	0.0000	181.5558

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
Vendor											0.0000	145.2561	145.2561	9.7600e-003	0.0000	145.5000
Worker											0.0000	121.8119	121.8119	2.3400e-003	0.0000	121.8703
Total											0.0000	267.0680	267.0680	0.0121	0.0000	267.3703

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3.5 Paving - 2031

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											0.0000	148.2120	148.2120	6.9500e-003	0.0000	148.3857
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	148.2120	148.2120	6.9500e-003	0.0000	148.3857

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	7.1117	7.1117	1.4000e-004	0.0000	7.1151
Total											0.0000	7.1117	7.1117	1.4000e-004	0.0000	7.1151

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3.5 Paving - 2031

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											0.0000	148.2118	148.2118	6.9500e-003	0.0000	148.3855
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	148.2118	148.2118	6.9500e-003	0.0000	148.3855

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	7.1117	7.1117	1.4000e-004	0.0000	7.1151
Total											0.0000	7.1117	7.1117	1.4000e-004	0.0000	7.1151

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3.5 Paving - 2032

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											0.0000	116.8827	116.8827	5.4800e-003	0.0000	117.0196
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	116.8827	116.8827	5.4800e-003	0.0000	117.0196

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	5.4971	5.4971	1.0000e-004	0.0000	5.4997
Total											0.0000	5.4971	5.4971	1.0000e-004	0.0000	5.4997

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3.5 Paving - 2032

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											0.0000	116.8825	116.8825	5.4800e-003	0.0000	117.0195
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	116.8825	116.8825	5.4800e-003	0.0000	117.0195

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	5.4971	5.4971	1.0000e-004	0.0000	5.4997
Total											0.0000	5.4971	5.4971	1.0000e-004	0.0000	5.4997

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3.6 Architectural Coating - 2032

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

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

4.0 Operational Detail - Mobile

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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	5,737.3263	5,737.3263	0.2633	0.0000	5,743.9078
Unmitigated											0.0000	5,737.3263	5,737.3263	0.2633	0.0000	5,743.9078

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	3,010.00	3,133.41	2724.05	11,053,059	11,053,059
General Office Building	4,172.87	930.67	397.24	8,752,696	8,752,696
Total	7,182.87	4,064.08	3,121.29	19,805,755	19,805,755

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	16.80	7.10	7.90	41.60	18.80	39.60	86	11	3
General Office Building	14.70	6.60	6.60	33.00	48.00	19.00	77	19	4

4.4 Fleet Mix

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Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.615011	0.035959	0.175734	0.096057	0.010793	0.005300	0.020678	0.029891	0.002015	0.001593	0.005502	0.000799	0.000668
General Office Building	0.615011	0.035959	0.175734	0.096057	0.010793	0.005300	0.020678	0.029891	0.002015	0.001593	0.005502	0.000799	0.000668

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	1,175.4098	1,175.4098	0.0837	0.0173	1,182.6600
Electricity Unmitigated											0.0000	1,175.4098	1,175.4098	0.0837	0.0173	1,182.6600
NaturalGas Mitigated											0.0000	523.5131	523.5131	0.0100	9.6000e-003	526.6241
NaturalGas Unmitigated											0.0000	523.5131	523.5131	0.0100	9.6000e-003	526.6241

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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					
General Office Building	1.25602e+006											0.0000	67.0261	67.0261	1.2800e-003	1.2300e-003	67.4244
Single Family Housing	8.55424e+006											0.0000	456.4870	456.4870	8.7500e-003	8.3700e-003	459.1996
Total												0.0000	523.5131	523.5131	0.0100	9.6000e-003	526.6241

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					
General Office Building	1.25602e+006											0.0000	67.0261	67.0261	1.2800e-003	1.2300e-003	67.4244
Single Family Housing	8.55424e+006											0.0000	456.4870	456.4870	8.7500e-003	8.3700e-003	459.1996
Total												0.0000	523.5131	523.5131	0.0100	9.6000e-003	526.6241

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	3.63187e+006	671.1629	0.0478	9.8800e-003	675.3028
Single Family Housing	2.72864e+006	504.2469	0.0359	7.4300e-003	507.3572
Total		1,175.4098	0.0837	0.0173	1,182.6600

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	3.63187e+006	671.1629	0.0478	9.8800e-003	675.3028
Single Family Housing	2.72864e+006	504.2469	0.0359	7.4300e-003	507.3572
Total		1,175.4098	0.0837	0.0173	1,182.6600

6.0 Area Detail

6.1 Mitigation Measures Area

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											310.9203	134.0530	444.9732	0.2904	0.0245	459.5217
Unmitigated											310.9203	134.0530	444.9732	0.2904	0.0245	459.5217

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
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											310.9203	130.3954	441.3157	0.2869	0.0245	455.7769
Landscaping											0.0000	3.6575	3.6575	3.4900e-003	0.0000	3.7448
Total											310.9203	134.0530	444.9732	0.2904	0.0245	459.5217

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											310.9203	130.3954	441.3157	0.2869	0.0245	455.7769
Landscaping											0.0000	3.6575	3.6575	3.4900e-003	0.0000	3.7448
Total											310.9203	134.0530	444.9732	0.2904	0.0245	459.5217

7.0 Water Detail

7.1 Mitigation Measures Water

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	346.5372	2.8528	0.0715	439.1698
Unmitigated	346.5372	2.8528	0.0715	439.1698

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	67.2402 / 41.2118	267.7415	2.2086	0.0554	339.4540
Single Family Housing	19.6114 / 12.3637	78.7957	0.6442	0.0162	99.7158
Total		346.5372	2.8528	0.0715	439.1698

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7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	67.2402 / 41.2118	267.7415	2.2086	0.0554	339.4540
Single Family Housing	19.6114 / 12.3637	78.7957	0.6442	0.0162	99.7158
Total		346.5372	2.8528	0.0715	439.1698

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	71.6578	4.2349	0.0000	177.5293
Unmitigated	71.6578	4.2349	0.0000	177.5293

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8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	351.84	0.0000	0.0000	0.0000	0.0000
Single Family Housing	353.01	71.6578	4.2349	0.0000	177.5293
Total		71.6578	4.2349	0.0000	177.5293

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	351.84	0.0000	0.0000	0.0000	0.0000
Single Family Housing	353.01	71.6578	4.2349	0.0000	177.5293
Total		71.6578	4.2349	0.0000	177.5293

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

Valley Center 7+ Unmitigated - GHG Only - San Diego County, Annual

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	253.00	Dwelling Unit	82.14	455,400.00	724

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	10			Operational Year	2050
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	407.41	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

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Project Characteristics - Adjusted RPS 50% goal.

Land Use - .

Construction Phase -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Architectural Coating - SDAPCD Rule 67.0.1 Architectural Coating

Vehicle Trips - SANDAG trip rate

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Area Coating - SDAPCD Rule 67.0.1 architectural coating

Energy Use - .

Energy Mitigation - Adjusted Title 24 2016 standard

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Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	50.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	50
tblAreaCoating	Area_EF_Residential_Exterior	250	50
tblAreaCoating	Area_EF_Residential_Interior	250	50
tblConstructionPhase	PhaseEndDate	12/30/2016	8/8/2025
tblConstructionPhase	PhaseEndDate	12/30/2016	10/5/2024
tblConstructionPhase	PhaseEndDate	12/30/2016	10/26/2018
tblConstructionPhase	PhaseEndDate	12/30/2016	3/7/2025
tblConstructionPhase	PhaseEndDate	12/30/2016	3/23/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	3/8/2025
tblConstructionPhase	PhaseStartDate	12/31/2016	10/27/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	3/24/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	10/5/2024
tblConstructionPhase	PhaseStartDate	12/31/2016	1/1/2018
tblProjectCharacteristics	CO2IntensityFactor	720.49	407.41
tblProjectCharacteristics	OperationalYear	2018	2050
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	ST_TR	9.91	10.41
tblVehicleTrips	SU_TR	8.62	9.05
tblVehicleTrips	WD_TR	9.52	10.00

Valley Center 7+ Unmitigated - GHG Only - San Diego County, Annual

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018											0.0000	663.0455	663.0455	0.1855	0.0000	667.6830
2019											0.0000	530.0921	530.0921	0.0862	0.0000	532.2462
2020											0.0000	522.6308	522.6308	0.0847	0.0000	524.7483
2021											0.0000	515.4268	515.4268	0.0830	0.0000	517.5016
2022											0.0000	508.0844	508.0844	0.0817	0.0000	510.1265
2023											0.0000	501.3598	501.3598	0.0804	0.0000	503.3687
2024											0.0000	448.2611	448.2611	0.0814	0.0000	450.2970
2025											0.0000	74.5245	74.5245	0.0166	0.0000	74.9393
Maximum											0.0000	663.0455	663.0455	0.1855	0.0000	667.6830

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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					
2018											0.0000	663.0447	663.0447	0.1855	0.0000	667.6823
2019											0.0000	530.0917	530.0917	0.0862	0.0000	532.2459
2020											0.0000	522.6304	522.6304	0.0847	0.0000	524.7480
2021											0.0000	515.4264	515.4264	0.0830	0.0000	517.5012
2022											0.0000	508.0840	508.0840	0.0817	0.0000	510.1261
2023											0.0000	501.3595	501.3595	0.0804	0.0000	503.3684
2024											0.0000	448.2607	448.2607	0.0814	0.0000	450.2966
2025											0.0000	74.5244	74.5244	0.0166	0.0000	74.9392
Maximum											0.0000	663.0447	663.0447	0.1855	0.0000	667.6823

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

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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											261.3383	112.6701	374.0084	0.2441	0.0206	386.2364
Energy											0.0000	939.1900	939.1900	0.0408	0.0156	944.8700
Mobile											0.0000	4,012.719 2	4,012.719 2	0.2139	0.0000	4,018.067 0
Waste											60.2558	0.0000	60.2558	3.5610	0.0000	149.2813
Water											5.2296	61.0007	66.2303	0.5415	0.0136	83.8143
Total											326.8237	5,125.579 9	5,452.403 6	4.6013	0.0498	5,582.268 9

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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											261.3383	112.6701	374.0084	0.2441	0.0206	386.2364
Energy											0.0000	807.5273	807.5273	0.0375	0.0133	812.4217
Mobile											0.0000	4,012.719 2	4,012.719 2	0.2139	0.0000	4,018.067 0
Waste											60.2558	0.0000	60.2558	3.5610	0.0000	149.2813
Water											5.2296	61.0007	66.2303	0.5415	0.0136	83.8143
Total											326.8237	4,993.917 2	5,320.740 9	4.5980	0.0474	5,449.820 7

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.57	2.41	0.07	4.74	2.37

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	3/8/2025	8/8/2025	5	110	
2	Building Construction	Building Construction	10/27/2018	10/5/2024	5	1550	
3	Grading	Grading	3/24/2018	10/26/2018	5	155	
4	Paving	Paving	10/5/2024	3/7/2025	5	110	
5	Site Preparation	Site Preparation	1/1/2018	3/23/2018	5	60	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 387.5

Acres of Paving: 0

Residential Indoor: 922,185; Residential Outdoor: 307,395; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Grading	Excavators	2	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	91.00	27.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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3.2 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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	14.0429	14.0429	7.7000e-004	0.0000	14.0621
Total											0.0000	14.0429	14.0429	7.7000e-004	0.0000	14.0621

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	9.1193	9.1193	2.1000e-004	0.0000	9.1246
Total											0.0000	9.1193	9.1193	2.1000e-004	0.0000	9.1246

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3.2 Architectural Coating - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	14.0429	14.0429	7.7000e-004	0.0000	14.0620
Total											0.0000	14.0429	14.0429	7.7000e-004	0.0000	14.0620

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	9.1193	9.1193	2.1000e-004	0.0000	9.1246
Total											0.0000	9.1193	9.1193	2.1000e-004	0.0000	9.1246

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3.3 Building Construction - 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					
Off-Road											0.0000	54.6865	54.6865	0.0134	0.0000	55.0214
Total											0.0000	54.6865	54.6865	0.0134	0.0000	55.0214

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
Vendor											0.0000	15.3406	15.3406	1.3100e-003	0.0000	15.3733
Worker											0.0000	24.8742	24.8742	8.3000e-004	0.0000	24.8950
Total											0.0000	40.2148	40.2148	2.1400e-003	0.0000	40.2683

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3.3 Building Construction - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	54.6864	54.6864	0.0134	0.0000	55.0214
Total											0.0000	54.6864	54.6864	0.0134	0.0000	55.0214

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
Vendor											0.0000	15.3406	15.3406	1.3100e-003	0.0000	15.3733
Worker											0.0000	24.8742	24.8742	8.3000e-004	0.0000	24.8950
Total											0.0000	40.2148	40.2148	2.1400e-003	0.0000	40.2683

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3.3 Building Construction - 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											0.0000	306.8110	306.8110	0.0747	0.0000	308.6795
Total											0.0000	306.8110	306.8110	0.0747	0.0000	308.6795

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
Vendor											0.0000	86.4085	86.4085	7.1700e-003	0.0000	86.5877
Worker											0.0000	136.8726	136.8726	4.2600e-003	0.0000	136.9790
Total											0.0000	223.2811	223.2811	0.0114	0.0000	223.5667

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3.3 Building Construction - 2019

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											0.0000	306.8106	306.8106	0.0747	0.0000	308.6792
Total											0.0000	306.8106	306.8106	0.0747	0.0000	308.6792

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
Vendor											0.0000	86.4085	86.4085	7.1700e-003	0.0000	86.5877
Worker											0.0000	136.8726	136.8726	4.2600e-003	0.0000	136.9790
Total											0.0000	223.2811	223.2811	0.0114	0.0000	223.5667

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3.3 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											0.0000	303.4091	303.4091	0.0740	0.0000	305.2596
Total											0.0000	303.4091	303.4091	0.0740	0.0000	305.2596

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
Vendor											0.0000	86.1650	86.1650	6.8200e-003	0.0000	86.3354
Worker											0.0000	133.0567	133.0567	3.8700e-003	0.0000	133.1533
Total											0.0000	219.2217	219.2217	0.0107	0.0000	219.4887

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3.3 Building Construction - 2020

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											0.0000	303.4087	303.4087	0.0740	0.0000	305.2592
Total											0.0000	303.4087	303.4087	0.0740	0.0000	305.2592

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
Vendor											0.0000	86.1650	86.1650	6.8200e-003	0.0000	86.3354
Worker											0.0000	133.0567	133.0567	3.8700e-003	0.0000	133.1533
Total											0.0000	219.2217	219.2217	0.0107	0.0000	219.4887

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3.3 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											0.0000	302.2867	302.2867	0.0729	0.0000	304.1099
Total											0.0000	302.2867	302.2867	0.0729	0.0000	304.1099

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
Vendor											0.0000	85.0476	85.0476	6.5100e-003	0.0000	85.2103
Worker											0.0000	128.0925	128.0925	3.5600e-003	0.0000	128.1814
Total											0.0000	213.1401	213.1401	0.0101	0.0000	213.3917

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3.3 Building Construction - 2021

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											0.0000	302.2863	302.2863	0.0729	0.0000	304.1095
Total											0.0000	302.2863	302.2863	0.0729	0.0000	304.1095

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
Vendor											0.0000	85.0476	85.0476	6.5100e-003	0.0000	85.2103
Worker											0.0000	128.0925	128.0925	3.5600e-003	0.0000	128.1814
Total											0.0000	213.1401	213.1401	0.0101	0.0000	213.3917

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3.3 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											0.0000	301.2428	301.2428	0.0722	0.0000	303.0471
Total											0.0000	301.2428	301.2428	0.0722	0.0000	303.0471

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
Vendor											0.0000	83.9212	83.9212	6.2700e-003	0.0000	84.0779
Worker											0.0000	122.9203	122.9203	3.2500e-003	0.0000	123.0015
Total											0.0000	206.8415	206.8415	9.5200e-003	0.0000	207.0794

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3.3 Building Construction - 2022

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											0.0000	301.2425	301.2425	0.0722	0.0000	303.0467
Total											0.0000	301.2425	301.2425	0.0722	0.0000	303.0467

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
Vendor											0.0000	83.9212	83.9212	6.2700e-003	0.0000	84.0779
Worker											0.0000	122.9203	122.9203	3.2500e-003	0.0000	123.0015
Total											0.0000	206.8415	206.8415	9.5200e-003	0.0000	207.0794

Valley Center 7+ Unmitigated - GHG Only - San Diego County, Annual

3.3 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											0.0000	301.3462	301.3462	0.0717	0.0000	303.1383
Total											0.0000	301.3462	301.3462	0.0717	0.0000	303.1383

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
Vendor											0.0000	81.7920	81.7920	5.7000e-003	0.0000	81.9345
Worker											0.0000	118.2216	118.2216	2.9700e-003	0.0000	118.2959
Total											0.0000	200.0137	200.0137	8.6700e-003	0.0000	200.2304

Valley Center 7+ Unmitigated - GHG Only - San Diego County, Annual

3.3 Building Construction - 2023

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											0.0000	301.3458	301.3458	0.0717	0.0000	303.1380
Total											0.0000	301.3458	301.3458	0.0717	0.0000	303.1380

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
Vendor											0.0000	81.7920	81.7920	5.7000e-003	0.0000	81.9345
Worker											0.0000	118.2216	118.2216	2.9700e-003	0.0000	118.2959
Total											0.0000	200.0137	200.0137	8.6700e-003	0.0000	200.2304

Valley Center 7+ Unmitigated - GHG Only - San Diego County, Annual

3.3 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											0.0000	231.8491	231.8491	0.0548	0.0000	233.2198
Total											0.0000	231.8491	231.8491	0.0548	0.0000	233.2198

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
Vendor											0.0000	62.5086	62.5086	4.3200e-003	0.0000	62.6167
Worker											0.0000	87.3573	87.3573	2.1000e-003	0.0000	87.4098
Total											0.0000	149.8659	149.8659	6.4200e-003	0.0000	150.0265

Valley Center 7+ Unmitigated - GHG Only - San Diego County, Annual

3.3 Building Construction - 2024

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											0.0000	231.8488	231.8488	0.0548	0.0000	233.2195
Total											0.0000	231.8488	231.8488	0.0548	0.0000	233.2195

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
Vendor											0.0000	62.5086	62.5086	4.3200e-003	0.0000	62.6167
Worker											0.0000	87.3573	87.3573	2.1000e-003	0.0000	87.4098
Total											0.0000	149.8659	149.8659	6.4200e-003	0.0000	150.0265

Valley Center 7+ Unmitigated - GHG Only - San Diego County, Annual

3.4 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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	439.0259	439.0259	0.1367	0.0000	442.4428
Total											0.0000	439.0259	439.0259	0.1367	0.0000	442.4428

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	18.4209	18.4209	6.1000e-004	0.0000	18.4363
Total											0.0000	18.4209	18.4209	6.1000e-004	0.0000	18.4363

Valley Center 7+ Unmitigated - GHG Only - San Diego County, Annual

3.4 Grading - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	439.0254	439.0254	0.1367	0.0000	442.4422
Total											0.0000	439.0254	439.0254	0.1367	0.0000	442.4422

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	18.4209	18.4209	6.1000e-004	0.0000	18.4363
Total											0.0000	18.4209	18.4209	6.1000e-004	0.0000	18.4363

Valley Center 7+ Unmitigated - GHG Only - San Diego County, Annual

3.5 Paving - 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											0.0000	62.0823	62.0823	0.0201	0.0000	62.5842
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	62.0823	62.0823	0.0201	0.0000	62.5842

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	4.4639	4.4639	1.1000e-004	0.0000	4.4665
Total											0.0000	4.4639	4.4639	1.1000e-004	0.0000	4.4665

Valley Center 7+ Unmitigated - GHG Only - San Diego County, Annual

3.5 Paving - 2024

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											0.0000	62.0822	62.0822	0.0201	0.0000	62.5841
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	62.0822	62.0822	0.0201	0.0000	62.5841

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	4.4639	4.4639	1.1000e-004	0.0000	4.4665
Total											0.0000	4.4639	4.4639	1.1000e-004	0.0000	4.4665

Valley Center 7+ Unmitigated - GHG Only - San Diego County, Annual

3.5 Paving - 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											0.0000	48.0462	48.0462	0.0155	0.0000	48.4347
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	48.0462	48.0462	0.0155	0.0000	48.4347

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	3.3161	3.3161	8.0000e-005	0.0000	3.3180
Total											0.0000	3.3161	3.3161	8.0000e-005	0.0000	3.3180

Valley Center 7+ Unmitigated - GHG Only - San Diego County, Annual

3.5 Paving - 2025

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											0.0000	48.0462	48.0462	0.0155	0.0000	48.4346
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	48.0462	48.0462	0.0155	0.0000	48.4346

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	3.3161	3.3161	8.0000e-005	0.0000	3.3180
Total											0.0000	3.3161	3.3161	8.0000e-005	0.0000	3.3180

Valley Center 7+ Unmitigated - GHG Only - San Diego County, Annual

3.6 Site Preparation - 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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	104.2797	104.2797	0.0325	0.0000	105.0913
Total											0.0000	104.2797	104.2797	0.0325	0.0000	105.0913

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	6.4176	6.4176	2.1000e-004	0.0000	6.4230
Total											0.0000	6.4176	6.4176	2.1000e-004	0.0000	6.4230

Valley Center 7+ Unmitigated - GHG Only - San Diego County, Annual

3.6 Site Preparation - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	104.2796	104.2796	0.0325	0.0000	105.0912
Total											0.0000	104.2796	104.2796	0.0325	0.0000	105.0912

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	6.4176	6.4176	2.1000e-004	0.0000	6.4230
Total											0.0000	6.4176	6.4176	2.1000e-004	0.0000	6.4230

4.0 Operational Detail - Mobile

Valley Center 7+ Unmitigated - GHG Only - San Diego County, Annual

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	4,012.7192	4,012.7192	0.2139	0.0000	4,018.0670
Unmitigated											0.0000	4,012.7192	4,012.7192	0.2139	0.0000	4,018.0670

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	2,530.00	2,633.73	2289.65	9,290,445	9,290,445
Total	2,530.00	2,633.73	2,289.65	9,290,445	9,290,445

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	16.80	7.10	7.90	41.60	18.80	39.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.615011	0.035959	0.175734	0.096057	0.010793	0.005300	0.020678	0.029891	0.002015	0.001593	0.005502	0.000799	0.000668

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5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	423.8356	423.8356	0.0302	6.2400e-003	426.4500
Electricity Unmitigated											0.0000	437.9448	437.9448	0.0312	6.4500e-003	440.6462
NaturalGas Mitigated											0.0000	383.6917	383.6917	7.3500e-003	7.0300e-003	385.9718
NaturalGas Unmitigated											0.0000	501.2451	501.2451	9.6100e-003	9.1900e-003	504.2238

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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					
Single Family Housing	9.39298e+006											0.0000	501.2451	501.2451	9.6100e-003	9.1900e-003	504.2238
Total												0.0000	501.2451	501.2451	9.6100e-003	9.1900e-003	504.2238

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					
Single Family Housing	7.19011e+006											0.0000	383.6917	383.6917	7.3500e-003	7.0300e-003	385.9718
Total												0.0000	383.6917	383.6917	7.3500e-003	7.0300e-003	385.9718

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	2.36986e+006	437.9448	0.0312	6.4500e-003	440.6462
Total		437.9448	0.0312	6.4500e-003	440.6462

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	2.29351e+006	423.8356	0.0302	6.2400e-003	426.4500
Total		423.8356	0.0302	6.2400e-003	426.4500

6.0 Area Detail

6.1 Mitigation Measures Area

Valley Center 7+ Unmitigated - GHG Only - San Diego County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											261.3383	112.6701	374.0084	0.2441	0.0206	386.2364
Unmitigated											261.3383	112.6701	374.0084	0.2441	0.0206	386.2364

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
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											261.3383	109.6015	370.9398	0.2412	0.0206	383.0948
Landscaping											0.0000	3.0686	3.0686	2.9200e-003	0.0000	3.1416
Total											261.3383	112.6701	374.0084	0.2441	0.0206	386.2364

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											261.3383	109.6015	370.9398	0.2412	0.0206	383.0948
Landscaping											0.0000	3.0686	3.0686	2.9200e-003	0.0000	3.1416
Total											261.3383	112.6701	374.0084	0.2441	0.0206	386.2364

7.0 Water Detail

7.1 Mitigation Measures Water

Valley Center 7+ Unmitigated - GHG Only - San Diego County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	66.2303	0.5415	0.0136	83.8143
Unmitigated	66.2303	0.5415	0.0136	83.8143

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	16.484 / 10.3921	66.2303	0.5415	0.0136	83.8143
Total		66.2303	0.5415	0.0136	83.8143

Valley Center 7+ Unmitigated - GHG Only - San Diego County, Annual

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	16.484 / 10.3921	66.2303	0.5415	0.0136	83.8143
Total		66.2303	0.5415	0.0136	83.8143

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	60.2558	3.5610	0.0000	149.2813
Unmitigated	60.2558	3.5610	0.0000	149.2813

Valley Center 7+ Unmitigated - GHG Only - San Diego County, Annual

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	296.84	60.2558	3.5610	0.0000	149.2813
Total		60.2558	3.5610	0.0000	149.2813

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	296.84	60.2558	3.5610	0.0000	149.2813
Total		60.2558	3.5610	0.0000	149.2813

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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Valley Center 7+ Unmitigated - GHG Only - San Diego County, Annual

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	13.00	Dwelling Unit	4.22	23,400.00	37

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	10			Operational Year	2050
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	407.41	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

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Project Characteristics - Adjusted RPS 50% goal.

Land Use - .

Construction Phase -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Architectural Coating - SDAPCD Rule 67.0.1 architectural coating

Vehicle Trips - SANDAG trip rate

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Area Coating - SDAPCD Rule 67.0.1 architectural coating

Energy Use - .

Energy Mitigation - Adjusted Title 24 2016 standard

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Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	50.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	50
tblAreaCoating	Area_EF_Residential_Exterior	250	50
tblAreaCoating	Area_EF_Residential_Interior	250	50
tblConstructionPhase	PhaseEndDate	12/30/2016	1/24/2019
tblConstructionPhase	PhaseEndDate	12/30/2016	12/5/2018
tblConstructionPhase	PhaseEndDate	12/30/2016	1/17/2018
tblConstructionPhase	PhaseEndDate	12/30/2016	12/31/2018
tblConstructionPhase	PhaseEndDate	12/30/2016	1/5/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	1/1/2019
tblConstructionPhase	PhaseStartDate	12/31/2016	1/18/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	1/6/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	12/6/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	1/1/2018
tblProjectCharacteristics	CO2IntensityFactor	720.49	407.41
tblProjectCharacteristics	OperationalYear	2018	2050
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	ST_TR	9.91	10.41
tblVehicleTrips	SU_TR	8.62	9.05
tblVehicleTrips	WD_TR	9.52	10.00

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2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018											0.0000	321.3153	321.3153	0.0783	0.0000	323.2724
2019											0.0000	2.4017	2.4017	2.0000e-004	0.0000	2.4066
Maximum											0.0000	321.3153	321.3153	0.0783	0.0000	323.2724

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018											0.0000	321.3149	321.3149	0.0783	0.0000	323.2721
2019											0.0000	2.4017	2.4017	2.0000e-004	0.0000	2.4066
Maximum											0.0000	321.3149	321.3149	0.0783	0.0000	323.2721

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area											13.4285	5.7894	19.2178	0.0125	1.0600e-003	19.8461
Energy											0.0000	48.2588	48.2588	2.1000e-003	8.0000e-004	48.5506
Mobile											0.0000	137.0974	137.0974	6.2200e-003	0.0000	137.2529
Waste											3.0794	0.0000	3.0794	0.1820	0.0000	7.6290
Water											0.2687	3.1344	3.4031	0.0278	7.0000e-004	4.3067
Total											16.7765	194.2800	211.0565	0.2307	2.5600e-003	217.5853

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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											13.4285	5.7894	19.2178	0.0125	1.0600e-003	19.8461
Energy											0.0000	41.4935	41.4935	1.9300e-003	6.8000e-004	41.7450
Mobile											0.0000	137.0974	137.0974	6.2200e-003	0.0000	137.2529
Waste											3.0794	0.0000	3.0794	0.1820	0.0000	7.6290
Water											0.2687	3.1344	3.4031	0.0278	7.0000e-004	4.3067
Total											16.7765	187.5147	204.2912	0.2305	2.4400e-003	210.7797

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.48	3.21	0.07	4.69	3.13

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	1/1/2019	1/24/2019	5	18	
2	Building Construction	Building Construction	1/18/2018	12/5/2018	5	230	
3	Grading	Grading	1/6/2018	1/17/2018	5	8	
4	Paving	Paving	12/6/2018	12/31/2018	5	18	
5	Site Preparation	Site Preparation	1/1/2018	1/5/2018	5	5	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 47,385; Residential Outdoor: 15,795; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Grading	Excavators	1	8.00	158	0.38
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	2	6.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Paving	Paving Equipment	2	6.00	132	0.36
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	1.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	5.00	1.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

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3.1 Mitigation Measures Construction

3.2 Architectural Coating - 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					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	2.2979	2.2979	1.9000e-004	0.0000	2.3028
Total											0.0000	2.2979	2.2979	1.9000e-004	0.0000	2.3028

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.1037	0.1037	0.0000	0.0000	0.1038
Total											0.0000	0.1037	0.1037	0.0000	0.0000	0.1038

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3.2 Architectural Coating - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	2.2979	2.2979	1.9000e-004	0.0000	2.3028
Total											0.0000	2.2979	2.2979	1.9000e-004	0.0000	2.3028

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.1037	0.1037	0.0000	0.0000	0.1038
Total											0.0000	0.1037	0.1037	0.0000	0.0000	0.1038

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3.3 Building Construction - 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					
Off-Road											0.0000	273.4323	273.4323	0.0670	0.0000	275.1071
Total											0.0000	273.4323	273.4323	0.0670	0.0000	275.1071

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
Vendor											0.0000	2.8409	2.8409	2.4000e-004	0.0000	2.8469
Worker											0.0000	6.8336	6.8336	2.3000e-004	0.0000	6.8393
Total											0.0000	9.6744	9.6744	4.7000e-004	0.0000	9.6862

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3.3 Building Construction - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	273.4320	273.4320	0.0670	0.0000	275.1068
Total											0.0000	273.4320	273.4320	0.0670	0.0000	275.1068

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
Vendor											0.0000	2.8409	2.8409	2.4000e-004	0.0000	2.8469
Worker											0.0000	6.8336	6.8336	2.3000e-004	0.0000	6.8393
Total											0.0000	9.6744	9.6744	4.7000e-004	0.0000	9.6862

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3.4 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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	10.8428	10.8428	3.3800e-003	0.0000	10.9271
Total											0.0000	10.8428	10.8428	3.3800e-003	0.0000	10.9271

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.7131	0.7131	2.0000e-005	0.0000	0.7137
Total											0.0000	0.7131	0.7131	2.0000e-005	0.0000	0.7137

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3.4 Grading - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	10.8427	10.8427	3.3800e-003	0.0000	10.9271
Total											0.0000	10.8427	10.8427	3.3800e-003	0.0000	10.9271

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.7131	0.7131	2.0000e-005	0.0000	0.7137
Total											0.0000	0.7131	0.7131	2.0000e-005	0.0000	0.7137

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3.5 Paving - 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					
Off-Road											0.0000	15.2887	15.2887	4.6300e-003	0.0000	15.4045
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	15.2887	15.2887	4.6300e-003	0.0000	15.4045

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	2.1392	2.1392	7.0000e-005	0.0000	2.1410
Total											0.0000	2.1392	2.1392	7.0000e-005	0.0000	2.1410

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3.5 Paving - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	15.2887	15.2887	4.6300e-003	0.0000	15.4045
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	15.2887	15.2887	4.6300e-003	0.0000	15.4045

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	2.1392	2.1392	7.0000e-005	0.0000	2.1410
Total											0.0000	2.1392	2.1392	7.0000e-005	0.0000	2.1410

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3.6 Site Preparation - 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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	8.6900	8.6900	2.7100e-003	0.0000	8.7576
Total											0.0000	8.6900	8.6900	2.7100e-003	0.0000	8.7576

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.5348	0.5348	2.0000e-005	0.0000	0.5353
Total											0.0000	0.5348	0.5348	2.0000e-005	0.0000	0.5353

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3.6 Site Preparation - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	8.6900	8.6900	2.7100e-003	0.0000	8.7576
Total											0.0000	8.6900	8.6900	2.7100e-003	0.0000	8.7576

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.5348	0.5348	2.0000e-005	0.0000	0.5353
Total											0.0000	0.5348	0.5348	2.0000e-005	0.0000	0.5353

4.0 Operational Detail - Mobile

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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	137.0974	137.0974	6.2200e-003	0.0000	137.2529
Unmitigated											0.0000	137.0974	137.0974	6.2200e-003	0.0000	137.2529

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	130.00	135.33	117.65	477,375	477,375
Total	130.00	135.33	117.65	477,375	477,375

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	16.80	7.10	7.90	41.60	18.80	39.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.615011	0.035959	0.175734	0.096057	0.010793	0.005300	0.020678	0.029891	0.002015	0.001593	0.005502	0.000799	0.000668

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5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	21.7781	21.7781	1.5500e-003	3.2000e-004	21.9125
Electricity Unmitigated											0.0000	22.5031	22.5031	1.6000e-003	3.3000e-004	22.6419
NaturalGas Mitigated											0.0000	19.7154	19.7154	3.8000e-004	3.6000e-004	19.8325
NaturalGas Unmitigated											0.0000	25.7557	25.7557	4.9000e-004	4.7000e-004	25.9087

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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					
Single Family Housing	482643											0.0000	25.7557	25.7557	4.9000e-004	4.7000e-004	25.9087
Total												0.0000	25.7557	25.7557	4.9000e-004	4.7000e-004	25.9087

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					
Single Family Housing	369452											0.0000	19.7154	19.7154	3.8000e-004	3.6000e-004	19.8325
Total												0.0000	19.7154	19.7154	3.8000e-004	3.6000e-004	19.8325

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5.3 Energy by Land Use - Electricity**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	121771	22.5031	1.6000e-003	3.3000e-004	22.6419
Total		22.5031	1.6000e-003	3.3000e-004	22.6419

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	117848	21.7781	1.5500e-003	3.2000e-004	21.9125
Total		21.7781	1.5500e-003	3.2000e-004	21.9125

6.0 Area Detail**6.1 Mitigation Measures Area**

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											13.4285	5.7894	19.2178	0.0125	1.0600e-003	19.8461
Unmitigated											13.4285	5.7894	19.2178	0.0125	1.0600e-003	19.8461

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
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											13.4285	5.6317	19.0602	0.0124	1.0600e-003	19.6847
Landscaping											0.0000	0.1577	0.1577	1.5000e-004	0.0000	0.1614
Total											13.4285	5.7894	19.2178	0.0125	1.0600e-003	19.8461

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											13.4285	5.6317	19.0602	0.0124	1.0600e-003	19.6847
Landscaping											0.0000	0.1577	0.1577	1.5000e-004	0.0000	0.1614
Total											13.4285	5.7894	19.2178	0.0125	1.0600e-003	19.8461

7.0 Water Detail

7.1 Mitigation Measures Water

Valley Center 51 Unmitigated - GHG Only - San Diego County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	3.4031	0.0278	7.0000e-004	4.3067
Unmitigated	3.4031	0.0278	7.0000e-004	4.3067

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	0.847002 / 0.53398	3.4031	0.0278	7.0000e-004	4.3067
Total		3.4031	0.0278	7.0000e-004	4.3067

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7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	0.847002 / 0.53398	3.4031	0.0278	7.0000e-004	4.3067
Total		3.4031	0.0278	7.0000e-004	4.3067

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	3.0794	0.1820	0.0000	7.6290
Unmitigated	3.0794	0.1820	0.0000	7.6290

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8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	15.17	3.0794	0.1820	0.0000	7.6290
Total		3.0794	0.1820	0.0000	7.6290

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	15.17	3.0794	0.1820	0.0000	7.6290
Total		3.0794	0.1820	0.0000	7.6290

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

Valley Center 57+ Unmitigated - GHG Only - San Diego County, Annual

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San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	231.00	Dwelling Unit	75.00	415,800.00	661

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	10			Operational Year	2050
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	407.41	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

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Project Characteristics - Adjusted for RPS 50% goal.

Land Use - .

Construction Phase -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Architectural Coating - SDAPCD Rule 67.0.1 architectural coating

Vehicle Trips - SANDAG trip rates

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Area Coating - SDAPCD Rule 67.0.1 architectural coating

Energy Use - .

Energy Mitigation - Adjusted Title 24 2016 standard

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Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	50.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	50
tblAreaCoating	Area_EF_Residential_Exterior	250	50
tblAreaCoating	Area_EF_Residential_Interior	250	50
tblConstructionPhase	PhaseEndDate	12/30/2016	5/26/2023
tblConstructionPhase	PhaseEndDate	12/30/2016	10/28/2022
tblConstructionPhase	PhaseEndDate	12/30/2016	7/27/2018
tblConstructionPhase	PhaseEndDate	12/30/2016	2/10/2023
tblConstructionPhase	PhaseEndDate	12/30/2016	2/23/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	2/11/2023
tblConstructionPhase	PhaseStartDate	12/31/2016	7/28/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	2/24/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	10/29/2022
tblConstructionPhase	PhaseStartDate	12/31/2016	1/1/2018
tblProjectCharacteristics	CO2IntensityFactor	720.49	407.41
tblProjectCharacteristics	OperationalYear	2018	2050
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	ST_TR	9.91	10.41
tblVehicleTrips	SU_TR	8.62	9.05
tblVehicleTrips	WD_TR	9.52	10.00

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2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018											0.0000	619.4201	619.4201	0.1563	0.0000	623.3275
2019											0.0000	511.6587	511.6587	0.0853	0.0000	513.7902
2020											0.0000	504.5509	504.5509	0.0839	0.0000	506.6473
2021											0.0000	497.8661	497.8661	0.0822	0.0000	499.9210
2022											0.0000	454.6391	454.6391	0.0816	0.0000	456.6790
2023											0.0000	48.2343	48.2343	0.0105	0.0000	48.4969
Maximum											0.0000	619.4201	619.4201	0.1563	0.0000	623.3275

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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					
2018											0.0000	619.4195	619.4195	0.1563	0.0000	623.3269
2019											0.0000	511.6583	511.6583	0.0853	0.0000	513.7899
2020											0.0000	504.5505	504.5505	0.0839	0.0000	506.6470
2021											0.0000	497.8657	497.8657	0.0822	0.0000	499.9207
2022											0.0000	454.6388	454.6388	0.0816	0.0000	456.6786
2023											0.0000	48.2342	48.2342	0.0105	0.0000	48.4969
Maximum											0.0000	619.4195	619.4195	0.1563	0.0000	623.3269

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

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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											238.6132	102.8727	341.4859	0.2229	0.0188	352.6507
Energy											0.0000	857.5213	857.5213	0.0372	0.0143	862.7074
Mobile											0.0000	3,663.787 1	3,663.787 1	0.1953	0.0000	3,668.669 9
Waste											55.0126	0.0000	55.0126	3.2512	0.0000	136.2913
Water											4.7749	55.6963	60.4711	0.4944	0.0124	76.5261
Total											298.4007	4,679.877 3	4,978.277 9	4.2010	0.0455	5,096.845 3

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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											238.6132	102.8727	341.4859	0.2229	0.0188	352.6507
Energy											0.0000	737.3075	737.3075	0.0343	0.0121	741.7763
Mobile											0.0000	3,663.787 1	3,663.787 1	0.1953	0.0000	3,668.669 9
Waste											55.0126	0.0000	55.0126	3.2512	0.0000	136.2913
Water											4.7749	55.6963	60.4711	0.4944	0.0124	76.5261
Total											298.4007	4,559.663 5	4,858.064 2	4.1980	0.0433	4,975.914 3

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.57	2.41	0.07	4.75	2.37

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	2/11/2023	5/26/2023	5	75	
2	Building Construction	Building Construction	7/28/2018	10/28/2022	5	1110	
3	Grading	Grading	2/24/2018	7/27/2018	5	110	
4	Paving	Paving	10/29/2022	2/10/2023	5	75	
5	Site Preparation	Site Preparation	1/1/2018	2/23/2018	5	40	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 275

Acres of Paving: 0

Residential Indoor: 841,995; Residential Outdoor: 280,665; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Grading	Excavators	2	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	17.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	83.00	25.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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3.2 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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	9.5747	9.5747	5.7000e-004	0.0000	9.5890
Total											0.0000	9.5747	9.5747	5.7000e-004	0.0000	9.5890

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	6.3708	6.3708	1.6000e-004	0.0000	6.3748
Total											0.0000	6.3708	6.3708	1.6000e-004	0.0000	6.3748

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3.2 Architectural Coating - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	9.5747	9.5747	5.7000e-004	0.0000	9.5890
Total											0.0000	9.5747	9.5747	5.7000e-004	0.0000	9.5890

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	6.3708	6.3708	1.6000e-004	0.0000	6.3748
Total											0.0000	6.3708	6.3708	1.6000e-004	0.0000	6.3748

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3.3 Building Construction - 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					
Off-Road											0.0000	131.9608	131.9608	0.0323	0.0000	132.7691
Total											0.0000	131.9608	131.9608	0.0323	0.0000	132.7691

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
Vendor											0.0000	34.2755	34.2755	2.9200e-003	0.0000	34.3486
Worker											0.0000	54.7459	54.7459	1.8300e-003	0.0000	54.7915
Total											0.0000	89.0214	89.0214	4.7500e-003	0.0000	89.1401

Valley Center 57+ Unmitigated - GHG Only - San Diego County, Annual

3.3 Building Construction - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	131.9607	131.9607	0.0323	0.0000	132.7689
Total											0.0000	131.9607	131.9607	0.0323	0.0000	132.7689

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
Vendor											0.0000	34.2755	34.2755	2.9200e-003	0.0000	34.3486
Worker											0.0000	54.7459	54.7459	1.8300e-003	0.0000	54.7915
Total											0.0000	89.0214	89.0214	4.7500e-003	0.0000	89.1401

Valley Center 57+ Unmitigated - GHG Only - San Diego County, Annual

3.3 Building Construction - 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											0.0000	306.8110	306.8110	0.0747	0.0000	308.6795
Total											0.0000	306.8110	306.8110	0.0747	0.0000	308.6795

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
Vendor											0.0000	80.0078	80.0078	6.6400e-003	0.0000	80.1738
Worker											0.0000	124.8399	124.8399	3.8800e-003	0.0000	124.9369
Total											0.0000	204.8477	204.8477	0.0105	0.0000	205.1107

Valley Center 57+ Unmitigated - GHG Only - San Diego County, Annual

3.3 Building Construction - 2019

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											0.0000	306.8106	306.8106	0.0747	0.0000	308.6792
Total											0.0000	306.8106	306.8106	0.0747	0.0000	308.6792

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
Vendor											0.0000	80.0078	80.0078	6.6400e-003	0.0000	80.1738
Worker											0.0000	124.8399	124.8399	3.8800e-003	0.0000	124.9369
Total											0.0000	204.8477	204.8477	0.0105	0.0000	205.1107

Valley Center 57+ Unmitigated - GHG Only - San Diego County, Annual

3.3 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											0.0000	303.4091	303.4091	0.0740	0.0000	305.2596
Total											0.0000	303.4091	303.4091	0.0740	0.0000	305.2596

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
Vendor											0.0000	79.7824	79.7824	6.3100e-003	0.0000	79.9402
Worker											0.0000	121.3594	121.3594	3.5300e-003	0.0000	121.4475
Total											0.0000	201.1418	201.1418	9.8400e-003	0.0000	201.3877

Valley Center 57+ Unmitigated - GHG Only - San Diego County, Annual

3.3 Building Construction - 2020

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											0.0000	303.4087	303.4087	0.0740	0.0000	305.2592
Total											0.0000	303.4087	303.4087	0.0740	0.0000	305.2592

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
Vendor											0.0000	79.7824	79.7824	6.3100e-003	0.0000	79.9402
Worker											0.0000	121.3594	121.3594	3.5300e-003	0.0000	121.4475
Total											0.0000	201.1418	201.1418	9.8400e-003	0.0000	201.3877

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3.3 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											0.0000	302.2867	302.2867	0.0729	0.0000	304.1099
Total											0.0000	302.2867	302.2867	0.0729	0.0000	304.1099

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
Vendor											0.0000	78.7478	78.7478	6.0300e-003	0.0000	78.8984
Worker											0.0000	116.8316	116.8316	3.2400e-003	0.0000	116.9127
Total											0.0000	195.5794	195.5794	9.2700e-003	0.0000	195.8112

Valley Center 57+ Unmitigated - GHG Only - San Diego County, Annual

3.3 Building Construction - 2021

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											0.0000	302.2863	302.2863	0.0729	0.0000	304.1095
Total											0.0000	302.2863	302.2863	0.0729	0.0000	304.1095

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
Vendor											0.0000	78.7478	78.7478	6.0300e-003	0.0000	78.8984
Worker											0.0000	116.8316	116.8316	3.2400e-003	0.0000	116.9127
Total											0.0000	195.5794	195.5794	9.2700e-003	0.0000	195.8112

Valley Center 57+ Unmitigated - GHG Only - San Diego County, Annual

3.3 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											0.0000	249.1046	249.1046	0.0597	0.0000	250.5966
Total											0.0000	249.1046	249.1046	0.0597	0.0000	250.5966

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
Vendor											0.0000	64.2559	64.2559	4.8000e-003	0.0000	64.3759
Worker											0.0000	92.7098	92.7098	2.4500e-003	0.0000	92.7710
Total											0.0000	156.9657	156.9657	7.2500e-003	0.0000	157.1469

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3.3 Building Construction - 2022

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											0.0000	249.1043	249.1043	0.0597	0.0000	250.5963
Total											0.0000	249.1043	249.1043	0.0597	0.0000	250.5963

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
Vendor											0.0000	64.2559	64.2559	4.8000e-003	0.0000	64.3759
Worker											0.0000	92.7098	92.7098	2.4500e-003	0.0000	92.7710
Total											0.0000	156.9657	156.9657	7.2500e-003	0.0000	157.1469

Valley Center 57+ Unmitigated - GHG Only - San Diego County, Annual

3.4 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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	311.5668	311.5668	0.0970	0.0000	313.9916
Total											0.0000	311.5668	311.5668	0.0970	0.0000	313.9916

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	13.0729	13.0729	4.4000e-004	0.0000	13.0838
Total											0.0000	13.0729	13.0729	4.4000e-004	0.0000	13.0838

Valley Center 57+ Unmitigated - GHG Only - San Diego County, Annual

3.4 Grading - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	311.5664	311.5664	0.0970	0.0000	313.9913
Total											0.0000	311.5664	311.5664	0.0970	0.0000	313.9913

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	13.0729	13.0729	4.4000e-004	0.0000	13.0838
Total											0.0000	13.0729	13.0729	4.4000e-004	0.0000	13.0838

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3.5 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	45.0620	45.0620	0.0146	0.0000	45.4264
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	45.0620	45.0620	0.0146	0.0000	45.4264

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	3.5068	3.5068	9.0000e-005	0.0000	3.5091
Total											0.0000	3.5068	3.5068	9.0000e-005	0.0000	3.5091

Valley Center 57+ Unmitigated - GHG Only - San Diego County, Annual

3.5 Paving - 2022

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											0.0000	45.0620	45.0620	0.0146	0.0000	45.4263
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	45.0620	45.0620	0.0146	0.0000	45.4263

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	3.5068	3.5068	9.0000e-005	0.0000	3.5091
Total											0.0000	3.5068	3.5068	9.0000e-005	0.0000	3.5091

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3.5 Paving - 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											0.0000	30.0403	30.0403	9.7200e-003	0.0000	30.2832
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	30.0403	30.0403	9.7200e-003	0.0000	30.2832

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	2.2485	2.2485	6.0000e-005	0.0000	2.2499
Total											0.0000	2.2485	2.2485	6.0000e-005	0.0000	2.2499

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3.5 Paving - 2023

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											0.0000	30.0403	30.0403	9.7200e-003	0.0000	30.2832
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	30.0403	30.0403	9.7200e-003	0.0000	30.2832

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	2.2485	2.2485	6.0000e-005	0.0000	2.2499
Total											0.0000	2.2485	2.2485	6.0000e-005	0.0000	2.2499

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3.6 Site Preparation - 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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	69.5198	69.5198	0.0216	0.0000	70.0609
Total											0.0000	69.5198	69.5198	0.0216	0.0000	70.0609

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	4.2784	4.2784	1.4000e-004	0.0000	4.2820
Total											0.0000	4.2784	4.2784	1.4000e-004	0.0000	4.2820

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3.6 Site Preparation - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	69.5197	69.5197	0.0216	0.0000	70.0608
Total											0.0000	69.5197	69.5197	0.0216	0.0000	70.0608

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	4.2784	4.2784	1.4000e-004	0.0000	4.2820
Total											0.0000	4.2784	4.2784	1.4000e-004	0.0000	4.2820

4.0 Operational Detail - Mobile

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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	3,663.7871	3,663.7871	0.1953	0.0000	3,668.6699
Unmitigated											0.0000	3,663.7871	3,663.7871	0.1953	0.0000	3,668.6699

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	2,310.00	2,404.71	2090.55	8,482,580	8,482,580
Total	2,310.00	2,404.71	2,090.55	8,482,580	8,482,580

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	16.80	7.10	7.90	41.60	18.80	39.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.615011	0.035959	0.175734	0.096057	0.010793	0.005300	0.020678	0.029891	0.002015	0.001593	0.005502	0.000799	0.000668

Valley Center 57+ Unmitigated - GHG Only - San Diego County, Annual

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	386.9804	386.9804	0.0276	5.7000e-003	389.3673
Electricity Unmitigated											0.0000	399.8627	399.8627	0.0285	5.8900e-003	402.3291
NaturalGas Mitigated											0.0000	350.3272	350.3272	6.7100e-003	6.4200e-003	352.4090
NaturalGas Unmitigated											0.0000	457.6586	457.6586	8.7700e-003	8.3900e-003	460.3782

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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					
Single Family Housing	8.5762e+006											0.0000	457.6586	457.6586	8.7700e-003	8.3900e-003	460.3782
Total												0.0000	457.6586	457.6586	8.7700e-003	8.3900e-003	460.3782

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					
Single Family Housing	6.56488e+006											0.0000	350.3272	350.3272	6.7100e-003	6.4200e-003	352.4090
Total												0.0000	350.3272	350.3272	6.7100e-003	6.4200e-003	352.4090

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	2.16378e+006	399.8627	0.0285	5.8900e-003	402.3291
Total		399.8627	0.0285	5.8900e-003	402.3291

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	2.09407e+006	386.9804	0.0276	5.7000e-003	389.3673
Total		386.9804	0.0276	5.7000e-003	389.3673

6.0 Area Detail

6.1 Mitigation Measures Area

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											238.6132	102.8727	341.4859	0.2229	0.0188	352.6507
Unmitigated											238.6132	102.8727	341.4859	0.2229	0.0188	352.6507

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
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											238.6132	100.0709	338.6841	0.2202	0.0188	349.7822
Landscaping											0.0000	2.8018	2.8018	2.6700e-003	0.0000	2.8684
Total											238.6132	102.8727	341.4859	0.2229	0.0188	352.6507

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											238.6132	100.0709	338.6841	0.2202	0.0188	349.7822
Landscaping											0.0000	2.8018	2.8018	2.6700e-003	0.0000	2.8684
Total											238.6132	102.8727	341.4859	0.2229	0.0188	352.6507

7.0 Water Detail

7.1 Mitigation Measures Water

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	60.4711	0.4944	0.0124	76.5261
Unmitigated	60.4711	0.4944	0.0124	76.5261

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	15.0506 / 9.48841	60.4711	0.4944	0.0124	76.5261
Total		60.4711	0.4944	0.0124	76.5261

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7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	15.0506 / 9.48841	60.4711	0.4944	0.0124	76.5261
Total		60.4711	0.4944	0.0124	76.5261

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	55.0126	3.2512	0.0000	136.2913
Unmitigated	55.0126	3.2512	0.0000	136.2913

Valley Center 57+ Unmitigated - GHG Only - San Diego County, Annual

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	271.01	55.0126	3.2512	0.0000	136.2913
Total		55.0126	3.2512	0.0000	136.2913

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	271.01	55.0126	3.2512	0.0000	136.2913
Total		55.0126	3.2512	0.0000	136.2913

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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Valley Center 57+ Unmitigated - GHG Only - San Diego County, Annual

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

Valley Center 67 Unmitigated - GHG Only - San Diego County, Annual

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San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	283.14	1000sqft	6.50	283,140.00	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	10			Operational Year	2050
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	407.41	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

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Project Characteristics - Adjusted RPS 50% goal.

Land Use - .

Construction Phase -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Architectural Coating - SDAPCD Rule 67.0.1 Architectural Coating

Vehicle Trips -

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Area Coating - SDAPCD Rule 67.0.1 Architectural Coating

Energy Use - .

Energy Mitigation - Adjusted Title 24 2016 Standard

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Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	50.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	50
tblAreaCoating	Area_EF_Residential_Exterior	250	50
tblAreaCoating	Area_EF_Residential_Interior	250	50
tblConstructionPhase	PhaseEndDate	12/30/2016	2/22/2019
tblConstructionPhase	PhaseEndDate	12/30/2016	12/28/2018
tblConstructionPhase	PhaseEndDate	12/30/2016	2/9/2018
tblConstructionPhase	PhaseEndDate	12/30/2016	1/25/2019
tblConstructionPhase	PhaseEndDate	12/30/2016	1/12/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	1/26/2019
tblConstructionPhase	PhaseStartDate	12/31/2016	2/10/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	1/13/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	12/29/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	1/1/2018
tblProjectCharacteristics	CO2IntensityFactor	720.49	407.41
tblProjectCharacteristics	OperationalYear	2018	2050
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural

2.0 Emissions Summary

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area											0.0000	5.0600e-003	5.0600e-003	1.0000e-005	0.0000	5.3900e-003
Energy											0.0000	1,032.9903	1,032.9903	0.0479	0.0170	1,039.2510
Mobile											0.0000	1,649.8023	1,649.8023	0.0746	0.0000	1,651.6668
Waste											71.2681	0.0000	71.2681	4.2118	0.0000	176.5637
Water											20.7726	157.5523	178.3249	2.1448	0.0527	247.6477
Total											92.0407	2,840.3500	2,932.3906	6.4791	0.0697	3,115.1345

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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	5.0600e-003	5.0600e-003	1.0000e-005	0.0000	5.3900e-003
Energy											0.0000	1,015.2900	1,015.2900	0.0473	0.0167	1,021.4441
Mobile											0.0000	1,649.8023	1,649.8023	0.0746	0.0000	1,651.6668
Waste											71.2681	0.0000	71.2681	4.2118	0.0000	176.5637
Water											20.7726	157.5523	178.3249	2.1448	0.0527	247.6477
Total											92.0407	2,822.6497	2,914.6903	6.4785	0.0694	3,097.3277

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.62	0.60	0.01	0.44	0.57

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	1/26/2019	2/22/2019	5	20	
2	Building Construction	Building Construction	2/10/2018	12/28/2018	5	230	
3	Grading	Grading	1/13/2018	2/9/2018	5	20	
4	Paving	Paving	12/29/2018	1/25/2019	5	20	
5	Site Preparation	Site Preparation	1/1/2018	1/12/2018	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 424,710; Non-Residential Outdoor: 141,570; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Valley Center 67 Unmitigated - GHG Only - San Diego County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Grading	Excavators	1	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	24.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	119.00	46.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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3.2 Architectural Coating - 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					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5587
Total											0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5587

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	2.7662	2.7662	9.0000e-005	0.0000	2.7683
Total											0.0000	2.7662	2.7662	9.0000e-005	0.0000	2.7683

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3.2 Architectural Coating - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5586
Total											0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5586

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	2.7662	2.7662	9.0000e-005	0.0000	2.7683
Total											0.0000	2.7662	2.7662	9.0000e-005	0.0000	2.7683

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3.3 Building Construction - 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					
Off-Road											0.0000	273.4323	273.4323	0.0670	0.0000	275.1071
Total											0.0000	273.4323	273.4323	0.0670	0.0000	275.1071

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
Vendor											0.0000	130.6792	130.6792	0.0111	0.0000	130.9578
Worker											0.0000	162.6391	162.6391	5.4200e-003	0.0000	162.7747
Total											0.0000	293.3183	293.3183	0.0166	0.0000	293.7325

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3.3 Building Construction - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	273.4320	273.4320	0.0670	0.0000	275.1068
Total											0.0000	273.4320	273.4320	0.0670	0.0000	275.1068

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
Vendor											0.0000	130.6792	130.6792	0.0111	0.0000	130.9578
Worker											0.0000	162.6391	162.6391	5.4200e-003	0.0000	162.7747
Total											0.0000	293.3183	293.3183	0.0166	0.0000	293.7325

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3.4 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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	27.1069	27.1069	8.4400e-003	0.0000	27.3178
Total											0.0000	27.1069	27.1069	8.4400e-003	0.0000	27.3178

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.7827	1.7827	6.0000e-005	0.0000	1.7842
Total											0.0000	1.7827	1.7827	6.0000e-005	0.0000	1.7842

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3.4 Grading - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	27.1068	27.1068	8.4400e-003	0.0000	27.3178
Total											0.0000	27.1068	27.1068	8.4400e-003	0.0000	27.3178

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.7827	1.7827	6.0000e-005	0.0000	1.7842
Total											0.0000	1.7827	1.7827	6.0000e-005	0.0000	1.7842

Valley Center 67 Unmitigated - GHG Only - San Diego County, Annual

3.5 Paving - 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					
Off-Road											0.0000	1.0406	1.0406	3.2000e-004	0.0000	1.0487
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	1.0406	1.0406	3.2000e-004	0.0000	1.0487

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.0891	0.0891	0.0000	0.0000	0.0892
Total											0.0000	0.0891	0.0891	0.0000	0.0000	0.0892

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3.5 Paving - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	1.0406	1.0406	3.2000e-004	0.0000	1.0487
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	1.0406	1.0406	3.2000e-004	0.0000	1.0487

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.0891	0.0891	0.0000	0.0000	0.0892
Total											0.0000	0.0891	0.0891	0.0000	0.0000	0.0892

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3.5 Paving - 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											0.0000	19.4514	19.4514	6.1500e-003	0.0000	19.6053
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	19.4514	19.4514	6.1500e-003	0.0000	19.6053

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.6424	1.6424	5.0000e-005	0.0000	1.6437
Total											0.0000	1.6424	1.6424	5.0000e-005	0.0000	1.6437

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3.5 Paving - 2019

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											0.0000	19.4514	19.4514	6.1500e-003	0.0000	19.6053
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	19.4514	19.4514	6.1500e-003	0.0000	19.6053

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.6424	1.6424	5.0000e-005	0.0000	1.6437
Total											0.0000	1.6424	1.6424	5.0000e-005	0.0000	1.6437

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3.6 Site Preparation - 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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	17.3800	17.3800	5.4100e-003	0.0000	17.5152
Total											0.0000	17.3800	17.3800	5.4100e-003	0.0000	17.5152

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.0696	1.0696	4.0000e-005	0.0000	1.0705
Total											0.0000	1.0696	1.0696	4.0000e-005	0.0000	1.0705

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3.6 Site Preparation - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	17.3799	17.3799	5.4100e-003	0.0000	17.5152
Total											0.0000	17.3799	17.3799	5.4100e-003	0.0000	17.5152

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.0696	1.0696	4.0000e-005	0.0000	1.0705
Total											0.0000	1.0696	1.0696	4.0000e-005	0.0000	1.0705

4.0 Operational Detail - Mobile

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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	1,649.8023	1,649.8023	0.0746	0.0000	1,651.6668
Unmitigated											0.0000	1,649.8023	1,649.8023	0.0746	0.0000	1,651.6668

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	1,973.49	373.74	192.54	5,758,611	5,758,611
Total	1,973.49	373.74	192.54	5,758,611	5,758,611

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.615011	0.035959	0.175734	0.096057	0.010793	0.005300	0.020678	0.029891	0.002015	0.001593	0.005502	0.000799	0.000668

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5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	534.9839	534.9839	0.0381	7.8800e-003	538.2838
Electricity Unmitigated											0.0000	541.0273	541.0273	0.0385	7.9700e-003	544.3645
NaturalGas Mitigated											0.0000	480.3061	480.3061	9.2100e-003	8.8100e-003	483.1603
NaturalGas Unmitigated											0.0000	491.9630	491.9630	9.4300e-003	9.0200e-003	494.8865

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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					
General Light Industry	9.21904e+006											0.0000	491.9630	491.9630	9.4300e-003	9.0200e-003	494.8865
Total												0.0000	491.9630	491.9630	9.4300e-003	9.0200e-003	494.8865

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					
General Light Industry	9.0006e+006											0.0000	480.3061	480.3061	9.2100e-003	8.8100e-003	483.1603
Total												0.0000	480.3061	480.3061	9.2100e-003	8.8100e-003	483.1603

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	2.92767e+006	541.0273	0.0385	7.9700e-003	544.3645
Total		541.0273	0.0385	7.9700e-003	544.3645

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	2.89496e+006	534.9839	0.0381	7.8800e-003	538.2838
Total		534.9839	0.0381	7.8800e-003	538.2838

6.0 Area Detail

6.1 Mitigation Measures Area

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											0.0000	5.0600e-003	5.0600e-003	1.0000e-005	0.0000	5.3900e-003
Unmitigated											0.0000	5.0600e-003	5.0600e-003	1.0000e-005	0.0000	5.3900e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping											0.0000	5.0600e-003	5.0600e-003	1.0000e-005	0.0000	5.3900e-003
Total											0.0000	5.0600e-003	5.0600e-003	1.0000e-005	0.0000	5.3900e-003

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping											0.0000	5.0600e-003	5.0600e-003	1.0000e-005	0.0000	5.3900e-003
Total											0.0000	5.0600e-003	5.0600e-003	1.0000e-005	0.0000	5.3900e-003

7.0 Water Detail

7.1 Mitigation Measures Water

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	178.3249	2.1448	0.0527	247.6477
Unmitigated	178.3249	2.1448	0.0527	247.6477

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	65.4761 / 0	178.3249	2.1448	0.0527	247.6477
Total		178.3249	2.1448	0.0527	247.6477

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7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	65.4761 / 0	178.3249	2.1448	0.0527	247.6477
Total		178.3249	2.1448	0.0527	247.6477

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	71.2681	4.2118	0.0000	176.5637
Unmitigated	71.2681	4.2118	0.0000	176.5637

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8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	351.09	71.2681	4.2118	0.0000	176.5637
Total		71.2681	4.2118	0.0000	176.5637

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	351.09	71.2681	4.2118	0.0000	176.5637
Total		71.2681	4.2118	0.0000	176.5637

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

Champagne Gardens Specific Plan Unmitigated - GHG Only - San Diego County, Annual

**Champagne Gardens Specific Plan Unmitigated - GHG Only
San Diego County, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	31.00	Dwelling Unit	10.06	55,800.00	89
General Office Building	117.61	1000sqft	2.70	117,610.00	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	10			Operational Year	2050
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	407.41	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

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Project Characteristics - Adjusted RPS 50% goal.

Land Use - .

Construction Phase -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Architectural Coating - SDAPCD Rule 67.0.1 architectural coating

Vehicle Trips - SANDAG trip rates

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Area Coating - SDAPCD Rule 67.0.1 architectural coating

Energy Use - Adjusted Title 24 2016 standard

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	50.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	50
tblAreaCoating	Area_EF_Residential_Exterior	250	50
tblAreaCoating	Area_EF_Residential_Interior	250	50
tblConstructionPhase	PhaseEndDate	12/30/2016	6/14/2019
tblConstructionPhase	PhaseEndDate	12/30/2016	4/19/2019

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tblConstructionPhase	PhaseEndDate	12/30/2016	2/23/2018
tblConstructionPhase	PhaseEndDate	12/30/2016	5/17/2019
tblConstructionPhase	PhaseEndDate	12/30/2016	1/12/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	5/18/2019
tblConstructionPhase	PhaseStartDate	12/31/2016	2/24/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	1/13/2018
tblConstructionPhase	PhaseStartDate	12/31/2016	4/20/2019
tblConstructionPhase	PhaseStartDate	12/31/2016	1/1/2018
tblEnergyUse	T24E	3.22	3.06
tblEnergyUse	T24E	1,077.77	775.99
tblEnergyUse	T24NG	3.49	3.32
tblEnergyUse	T24NG	31,096.40	22,389.41
tblProjectCharacteristics	CO2IntensityFactor	720.49	407.41
tblProjectCharacteristics	OperationalYear	2018	2050
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	ST_TR	9.91	10.41
tblVehicleTrips	SU_TR	8.62	9.05
tblVehicleTrips	WD_TR	9.52	10.00

2.0 Emissions Summary

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area											32.0217	13.8075	45.8292	0.0299	2.5200e-003	47.3277
Energy											0.0000	328.4301	328.4301	0.0199	5.0800e-003	330.4406
Mobile											0.0000	1,686.6035	1,686.6035	0.0930	0.0000	1,688.9285
Waste											29.6103	0.0000	29.6103	1.7499	0.0000	73.3582
Water											7.2724	84.0767	91.3492	0.7529	0.0189	115.7973
Total											68.9044	2,112.9178	2,181.8222	2.6456	0.0265	2,255.8523

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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											32.0217	13.8075	45.8292	0.0299	2.5200e-003	47.3277
Energy											0.0000	328.4301	328.4301	0.0199	5.0800e-003	330.4406
Mobile											0.0000	1,686.6035	1,686.6035	0.0930	0.0000	1,688.9285
Waste											29.6103	0.0000	29.6103	1.7499	0.0000	73.3582
Water											7.2724	84.0767	91.3492	0.7529	0.0189	115.7973
Total											68.9044	2,112.9178	2,181.8222	2.6456	0.0265	2,255.8523

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

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	5/18/2019	6/14/2019	5	20	
2	Building Construction	Building Construction	2/24/2018	4/19/2019	5	300	
3	Grading	Grading	1/13/2018	2/23/2018	5	30	
4	Paving	Paving	4/20/2019	5/17/2019	5	20	
5	Site Preparation	Site Preparation	1/1/2018	1/12/2018	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 0

Residential Indoor: 112,995; Residential Outdoor: 37,665; Non-Residential Indoor: 176,415; Non-Residential Outdoor: 58,805; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Grading	Excavators	2	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	10.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	49.00	23.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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3.2 Architectural Coating - 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					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5587
Total											0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5587

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.1526	1.1526	4.0000e-005	0.0000	1.1535
Total											0.0000	1.1526	1.1526	4.0000e-005	0.0000	1.1535

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3.2 Architectural Coating - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5586
Total											0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5586

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.1526	1.1526	4.0000e-005	0.0000	1.1535
Total											0.0000	1.1526	1.1526	4.0000e-005	0.0000	1.1535

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3.3 Building Construction - 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					
Off-Road											0.0000	262.7328	262.7328	0.0644	0.0000	264.3420
Total											0.0000	262.7328	262.7328	0.0644	0.0000	264.3420

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
Vendor											0.0000	62.7828	62.7828	5.3500e-003	0.0000	62.9167
Worker											0.0000	64.3485	64.3485	2.1500e-003	0.0000	64.4022
Total											0.0000	127.1313	127.1313	7.5000e-003	0.0000	127.3189

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3.3 Building Construction - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	262.7325	262.7325	0.0644	0.0000	264.3417
Total											0.0000	262.7325	262.7325	0.0644	0.0000	264.3417

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
Vendor											0.0000	62.7828	62.7828	5.3500e-003	0.0000	62.9167
Worker											0.0000	64.3485	64.3485	2.1500e-003	0.0000	64.4022
Total											0.0000	127.1313	127.1313	7.5000e-003	0.0000	127.3189

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3.3 Building Construction - 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											0.0000	92.8662	92.8662	0.0226	0.0000	93.4317
Total											0.0000	92.8662	92.8662	0.0226	0.0000	93.4317

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
Vendor											0.0000	22.2796	22.2796	1.8500e-003	0.0000	22.3258
Worker											0.0000	22.3079	22.3079	6.9000e-004	0.0000	22.3252
Total											0.0000	44.5874	44.5874	2.5400e-003	0.0000	44.6510

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3.3 Building Construction - 2019

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											0.0000	92.8661	92.8661	0.0226	0.0000	93.4316
Total											0.0000	92.8661	92.8661	0.0226	0.0000	93.4316

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
Vendor											0.0000	22.2796	22.2796	1.8500e-003	0.0000	22.3258
Worker											0.0000	22.3079	22.3079	6.9000e-004	0.0000	22.3252
Total											0.0000	44.5874	44.5874	2.5400e-003	0.0000	44.6510

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3.4 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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	84.9728	84.9728	0.0265	0.0000	85.6341
Total											0.0000	84.9728	84.9728	0.0265	0.0000	85.6341

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	3.5653	3.5653	1.2000e-004	0.0000	3.5683
Total											0.0000	3.5653	3.5653	1.2000e-004	0.0000	3.5683

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3.4 Grading - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	84.9727	84.9727	0.0265	0.0000	85.6340
Total											0.0000	84.9727	84.9727	0.0265	0.0000	85.6340

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	3.5653	3.5653	1.2000e-004	0.0000	3.5683
Total											0.0000	3.5653	3.5653	1.2000e-004	0.0000	3.5683

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3.5 Paving - 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											0.0000	20.4752	20.4752	6.4800e-003	0.0000	20.6371
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	20.4752	20.4752	6.4800e-003	0.0000	20.6371

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.7288	1.7288	5.0000e-005	0.0000	1.7302
Total											0.0000	1.7288	1.7288	5.0000e-005	0.0000	1.7302

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3.5 Paving - 2019

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											0.0000	20.4752	20.4752	6.4800e-003	0.0000	20.6371
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											0.0000	20.4752	20.4752	6.4800e-003	0.0000	20.6371

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.7288	1.7288	5.0000e-005	0.0000	1.7302
Total											0.0000	1.7288	1.7288	5.0000e-005	0.0000	1.7302

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3.6 Site Preparation - 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											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	17.3800	17.3800	5.4100e-003	0.0000	17.5152
Total											0.0000	17.3800	17.3800	5.4100e-003	0.0000	17.5152

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.0696	1.0696	4.0000e-005	0.0000	1.0705
Total											0.0000	1.0696	1.0696	4.0000e-005	0.0000	1.0705

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3.6 Site Preparation - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	17.3799	17.3799	5.4100e-003	0.0000	17.5152
Total											0.0000	17.3799	17.3799	5.4100e-003	0.0000	17.5152

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
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.0696	1.0696	4.0000e-005	0.0000	1.0705
Total											0.0000	1.0696	1.0696	4.0000e-005	0.0000	1.0705

4.0 Operational Detail - Mobile

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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	1,686.6035	1,686.6035	0.0930	0.0000	1,688.9285
Unmitigated											0.0000	1,686.6035	1,686.6035	0.0930	0.0000	1,688.9285

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	1,297.24	289.32	123.49	2,720,989	2,720,989
Single Family Housing	310.00	322.71	280.55	1,138,355	1,138,355
Total	1,607.24	612.03	404.04	3,859,344	3,859,344

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	14.70	6.60	6.60	33.00	48.00	19.00	77	19	4
Single Family Housing	16.80	7.10	7.90	41.60	18.80	39.60	86	11	3

4.4 Fleet Mix

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Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.615011	0.035959	0.175734	0.096057	0.010793	0.005300	0.020678	0.029891	0.002015	0.001593	0.005502	0.000799	0.000668
General Office Building	0.615011	0.035959	0.175734	0.096057	0.010793	0.005300	0.020678	0.029891	0.002015	0.001593	0.005502	0.000799	0.000668

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	260.5798	260.5798	0.0186	3.8400e-003	262.1871
Electricity Unmitigated											0.0000	260.5798	260.5798	0.0186	3.8400e-003	262.1871
NaturalGas Mitigated											0.0000	67.8503	67.8503	1.3000e-003	1.2400e-003	68.2535
NaturalGas Unmitigated											0.0000	67.8503	67.8503	1.3000e-003	1.2400e-003	68.2535

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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					
General Office Building	390465											0.0000	20.8367	20.8367	4.0000e-004	3.8000e-004	20.9605
Single Family Housing	881002											0.0000	47.0136	47.0136	9.0000e-004	8.6000e-004	47.2930
Total												0.0000	67.8503	67.8503	1.3000e-003	1.2400e-003	68.2535

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					
General Office Building	390465											0.0000	20.8367	20.8367	4.0000e-004	3.8000e-004	20.9605
Single Family Housing	881002											0.0000	47.0136	47.0136	9.0000e-004	8.6000e-004	47.2930
Total												0.0000	67.8503	67.8503	1.3000e-003	1.2400e-003	68.2535

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	1.12906e+006	208.6474	0.0149	3.0700e-003	209.9344
Single Family Housing	281022	51.9324	3.7000e-003	7.6000e-004	52.2527
Total		260.5798	0.0186	3.8300e-003	262.1871

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	1.12906e+006	208.6474	0.0149	3.0700e-003	209.9344
Single Family Housing	281022	51.9324	3.7000e-003	7.6000e-004	52.2527
Total		260.5798	0.0186	3.8300e-003	262.1871

6.0 Area Detail

6.1 Mitigation Measures Area

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											32.0217	13.8075	45.8292	0.0299	2.5200e-003	47.3277
Unmitigated											32.0217	13.8075	45.8292	0.0299	2.5200e-003	47.3277

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
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											32.0217	13.4294	45.4511	0.0296	2.5200e-003	46.9405
Landscaping											0.0000	0.3781	0.3781	3.6000e-004	0.0000	0.3872
Total											32.0217	13.8075	45.8292	0.0299	2.5200e-003	47.3277

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											32.0217	13.4294	45.4511	0.0296	2.5200e-003	46.9405
Landscaping											0.0000	0.3781	0.3781	3.6000e-004	0.0000	0.3872
Total											32.0217	13.8075	45.8292	0.0299	2.5200e-003	47.3277

7.0 Water Detail

7.1 Mitigation Measures Water

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	91.3492	0.7529	0.0189	115.7973
Unmitigated	91.3492	0.7529	0.0189	115.7973

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	20.9033 / 12.8117	83.2340	0.6866	0.0172	105.5276
Single Family Housing	2.01977 / 1.27334	8.1152	0.0664	1.6600e-003	10.2697
Total		91.3492	0.7529	0.0189	115.7973

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7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	20.9033 / 12.8117	83.2340	0.6866	0.0172	105.5276
Single Family Housing	2.01977 / 1.27334	8.1152	0.0664	1.6600e-003	10.2697
Total		91.3492	0.7529	0.0189	115.7973

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	29.6103	1.7499	0.0000	73.3582
Unmitigated	29.6103	1.7499	0.0000	73.3582

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8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	109.38	22.2032	1.3122	0.0000	55.0074
Single Family Housing	36.49	7.4071	0.4378	0.0000	18.3509
Total		29.6103	1.7499	0.0000	73.3583

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	109.38	22.2032	1.3122	0.0000	55.0074
Single Family Housing	36.49	7.4071	0.4378	0.0000	18.3509
Total		29.6103	1.7499	0.0000	73.3583

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation
