The Junipers Project
Final Environmental Impact Report
SCH No. 2018041032 - Project No. 586670

Appendix E

Greenhouse Gas Emissions Technical Report (including CAP Checklist)

January 2021

HELIX Environmental Planning

The Junipers Project

Greenhouse Gas Emissions Technical Report

December 2019 | LEN-84

Prepared for:

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ACRONYMS AND ABBREVIATIONS

AB	Assembly Bill
ADT	average daily trips
AEP	Association of Environmental Professionals
CAA	Clean Air Act
CAFE	Corporate Average Fuel Economy
CAP	Climate Action Plan
CARB	California Air Resources Board
CalEEMod	California Emission Estimator Model
CALGreen	California Green Building Standards Code
CBSC	California Building Standards Commission
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CFCs	chlorofluorocarbons
C_2F_6	Hexafluoroethane
CF_4	Tetraflouromethane
CH_4	methane
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	CO_2-equivalent
County	San Diego County
EO	Executive Order
°F	Fahrenheit
GHG	greenhouse gas
GWP	Global Warming Potential
HFCs	hydrofluorocarbons
IPCC	United Nations Intergovernmental Panel on Climate Change
LCFS	Low Carbon Fuel Standard
LLG	Linscott, Law, & Greenspan Engineers
MAWA	Maximum Applied Water Allowance
MMT	million metric tons
mpg	miles per gallon
MPO	Metropolitan Planning Organization
MT	metric ton

ACRONYMS AND ABBREVIATIONS (cont.)

N_2O	nitrous oxide
NASA	National Aeronautics and Space Administration
NHTSA	National Highway Traffic Safety Administration
NOAA	National Oceanic and Atmospheric Administration
NO_X	nitrogen oxides
PFCs	perfluorocarbons
ppm	parts per million
RTP	Regional Transportation Plan
SANDAG	San Diego Association of Governments
SB	Senate Bill
SCAQMD	South Coast Air Quality Management District
SCS	Sustainable Communities Strategy
SF_6	sulfur hexaflouride
USEPA	U.S. Environmental Protection Agency
VMT	vehicle miles traveled
VOC	volatile organic compound

EXECUTIVE SUMMARY

This report evaluates the potential greenhouse gas (GHG) emission impacts associated with the proposed Junipers Project (Project), located in the city of San Diego.

The Project would result in GHG emissions during construction and operation. Construction sources of GHG emissions include heavy construction equipment, worker vehicle miles traveled, and water use. Operational sources of GHG emissions sources include area (landscape maintenance), energy, transportation, water use, and solid waste.

According to the City of San Diego's (City's) Significance Determination Thresholds, projects that are consistent with the City's Climate Action Plan (CAP), as determined through the CAP Consistency Checklist, would result in a less-than-significant GHG emission cumulative impact. If a project is not consistent with the City's CAP, as determined through the CAP Consistency Checklist, a potentially significant cumulative GHG impact would occur.

Per Step 1 of the CAP consistency analysis, the Project would require a Community Plan Amendment and zone change and the Project is not located in a Transit Priority Area (TPA); therefore, the Project does not comply with Options A or B of Step 1 of the CAP Consistency Checklist. As demonstrated in this analysis, however, the Project would result in a less GHG-intensive land use than the assumptions utilized in development of the CAP; therefore, the Project would be consistent with the CAP via Option C.

Regarding Step 2, the Project would be consistent with all applicable CAP Consistency Checklist items and would implement all Step 2 strategies; therefore, the Project is consistent with Step 2. Step 3 consistency is not applicable to the Project because the Project is not located within a TPA.

As demonstrated in this report, the Project would be consistent with the CAP and, therefore, the Project would result in a less-than-significant cumulative impact regarding GHG emissions.

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1.0 INTRODUCTION

1.1 PROJECT LOCATION

The Junipers Project (Project) is located on an approximately 112.3-acre property at 14455 Peñasquitos Drive (Assessor's Parcel Numbers [APNs] 313-011-06, 313-011-07, 313-011-10, and 313-060-10) in the Rancho Peñasquitos Community Plan Area of the city of San Diego. The Project is located west of Interstate 15 (I-15), north of Carmel Mountain Road, and east of Peñasquitos Drive. Surrounding uses include single- and multi-family residential to the west and north, and a hotel (Hotel Karlan) immediately to the south. A large commercial shopping area is located immediately east of I-15 and the Project site along Carmel Mountain Road and Rancho Carmel Drive. Black Mountain Open Space Park is located farther west of the Project site, west of Peñasquitos Drive.

The majority of the site is zoned as Residential (RS-1-14), and is designated as Park, Open Space, and Recreation in the City of San Diego (City) General Plan, and Open Space/Golf Course in the Rancho Peñasquitos Community Plan. The southernmost area of the site (existing tennis courts and shed) is zoned as Commercial-Visitor (CV-1-1), and is designated as Commercial Employment, Retail and Services. Refer to Figure 1, *Regional Location*, and Figure 2, *Project Vicinity*.

1.2 PROJECT DESCRIPTION

The Project entails the development of a vacant property formerly used as a golf course to create a residential subdivision with a total of 536 units. The Project would include 455 attached and detached, multi-family, age-restricted residences, 81 affordable age-restricted multi-family apartments, a public park, publicly accessible trails, open space/parks for development use, and internal private streets. As part of the Project approval, zoning would be changed to RM-1-1 and RM-3-7, a General Plan Amendment would change the land use designation to Residential, and a Community Plan Amendment would change the land use designation to Low-Medium Density Residential. An approximately 2.75-mile, publicly accessible "social loop" pedestrian and bike trail would be developed and privately maintained around the perimeter of the Project. The public park would exceed 3 acres and provide opportunities for recreation, gathering, and social interaction. A mobility zone and bicycle hub are proposed within a privately owned, privately maintained park with a public access easement. This park will be located in the southeastern portion of the site near the transit stops at Carmel Mountain Road.

Vehicular access to the Project site would be provided from Peñasquitos Drive at the existing intersection with Janal Way, and from a new right-in only access road off of Carmel Mountain Road (with an emergency egress right-out lane onto Carmel Mountain Road). The access road would terminate at a roundabout from which one private street would extend north to connect with the residences in the western portion of the site, and a second private road would extend east leading to another roundabout from which one street would extend north to connect with the residences within the eastern portion of the site. There is one cul-de-sac proposed in the northernmost portion of the Project site. All other proposed private roadways would be interconnected within the Project site. Pedestrian and other non-vehicular (e.g., bicycle) circulation would be accommodated throughout the site. Refer to Figure 3, *Site Plan*.

1.3 REGULATORY REQUIREMENTS AND PROJECT DESIGN FEATURES THAT REDUCE GHG EMISSIONS

1.3.1 Area Source Reductions

- Natural gas fireplaces would be installed in each of the 133 single detached units with four additional natural gas fireplaces in and around the Clubhouse. No other fireplaces or hearths would be installed.

1.3.2 Energy Efficiencies

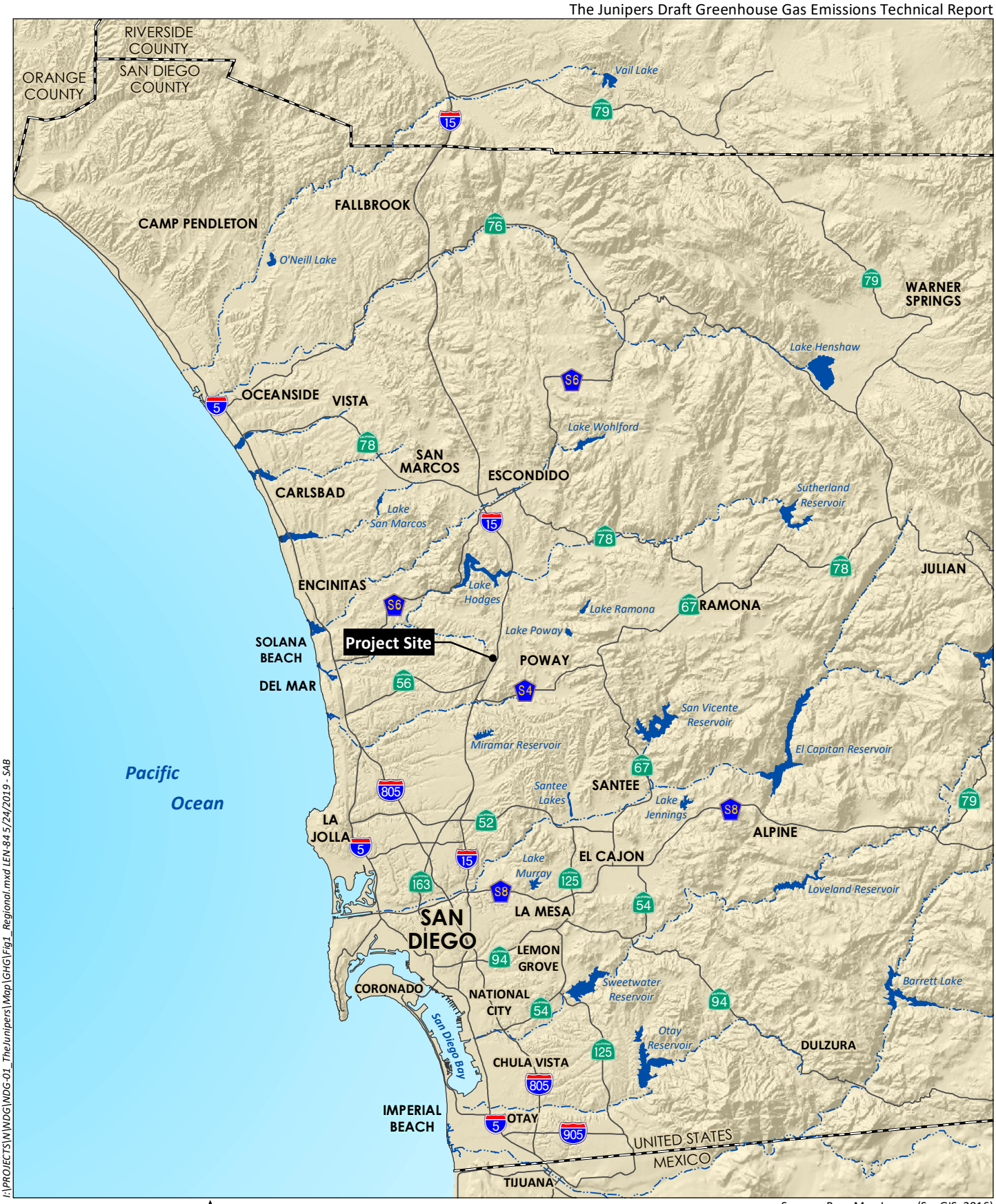
- The Project would be designed to meet 2016 Title 24 energy efficiency standards.

- The Project would install rooftop photovoltaic (PV) solar systems on all residential products for a combined total system size of at least 1,396 direct current (DC) kilowatts (kW). The breakdown of PV system size by unit is provided Table 1, *Photovoltaic Panel System Sizing by Plan*, below.

Table 1
PHOTOVOLTAIC PANEL SYSTEM SIZING BY PLAN

Plan	Number of Dwelling Units	Plan Area	PV System Size per Unit (kW DC)	Total kW DC per Plan
Duplex 1	46	1,802	2.68	123.28
Duplex 2	45	2,111	3.02	135.90
Duplex 3	45	2,331	3.35	150.75
50x90 1	36	1,738	2.68	96.48
50x90 2	32	1,945	3.02	46.64
50x90 3	32	2,331	3.35	107.20
50x90 4	33	2,468	3.69	121.77
Cluster 1	62	1,209	1.68	104.16
Cluster 2	31	1,505	2.35	72.85
Cluster 2X	31	1,984	3.02	93.62
Cluster 3	31	1,781	2.68	83.08
Cluster 3X	31	2,244	3.35	103.85
Affordable 1BR	65	600	1.2	78.00
Affordable 2BR	16	900	1.79	28.64
Affordable Community Room	1	1,400	-	-
			TOTAL kW DC	**1,396.22**

Source: SunStreet 2019.
Notes:
1. Sizes are based upon proposed roof for each product and orientation.
2. Assumed 75% maximum system size allowed by SDG&E on market rate units and 100% of SDG&E allowable on affordable for rent building.
3. Rounded market rate based on 335W panels
4. System proposed exceeds 2019 Title 24



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0 8 Miles

Source: Base Map Layers (SanGIS, 2016)

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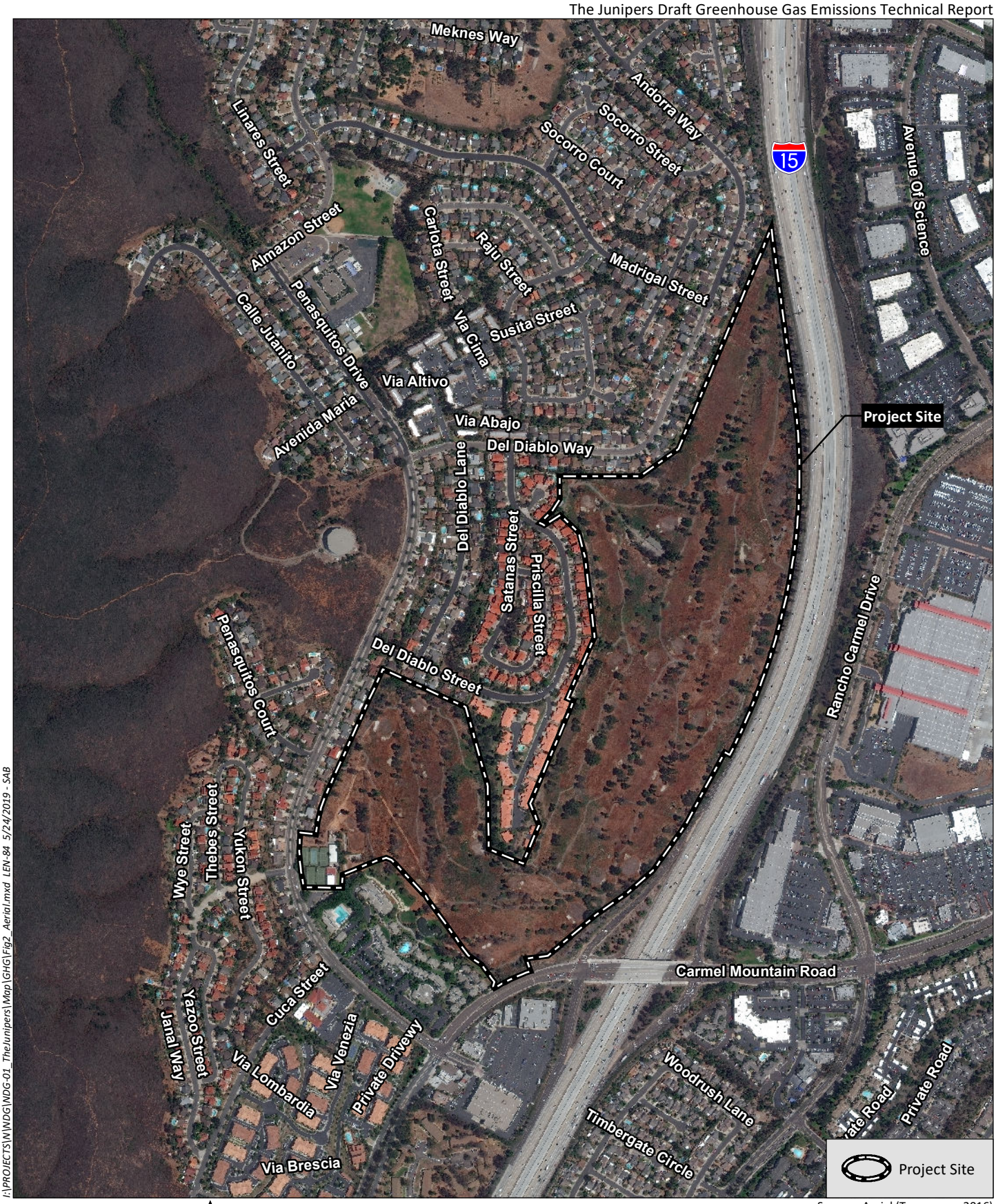
Regional Location

Figure 1



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0 800 Feet

Source: Aerial (Terraserver 2016)

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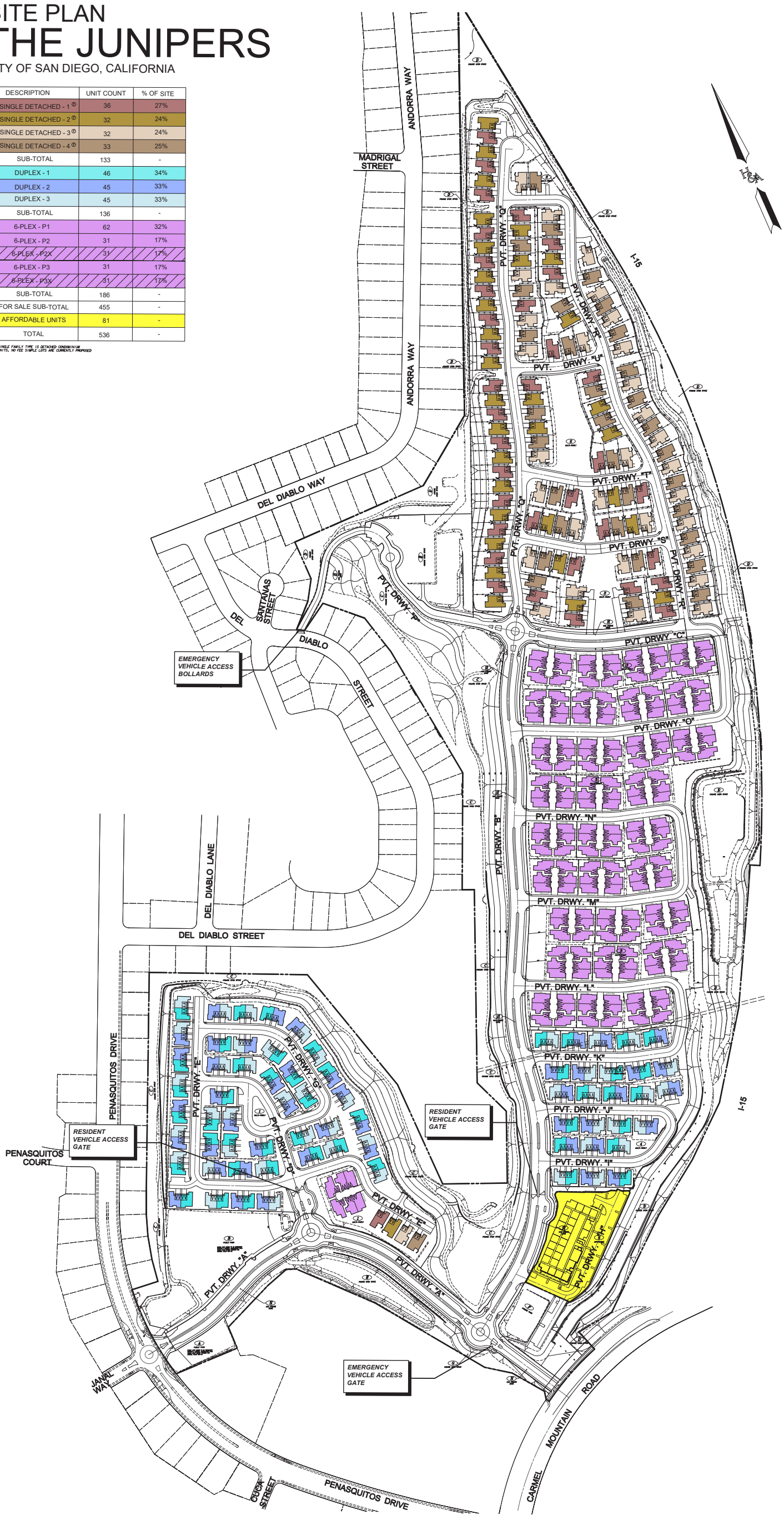
Project Vicinity

Figure 2

SITE PLAN
THE JUNIPERS
CITY OF SAN DIEGO, CALIFORNIA

DESCRIPTION	UNIT COUNT	% OF SITE
SINGLE DETACHED - 1 ⓘ	36	27%
SINGLE DETACHED - 2 ⓘ	32	24%
SINGLE DETACHED - 3 ⓘ	32	24%
SINGLE DETACHED - 4 ⓘ	33	25%
SUB-TOTAL	133	-
DUPLEX - 1	46	34%
DUPLEX - 2	45	33%
DUPLEX - 3	45	33%
SUB-TOTAL	136	-
6-PLEX - P1	62	32%
6-PLEX - P2	31	17%
6-PLEX - P2X	31	17%
6-PLEX - P3	31	17%
6-PLEX - P3X	31	17%
SUB-TOTAL	186	-
FOR SALE SUB-TOTAL	455	-
AFFORDABLE UNITS	81	-
TOTAL	536	-

ⓘ SINGLE FAMILY TYPE IS DETACHED CONDOMINIUM UNITS, NO FEE SIMPLE LOTS ARE CURRENTLY PROPOSED



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Source: Hunsaker & Associates 8/2019

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Site Plan

Figure 3

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1.3.3 Mobile Source Reductions

- Pre-wiring (i.e., cabinets and conduits provided for future wiring) of 3 percent of parking required (a total of 37 spaces for the future installation of electric vehicle (EV) charging stations, with 50 percent of that number (19 of the 37 spaces) to contain additional necessary equipment to be create active vehicle charging stations consistent with the City Climate Action Plan. The Project proposes the 19 fully active EV charging stations and also would provide EV-ready pre-wiring in all 455 market-rate residential garages (exceeding the requirement by 419 spaces).

- The Project is designed to comply with the following measures as described by the California Air Pollution Control Officers Association (CAPCOA; 2010).

    - *LUT-5 Increased Transit Accessibility* – Locating a project near transit will facilitate the use of transit by people traveling to or from the project site. The use of transit results in a mode shift and therefore reduced vehicle miles traveled (VMT). The Project site is located adjacent to San Diego Metropolitan Transit System Line 20, with a stop on both sides of Carmel Mountain Road at the intersection of Carmel Mountain Road and Peñasquitos Drive, within approximately 0.5 mile of the center of the Project site.

    - *LUT-6 Integrate Affordable and Below Market Rate Housing* – Income has a statistically significant effect on the probability that a commuter will take transit or walk to work. The Project would provide 81 affordable apartment units.

    - *SDT-1 Neighborhood/Site Enhancements* – Providing a pedestrian access network to link areas of the project site encourages people to walk instead of drive. This mode shift results in people driving less and thus a reduction in VMT. The Project would provide a pedestrian access network that internally links all uses and connects to all existing or planned external streets and pedestrian facilities contiguous with the Project site. The linkages would be ADA compliant, generally level (overall developed portions of the site range less than 40 feet in elevation), and would connect to Carmel Mountain Road via a 10-foot wide sidewalk connecting to sidewalks/paths linking all project residences.

1.3.4 Water and Waste Reduction

The City has enacted codes and policies directed at the achievement of State-required diversion levels, including the Refuse and Recyclable Materials Storage Regulations (San Diego Municipal Code Chapter 14, Article 2 Division 8), Recycling Ordinance (Municipal Code Chapter 6, Article 6, Division 7), and the Construction and Demolition Debris Deposit Ordinance (Municipal Code Chapter 6, Article 6, Division 6). A Waste Management Plan (HELIX 2019) has been developed to divert solid waste such as household waste and debris from construction and demolition away from landfills.

- At least 54 percent of operational waste would be diverted from landfills through reuse, recycling, and on-site composting. As specified in the Project Waste Management Plan (HELIX 2019), this includes 40 percent of household waste consistent with current City ordinances and regulations through recycling of glass/paper/solid plastic and green waste, as well as diversion of percentages of household food waste and HOA-maintained area green waste, to total a 54 percent Project diversion rate overall.

- The Project would provide areas for storage and collection of recyclables and yard waste in accordance with 2016 California Green Building Standards Code (CALGreen).

- The Project would provide 20 percent water reduction from the statewide average in accordance with 2016 CALGreen.

2.0 ENVIRONMENTAL SETTING

2.1 CLIMATE CHANGE OVERVIEW

Global climate change refers to changes in average climatic conditions on Earth, as a whole, including temperature, wind patterns, precipitation, and storms. Global temperatures are moderated by naturally occurring atmospheric gases. These gases are commonly referred to as GHGs because they function like a greenhouse by letting light in but preventing heat from escaping, thus warming the Earth's atmosphere. These gases allow solar radiation (sunlight) into the Earth's atmosphere but prevent radiative heat from escaping, thus warming the Earth's atmosphere.

GHGs are emitted by natural processes and human (anthropogenic) activities. Anthropogenic GHG emissions are primarily associated with (1) the burning of fossil fuels during motorized transport, electricity generation, natural gas consumption, industrial activity, manufacturing, and other activities; (2) deforestation; (3) agricultural activity; and (4) solid waste decomposition.

The temperature record shows a decades-long trend of warming, with 2016 global surface temperatures ranking as the warmest year on record since 1880. (National Aeronautics and Space Administration [NASA] 2018). The newest release in long-term warming trends announced 2017 ranked as the second warmest year with an increase of 1.62 degrees Fahrenheit compared to the 1951-1980 average (NASA 2018). GHG emissions from human activities are the most significant driver of observed climate change since the mid-20th century (Intergovernmental Panel on Climate Change [IPCC] 2013). The IPCC constructed several emission trajectories of GHGs needed to stabilize global temperatures and climate change impacts. The statistical models show a "high confidence" that temperature increase caused by anthropogenic GHG emissions could be kept to less than two degrees Celsius relative to pre-industrial levels if atmospheric concentrations are stabilized at about 450 parts per million (ppm) carbon dioxide equivalent (CO_2e) by the year 2100 (IPCC 2014).

2.2 GREENHOUSE GASES

The GHGs, as defined under California Assembly Bill (AB) 32, include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). Although water vapor is the most abundant and variable GHG in the atmosphere, it is not considered a pollutant; it maintains a climate necessary for life.

Carbon Dioxide. CO_2 is the most important and common anthropogenic GHG. CO_2 is an odorless, colorless GHG. Natural sources include the decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungi; evaporation from oceans; and volcanic outgassing. Anthropogenic sources of CO_2 include burning fuels, such as coal, oil, natural gas, and wood. Data from ice cores indicate that CO_2 concentrations remained steady prior to the current period for approximately 10,000 years. The atmospheric CO_2 concentration in 2010 was 390 ppm, 39 percent above the

concentration at the start of the Industrial Revolution (about 280 ppm in 1750). As of April 2018, the CO_2 concentration exceeded 408 ppm, a 46 percent increase since 1750 (National Oceanic and Atmospheric Administration [NOAA] 2018).

Methane. CH_4 is a gas and is the main component of natural gas used in homes. A natural source of methane is from the decay of organic matter. Geological deposits known as natural gas fields contain methane, which is extracted for fuel. Other sources are from decay of organic material in landfills, fermentation of manure, and cattle digestion.

Nitrous Oxide. N_2O is produced by both natural and human-related sources. N_2O is emitted during agricultural and industrial activities, as well as during combustion of fossil fuels and solid waste. Primary human-related sources of N_2O are agricultural soil management, animal manure management, sewage treatment, mobile and stationary combustion of fossil fuel, adipic (fatty) acid production, and nitric acid production.

Fluorocarbons. Fluorocarbons are gases formed synthetically by replacing all hydrogen atoms in methane or ethane with chlorine and/or fluorine atoms. Chlorofluorocarbons are nontoxic, nonflammable, insoluble, and chemically nonreactive in the troposphere (the level of air at Earth's surface). Chlorofluorocarbons were first synthesized in 1928 for use as refrigerants, aerosol propellants, and cleaning solvents. They destroy stratospheric ozone; therefore, their production was stopped as required by the Montreal Protocol.

Sulfur Hexafluoride. SF_6 is an inorganic, odorless, colorless, nontoxic, nonflammable gas. SF_6 is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semi-conductor manufacturing, and as a tracer gas for leak detection.

GHGs have long atmospheric lifetimes that range from one year to several thousand years. Long atmospheric lifetimes allow for GHGs to disperse around the globe. Because GHGs vary widely in the power of their climatic effects, climate scientists have established a unit called global warming potential (GWP). The GWP of a gas is a measure of both potency and lifespan in the atmosphere as compared to CO_2. For example, because methane and N_2O are approximately 25 and 298 times more powerful than CO_2, respectively, in their ability to trap heat in the atmosphere, they have GWPs of 25 and 298, respectively (CO_2 has a GWP of 1). CO_2e is a quantity that enables all GHG emissions to be considered as a group despite their varying GWP. The GWP of each GHG is multiplied by the prevalence of that gas to produce CO_2e. The atmospheric lifetime and GWP of selected GHGs are summarized in Table 2, *Global Warming Potentials and Atmospheric Lifetimes*. As shown in the table, the GWP for common GHGs ranges from 1 (CO_2) to 22,800 (SF_6).

Table 2
GLOBAL WARMING POTENTIALS AND ATMOSPHERIC LIFETIMES

Greenhouse Gas	Atmospheric Lifetime (years)	Global Warming Potential (100-year time horizon)
Carbon Dioxide (CO_2)	50-200	1
Methane (CH_4)	12	25
Nitrous Oxide (N_2O)	114	298
HFC-134a	14	1,430
PFC: Tetraflouromethane (CF_4)	50,000	7,390
PFC: Hexafluoroethane (C_2F_6)	10,000	12,200
Sulfur Hexafluoride (SF_6)	3,200	22,800

Source: IPCC 2007
HFC: hydrofluorocarbon; PFC: perfluorocarbon

2.3 REGULATORY FRAMEWORK

All levels of government have some responsibility for the protection of air quality, and each level (federal, state, and regional/local) has specific responsibilities relating to air quality regulation. GHG emissions and the regulation of GHGs is a relatively new component of air quality.

2.3.1 Federal

2.3.1.1 Federal Clean Air Act

The U.S. Supreme Court ruled on April 2, 2007, in *Massachusetts v. U.S. Environmental Protection Agency* (USEPA*)* that CO_2 is an air pollutant, as defined under the Clean Air Act (CAA), and that the USEPA has the authority to regulate emissions of GHGs. The USEPA announced that GHGs (including CO_2, CH_4, N_2O, HFC, PFC, and SF_6) threaten the public health and welfare of the American people. This action was a prerequisite to finalizing the USEPA's GHG emissions standards for light-duty vehicles, which were jointly proposed by the USEPA and the United States Department of Transportation's National Highway Traffic Safety Administration (NHTSA), as described below.

2.3.1.2 Light-Duty Vehicle Greenhouse Gas Emissions Standards and Corporate Average Fuel Economy Standards

The USEPA and the Department of Transportation's NHTSA have been working together on developing a national program of regulations to reduce GHG emissions and to improve fuel economy of light-duty vehicles. The USEPA is finalizing the first-ever national GHG emissions standards under the CAA, and the NHTSA is finalizing Corporate Average Fuel Economy (CAFE) standards under the Energy Policy and Conservation Act. On April 1, 2010, the USEPA and NHTSA announced a joint Final Rulemaking establishing standards for 2012 through 2016 model year vehicles. This was followed up on October 15, 2012, when the agencies issued a Final Rulemaking with standards for model years 2017 through 2025. The rules require these vehicles to meet an estimated combined average emissions level of 250 grams of CO_2 per mile by 2016, decreasing to an average industry fleet-wide level of 163 grams of CO_2 per mile in model year 2025. The 2016 standard is equivalent to 35.5 miles per gallon (mpg), and the 2025 standard is equivalent to 54.5 mpg if the levels were achieved solely through improvements in fuel efficiency. The agencies expect, however, that a portion of these improvements will be made through improvements in air-conditioning leakage and the use of alternative refrigerants that would not contribute to fuel

economy. These standards would cut GHG emissions by an estimated 2 billion metric tons and 4 billion barrels of oil over the lifetime of the vehicles sold under the program (model years 2017–2025). The combined USEPA GHG standards and NHTSA CAFE standards resolve previously conflicting requirements under both federal programs and the standards of the State of California and other states that have adopted the California standards (USEPA 2011; USEPA and NHTSA 2012).

2.3.2 State

2.3.2.1 California Code of Regulations, Title 24, Part 6

California Code of Regulations (CCR) Title 24 Part 6: California's Energy Efficiency Standards for Residential and Nonresidential Buildings were first established in 1978 in response to a legislative mandate to reduce California's energy consumption. Energy-efficient buildings require less electricity, natural gas, and other fuels. Electricity production from fossil fuels and on-site fuel combustion (typically for water heating) results in GHG emissions.

The Title 24 standards are updated periodically to allow the consideration and possible incorporation of new energy-efficiency technologies and methods. The latest update to the Title 24 standards occurred in 2016 and went into effect January 1, 2017. The 2016 update to the Building Energy Efficiency Standards focuses on several key areas to improve the energy efficiency of newly constructed buildings and additions and alterations to existing buildings. The most significant efficiency improvements to the residential standards include improvements for attics, walls, water heating, and lighting. The standards are divided into three basic sets. First, there is a basic set of mandatory requirements that apply to all buildings. Second, there is a set of performance standards – the energy budgets – that vary by climate zone (of which there are 16 in California) and building type; thus, the standards are tailored to local conditions. Finally, the third set constitutes an alternative to the performance standards, which is a set of prescriptive packages that are basically a recipe or a checklist compliance approach. The next update to Title 24 will occur in 2019 and go into effect on January 1, 2020. The 2019 standards will continue to improve construction of new buildings and alterations to existing buildings.

2.3.2.2 California Green Building Standards Code

The California Green Building Standards Code (24 CCR, Part 11) is a code with mandatory requirements for new residential and nonresidential buildings (including buildings for retail, office, public schools and hospitals) throughout California. The CALGreen code is Part 11 of the California Building Standards Code in Title 24 of the CCR (CBSC 2017). The current 2016 standards for new construction of, and additions and alterations to, residential and nonresidential buildings went into effect on January 1, 2017. The 2019 standards, which will go into effect January 2020, will continue to improve upon the current 2016 standards.

The development of the CALGreen Code is intended to (1) cause a reduction in GHG emissions from buildings; (2) promote environmentally responsible, cost-effective, healthier places to live and work; (3) reduce energy and water consumption; and (4) respond to the directives by the governor. In short, the code is established to reduce construction waste; make buildings more efficient in the use of materials and energy; and reduce environmental impact during and after construction.

The CALGreen Code contains requirements for storm water control during construction; construction waste reduction; indoor water use reduction; material selection; natural resource conservation; site irrigation conservation; and more. The code provides for design options that allow the designer to

determine how best to achieve compliance for a given site or building condition. The code also requires building commissioning, which is a process for the verification that all building systems, such as heating and cooling equipment and lighting systems, are functioning at their maximum efficiency.

2.3.2.3 Executive Order S-3-05

On June 1, 2005, Executive Order (EO) S-3-05 proclaimed that California is vulnerable to climate change impacts. It declared that increased temperatures could reduce snowpack in the Sierra Nevada, further exacerbate California's air quality problems, and potentially cause a rise in sea levels. In an effort to avoid or reduce climate change impacts, EO S-3-05 calls for a reduction in GHG emissions to the year 2000 level by 2010, to year 1990 levels by 2020, and to 80 percent below 1990 levels by 2050.

2.3.2.4 Assembly Bill 32 – Global Warming Solution Act of 2006

The California Global Warming Solutions Act of 2006, widely known as AB 32, requires that the California Air Resources Board (CARB) develop and enforce regulations for the reporting and verification of statewide GHG emissions. CARB is directed to set a GHG emission limit, based on 1990 levels, to be achieved by 2020. The bill requires CARB to adopt rules and regulations in an open public process to achieve the maximum technologically feasible and cost-effective GHG emission reductions.

2.3.2.5 Executive Order B-30-15

On April 29, 2015, EO B-30-15 established a California GHG reduction target of 40 percent below 1990 levels by 2030. The EO aligns California's GHG reduction targets with those of leading international governments, including the 28-nation European Union. California is on track to meet or exceed the target of reducing GHG emissions to 1990 levels by 2020, as established in AB 32. California's new emission reduction target of 40 percent below 1990 levels by 2030 will make it possible to reach the ultimate goal established by EO S-3-05 of reducing emissions 80 percent under 1990 levels by 2050.

2.3.2.6 Senate Bill 32

As a follow-up to AB 32 and in response to EO-B-30-15, Senate Bill (SB) 32 was passed by the California legislature in August 2016 to codify the EO's California GHG emission reduction target of 40 percent below 1990 levels by 2030.

2.3.2.7 Assembly Bill 1493 – Vehicular Emissions of Greenhouse Gases

AB 1493 (Pavley) requires that CARB develop and adopt regulations that achieve "the maximum feasible reduction of GHGs emitted by passenger vehicles and light-duty truck and other vehicles determined by CARB to be vehicles whose primary use is noncommercial personal transportation in the State." On September 24, 2009, CARB adopted amendments to the Pavley regulations that intend to reduce GHG emissions in new passenger vehicles from 2009 through 2016. The amendments bind California's enforcement of AB 1493 (starting in 2009), while providing vehicle manufacturers with new compliance flexibility. The amendments also prepare California to merge its rules with the federal CAFE rules for passenger vehicles (CARB 2013a). In January 2012, CARB approved a new emissions-control program for model years 2017 through 2025. The program combines the control of smog, soot, and global warming gases and requirements for greater numbers of zero-emission vehicles into a single packet of standards called Advanced Clean Cars (CARB 2013a).

2.3.2.8 Assembly Bill 341

In 2011, the State legislature enacted AB 341 (California Public Resource Code section 42649.2), increasing the diversion target to 75 percent statewide. AB 341 also requires the provision of recycling service to commercial and residential facilities that generate 4 cubic yards or more of solid waste per week.

2.3.2.9 Executive Order S-01-07

This EO, signed by Governor Schwarzenegger on January 18, 2007, directs that a statewide goal be established to reduce the carbon intensity of California's transportation fuels by at least 10 percent by the year 2020. It orders that a Low Carbon Fuel Standard (LCFS) for transportation fuels be established for California and directs the CARB to determine whether a LCFS can be adopted as a discrete early action measure pursuant to AB 32. CARB approved the LCFS as a discrete early action item with a regulation adopted and implemented in April 2010. Although challenged in 2011, the Ninth Circuit Court of Appeals reversed the District Court's opinion and rejected arguments that implementing LCFS violates the interstate commerce clause in September 2013. CARB, therefore, is continuing to implement the LCFS statewide.

2.3.2.10 Senate Bill (SB) 375

SB 375 aligns regional transportation planning efforts, regional GHG reduction targets, and affordable housing allocations. Metropolitan Planning Organizations (MPOs) are required to adopt a Sustainable Communities Strategy (SCS), which allocates land uses in the MPO's Regional Transportation Plan (RTP). Qualified projects consistent with an approved SCS or Alternative Planning Strategy categorized as "transit priority projects" would receive incentives to streamline California Environmental Quality Act (CEQA) processing.

2.3.2.11 California Air Resources Board: Scoping Plan

On December 11, 2008, the CARB adopted the Scoping Plan (CARB 2008) as directed by AB 32. The Scoping Plan proposes a set of actions designed to reduce overall GHG emissions in California to the levels required by AB 32. Measures applicable to development projects include those related to energy-efficiency building and appliance standards, use of renewable sources for electricity generation, regional transportation targets, and green building strategies. Relative to transportation, the Scoping Plan includes nine measures or recommended actions intended to reduce VMT and vehicle GHGs through fuel and efficiency measures. These measures would be implemented statewide rather than on a project-by-project basis.

In response to EO B-30-15 and SB 32, all state agencies with jurisdiction over sources of GHG emissions were directed to implement measures to achieve reductions of GHG emissions to meet the 2030 and 2050 targets. CARB was directed to update the Scoping Plan to reflect the 2030 target and, therefore, is moving forward with the update process. The mid-term target is critical to help frame the suite of policy measures, regulations, planning efforts, and investments in clean technologies and infrastructure needed to continue driving down emissions. CARB is moving forward with a second update to the Scoping Plan to reflect the 2030 target set by EO B-30-15 and codified by SB 32. The 2017 Climate Change Scoping Plan Update, Proposed Strategy for Achieving California's 2030 Greenhouse Gas Target, was adopted in December 2017. The Scoping Plan Update establishes a proposed framework for California to meet a 40 percent reduction in GHGs by 2030 compared to 1990 levels (CARB 2017).

2.3.3 Local

2.3.3.1 San Diego Association of Governments: Climate Action Strategy

The San Diego Association of Governments (SANDAG) Climate Action Strategy serves as a guide to help policymakers address climate change as they make decisions to meet the needs of growing populations, as well as to maintain and enhance quality of life and promote economic stability (SANDAG 2010). The purpose of the strategy is to identify land use, transportation, and other related policy measures that could reduce GHG emissions from passenger cars and light-duty trucks as part of the development of the SCS for the 2050 RTP in compliance with SB 375. Additional policy measures are identified for buildings and energy use, protecting transportation and energy infrastructures from climate impacts, and assisting SANDAG and other local agencies in reducing GHG emissions from their operations.

2.3.3.2 City of San Diego General Plan

The City's General Plan (City of San Diego 2008) includes various goals and policies designed to help result in a reduction in GHG emissions. As discussed in the General Plan, climate change and GHG reduction policies are addressed in multiple chapters of the General Plan. The policies related to climate change relevant to the Project are as follows (City of San Diego 2008):

Goals

To reduce the City's overall carbon dioxide footprint by improving energy efficiency, increasing use of alternative modes of transportation, employing sustainable planning and design techniques, and providing environmentally sound waste management.

Policies

CE-A.4 Pursue the development of "clean" or "green" sector industries that benefit San Diego's environment and economy.

CE-A.5 Employ sustainable or "green" building techniques for the construction and operation of buildings.

CE-A.7 Construct and operate buildings using materials, methods, and mechanical and electrical systems that ensure a healthful indoor air quality. Avoid contamination by carcinogens, volatile organic compounds, fungi, molds, bacteria, and other known toxins.

CE-A.8 Reduce construction and demolition waste in accordance with Public Facilities Element, Policy PF-I.2, or by renovating or adding on to existing buildings, rather than constructing new buildings.

CE-A.9 Reuse building materials, use materials that have recycled content, or use materials that are derived from sustainable or rapidly renewable resources to the extent possible.

CE-A.10 Include features in buildings to facilitate recycling of waste generated by building occupants and associated refuse storage areas.

CE-A.12 Reduce the San Diego Urban Heat Island, through actions such as:

- Using cool roofing materials, such as reflective, low heat retention tiles, membranes and coatings, or vegetated eco-roofs to reduce heat build-up;

- Planting trees and other vegetation, to provide shade and cool air temperatures. In particular, properly position trees to shade buildings, air conditioning units, and parking lots; and

- Reducing heat build-up in parking lots through increased shading or use of cool paving materials as feasible.

2.3.3.3 City of San Diego Climate Action Plan

The City adopted a CAP that quantifies GHG emissions, establishes citywide reduction targets for 2020 and 2035, identifies strategies and measures to reduce GHG levels, and provides guidance for monitoring progress on an annual basis (City of San Diego 2015). The CAP identifies a comprehensive set of goals, policies, and actions that the City can use to reduce GHG emissions/climate change impacts. The CAP includes five strategies: (1) water- and energy-efficient buildings; (2) clean and renewable energy; (3) bicycling, walking, transit, and land use; (4) zero waste; and (5) climate resiliency.

To provide a mechanism for CEQA tiering, the City developed a CAP Consistency Checklist to provide a streamlined review process for GHG emissions for development subject to CEQA. The checklist contains measures that are required to be implemented on a project-by-project basis to ensure that the specified emission targets identified in the CAP are achieved. Implementation of the measures identified in the checklist ensures that new development is consistent with the CAP's assumptions for relevant CAP strategies for achieving identified GHG reduction targets (City of San Diego 2017).

3.0 THRESHOLDS OF SIGNIFICANCE AND METHODOLOGY

3.1 SIGNIFICANCE CRITERIA

Given the relatively small levels of emissions generated by a typical development in relationship to the total amount of GHG emissions generated on a national or global basis, individual development projects are not expected to result in significant, direct impacts with respect to climate change. However, given the magnitude of the impact of GHG emissions on the global climate, GHG emissions from new development could result in significant, cumulative impacts with respect to climate change. Thus, the potential for a significant GHG impact is limited to cumulative impacts.

According to the City's Significance Determination Thresholds, projects that are consistent with the City's CAP, as determined through the CAP Consistency Checklist, would result in a less-than-significant cumulative impact regarding GHG emissions. If a project is not consistent with the City's CAP, as determined through the CAP Consistency Checklist, potentially significant cumulative GHG impacts would occur.

3.2 METHODOLOGY AND ASSUMPTIONS

GHG emissions were calculated using the California Emission Estimator Model (CalEEMod), Version 2016.3.2. CalEEMod is a computer model used to estimate criteria air pollutant and GHG emissions resulting from construction and operation of land development projects throughout the state of California. CalEEMod was developed by the South Coast Air Quality Management District (SCAQMD) with the input of several air quality management and pollution control districts. The proposed Project and two other buildout scenarios were analyzed for comparative purposes as part of this quantitative analysis:

- Scenario 1: Project - Buildout of the proposed Project;
- Scenario 2: Current Zoning - Maximum allowable single-family residential development under the existing RS-1-14 zoning designation; and
- Scenario 3: Community Plan Land Use Designation - Redevelopment of the golf course and tennis courts consistent with the existing General Plan and Community Plan designation.

Emissions from each GHG source category are discussed below with respect to each of the three development scenarios. The input data and subsequent construction and operation emission estimates for the proposed Project are discussed below. CalEEMod output files are included in Appendix A.

3.2.1 Construction Emissions

3.2.1.1 Scenario 1: Buildout of the Proposed Project

As described above, construction emissions are assessed using the CalEEMod, Version 2016.3.2. CalEEMod contains OFFROAD2011 emission factors and EMFAC2014 emission factors from CARB's models for off-road equipment and on-road vehicles, respectively. The construction analysis included modeling of the projected construction equipment that would be used during each construction activity and quantities of earth and debris to be moved. The model calculates GHG emissions in terms of metric tons (MT) of CO_2e.

Construction would require heavy equipment during site preparation, mass grading, underground utilities, building construction, and paving. Construction equipment estimates are based on default values in CalEEMod, Version 2016.3.2. Table 3, *Construction Equipment Assumptions*, presents a summary of the assumed equipment that would be involved in each stage of construction.

Table 3
CONSTRUCTION EQUIPMENT ASSUMPTIONS

Construction Phase	Equipment	Number
Demolition	Concrete/Industrial Saws	1
	Excavators	3
	Rubber Tired Dozers	2
Site Preparation	Rubber Tired Dozers	3
	Tractors/Loaders/Backhoes	4
Grading	Excavators	2
	Graders	1
	Rubber Tired Dozers	1
	Scrapers	2
	Tractors/Loaders/Backhoes	2
Building Construction	Cranes	1
	Forklifts	3
	Generator Sets	1
	Tractors/Loaders/Backhoes	3
	Welders	1
Paving	Pavers	2
	Paving Equipment	2
	Rollers	2
Architectural Coating	Air Compressors	1

Source: CalEEMod (output data, including equipment horsepower, is provided in Appendix A)

The construction schedule was determined by using CalEEMod defaults, input from the Project Applicant, and standard assumptions for similarly sized projects, and by taking into consideration the size of the Project in order to estimate necessary construction activities and length of days per construction activity. As shown in Table 4, *Anticipated Construction Schedule*, Project development was assumed to start in November 2019 and end in February 2023.

Table 4
ANTICIPATED CONSTRUCTION SCHEDULE

Construction Activity	Construction Period		
	Start	End	Number of Working Days
Demolition	11/1/2019	11/30/2019	21
Site Preparation	12/1/2019	2/28/2020	65
Grading	3/1/2020	5/29/2020	65
Building Construction	6/1/2020	9/30/2022	610
Paving	10/1/2022	11/30/2022	43
Architectural Coating	12/1/2022	2/28/2023	64

Source: CalEEMod (output data are provided in Appendix A)
Start and end dates are subject to approved Project Approvals and Hearings

The quantity, duration, and intensity of construction activity have an effect on the amount of construction emissions and their related emissions that occur at any one time. As such, the emission forecasts provided herein reflect a specific set of conservative assumptions based on the expected construction scenario wherein a relatively large amount of construction is occurring in a relatively intensive manner. Because of this conservative assumption, actual emissions could be less than those

forecasted. If construction is delayed or occurs over a longer time period, emissions could be reduced because of (1) a more modern and cleaner-burning construction equipment fleet mix than incorporated in the CalEEMod, and/or (2) a less intensive buildout schedule (i.e., fewer daily emissions occurring over a longer time interval). A complete listing of the assumptions used in the analysis and model output is provided in Appendix A of this report.

Construction emissions were amortized over 30 years per Association of Environmental Professionals (AEP) and SCAQMD recommendations (AEP 2010; SCAQMD 2009).

3.2.1.2 Scenario 2: Maximum Residential Buildout Consistent with Existing Zoning

In order to ensure consistency across scenarios, construction emissions were estimated for the maximum residential development scenario consistent with the existing zoning (831 single family residential dwelling units) utilizing the same demolition, site preparation, and grading assumptions as for the Project Scenario with building construction, paving, and architectural coating phases based on CalEEMod defaults for equipment and phasing based on development size.

3.2.1.3 Scenario 3: Redevelopment Consistent with Existing Community Plan Land Use Designation

In order to ensure consistency across scenarios, construction emissions were estimated for the existing community plan land use designation scenario (110.46-acre golf course and 1.85-acres of tennis courts) using assumptions scaled based on the Palo Alto Golf Course Reconfiguration Project (Appendix B of the certified EIR for a 156-acre golf course reconfiguration [State Clearinghouse #2013012053]).

3.2.2 Operation Emissions

CalEEMod was used to estimate potential operational GHG emissions from area sources (landscape maintenance), energy sources (natural gas and electricity), mobile sources, solid waste, and water supply and wastewater treatment.

Emissions from each GHG source category are discussed below with respect to each of the three development scenarios.

3.2.2.1 Scenario 1: Buildout of the Proposed Project

Operation of the Project would result in GHG emissions from area sources, energy sources, mobile sources, solid waste, and water supply. Per the construction schedule assumptions, construction of the Project is assumed to be completed in 2023, with the first full year of operation potentially being 2024.

Area Sources

Potential area sources include GHG emissions occurring from the use of landscaping equipment and fireplaces. Area source emissions were calculated using CalEEMod default values for landscaping and the assumption that the Project include a total of 137 natural gas fireplaces, consistent with the design feature described in Section 1.3.

Energy Sources

As represented in CalEEMod, energy sources include emissions associated with building electricity and natural gas usage (non-hearth). Projects that increase electricity consumption also result in an indirect increase in GHG emissions. The generation of electricity through the combustion of fossil fuels typically yields CO_2, and to a much smaller extent, methane, and nitrous oxide. The electricity and natural gas use associated with the Project was estimated assuming CalEEMod default consumption rates and emission factors for San Diego Gas & Electric (SDG&E), which would be the energy source provider to the site. Based on these factors, it was estimated the Project would demand 2,377 megawatt-hours of electricity and 6,017 million British Thermal Units (mmBTU)

As described in Section 1.3, the Project is designed to include rooftop PV systems for a combined total system size of at least 1,396 DC kW. Assuming a Capacity Factor of 28.9 percent, consistent with the statewide average for California (Berkeley Lab 2018), total electricity generation is estimated at 3,537 megawatt-hours per year.[1] This exceeds the expected electricity demand of the Project by approximately 1,160 megawatt-hours per year, thereby resulting in a net offset of electricity related emissions.

Mobile sources

The Project would consist of redevelopment in the vicinity of (i.e., immediately across I-15 from) an identified SANDAG Smart Growth Area (Potential Community Center). In addition, the southeastern portion of the Project site would be within a SANDAG-identified Transit Oriented District and the Project would include the VMT reducing measures identified in Section 1.3.3. Mobile-source GHG emissions were based on daily trip data provided by Linscott, Law, & Greenspan Engineers (LLG; 2019), average trip length as determined using SANDAG 2020 Regional Transportation Plan Series 13 Forecast Model (Appendix C), and the inclusion of the measures identified in Section 1.3 within CalEEMod (Appendix A). Annual VMT was estimated to be approximately 3.4 million miles per year (Appendix A).

Solid Waste

Solid waste generated would also contribute to GHG emissions. Treatment and disposal of solid waste produces significant amounts of methane. With the Project design features described in Section 1.3, consistent with the Waste Management Plan prepared for the Project, it was assumed the Project would generate 322 tons of waste per year.

Water and Wastewater

Water-related GHG emissions are from the conveyance and treatment of water. The California Energy Commission's 2006 Refining Estimates of Water-Related Energy Use in California defines average energy values for water in Southern California. These values are used in CalEEMod to establish default water-related emission factors. As described in Section 1.3, the Project would provide 20 percent water reduction from the statewide average in accordance with 2016 CALGreen. This reduction was applied to CalEEMod default water consumption and wastewater generation rates by land use were to estimate GHG emissions associated with water and wastewater.

[1] 1,396.22 kW * 24 hours/day * 365.24 days/year * 28.9% = 3,537,050.60 kWh/year

3.2.2.2 Scenario 2: Maximum Residential Buildout Consistent with Existing Zoning

As previously described, the Project site is currently zoned RS-1-14. For the purposes of this comparative analysis, the existing zoning designation scenario assumes development of 831 non-age restricted residential units. The 831-unit assumption is based upon the minimum lot size required by the existing zoning (5,000 square feet), with an 85 percent building efficiency (i.e., 15 percent of the 112.3-acre site would be developed as internal roadways and landscaping). This scenario uses the "Single Family Housing" land use category in CalEEMod and assumes a 2024 operational year consistent with first full operational year of the Project scenario.

Area Sources

Area sources include GHG emissions that would occur from the use of landscaping equipment and fireplaces. Area source emissions were calculated using CalEEMod default values for landscaping and included the assumption that all fireplaces would be natural gas.

Energy Sources

As represented in CalEEMod, energy sources include emissions associated with building electricity and natural gas usage (non-hearth). Projects that increase electricity consumption also result in an indirect increase in GHG emissions. The generation of electricity through the combustion of fossil fuels typically yields CO_2, and to a much smaller extent, methane, and nitrous oxide. The electricity and natural gas use associated with the existing zoning scenario was estimated assuming CalEEMod default consumption rates and emission factors for SDG&E, which would be the energy source provider to the site. Emission estimates assume Scenario 2 would include some rooftop solar consistent with the requirements of the 2019 updates to Title 24.

Mobile Sources

Mobile-source GHG emissions were modeled in CalEEMod utilizing trip generation rates available in the City of San Diego Trip Generation Manual and average trip lengths available in SANDAG's (Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region (City of San Diego 2003; SANDAG 2002). Annual VMT was estimated to be approximately 24 million miles.

Solid Waste

Solid waste generated would also contribute to GHG emissions. Treatment and disposal of solid waste produces significant amounts of methane. CalEEMod default values for solid waste generation based on the land use type were used to estimate GHG emissions associated with solid waste.

Water and Wastewater

Water-related GHG emissions are from the conveyance and treatment of water. The California Energy Commission's 2006 Refining Estimates of Water-Related Energy Use in California defines average energy values for water in Southern California. These values are used in CalEEMod to establish default water-related emission factors. CalEEMod default water consumption and wastewater generation rates by land use were used to estimate GHG emissions associated with water and wastewater.

3.2.2.3 Scenario 3: Redevelopment Consistent with Existing Community Plan Land Use Designation

As previously described, the existing Community Plan land use designation for the Project site is Open Space with policy direction to preserve the existing golf course as an open space and community amenity. For the purposes of this comparative analysis, the existing land use designation scenario assumes redevelopment of a golf course and tennis courts consistent with the Community Plan and the previous use of the site. The "Golf Course" land use category in CalEEMod was selected for the golf course and the "Racquet Club" land use category was used for the tennis courts (assuming a 110.46-acre golf course and a 1.85-acres of tennis courts). Modeling assumes a 2024 operational year consistent with the first full operational year of the proposed Project.

Area Sources

Area sources include GHG emissions that would occur from the use of landscaping equipment. Area source emissions were calculated using estimates of gasoline and diesel fuel usage for landscaping equipment for golf course facilities (Golf Course Superintendents Association of America [GCSAA] 2017). It was assumed a golf course of this size would consume 3,063 gallons of diesel fuel per year and 4,200 gallons of gasoline per year.

Energy Sources

As represented in CalEEMod, energy sources include emissions associated with building electricity and natural gas usage (non-hearth). Projects that increase electricity consumption also result in an indirect increase in GHG emissions. The generation of electricity through the combustion of fossil fuels typically yields CO_2, and to a much smaller extent, methane, and nitrous oxide. The electricity and natural gas use associated with the existing land use scenario was estimated assuming CalEEMod default consumption rates and emission factors for SDG&E, which would be the energy source provider to the site.

Mobile Sources

Mobile-source GHG emissions were modeled in CalEEMod utilizing trip generation rates available in the City of San Diego Trip Generation Manual and average trip lengths available in SANDAG's (Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region (City of San Diego 2003; SANDAG 2002). Annual VMT was estimated to be approximately 2.1 million miles.

Solid Waste

Solid waste generated would also contribute to GHG emissions. Treatment and disposal of solid waste produces significant amounts of methane. CalEEMod default values for solid waste generation based on the land use type were used to estimate GHG emissions associated with solid waste.

Water and Wastewater

Water-related GHG emissions are from the conveyance and treatment of water. The California Energy Commission's 2006 Refining Estimates of Water-Related Energy Use in California defines average energy values for water in Southern California. These values are used in CalEEMod to establish default water-related emission factors. CalEEMod default water consumption and wastewater generation rates by land use were used to estimate GHG emissions associated with water and wastewater.

4.0 PROJECT IMPACTS

This section evaluates potential impacts of the proposed Project related to the generation of GHG emissions.

4.1 DIRECT AND INDIRECT EMISSIONS OF GREENHOUSE GASES

4.1.1 Construction Emissions

GHG emissions would be associated with the construction phases of each of the three development scenarios analyzed through use of heavy equipment and vehicle trips by the construction crew commuting to the site (see Section 3.2.1 and Appendix A for construction assumptions). Emissions of GHGs related to construction activities would be temporary. Table 5, *Estimated Construction Emissions*, presents the emission estimates from CalEEMod for each of the three scenarios analyzed. As noted above, construction emissions were amortized over 30 years.

Table 5
ESTIMATED CONSTRUCTION EMISSIONS
(MT CO_2e per Year)

Year	Scenario 1	Scenario 2	Scenario 3
2019	135	79	126
2020	800	786	511
2021	852	882	-
2022	680	866	-
2023	16	848	-
2024	-	109	-
TOTAL	**2,483**	**3,569**	**637**
Amortized Construction Emissions[1]	83	119	21

Source: CalEEMod (output data are provided in Appendix A)
Note: totals may not sum due to rounding
[1] Construction emissions are amortized over 30 years.

4.1.2 Operational Emissions

The estimated 2024 (i.e., the first full year of operation) operational GHG emissions from area sources, energy usage, motor vehicles, solid waste generation, water supply, and wastewater treatment, considering the assumptions described in Section 3.2.2, above, are shown in Table 6, *Estimated Annual Operational Greenhouse Gas Emissions*.

Table 6
ESTIMATED ANNUAL OPERATIONAL GREENHOUSE GAS EMISSIONS
(MT CO_2e per Year)

Emission Sources	Scenario 1	Scenario 2	Scenario 3
Area Sources	115	669	68
Energy Sources	(57)	1,271	269
Vehicular (Mobile) Sources	1,303	8,777	779
Solid Waste Sources	162	490	282
Water Sources	222	429	517
OPERATIONAL SUB-TOTAL	**1,745**	**11,636**	**1,916**
Amortized Construction (Table 5)	***83***	***119***	***21***
TOTAL	**1,827**	**11,755**	**1,937**
Difference From Project (Scenario 1)	**-**	**(9,928)**	**(110)**

Source: CalEEMod output data are provided in Appendix A
Note: totals may not sum due to rounding

As shown in Table 6, annual emissions from buildout of the existing zoning (Scenario 2) would be approximately 9,928 MT CO_2e per year greater than the proposed Project (Scenario 1) and annual emissions from redevelopment of the previous uses consistent with the existing Community Plan Land Use designation (Scenario 3) would be approximately 110 MT CO_2e per year greater than the proposed Project (Scenario 1).

4.2 CLIMATE ACTION PLAN CONSISTENCY

Global climate change is inherently a cumulative impact; a project participates in this potential impact through its incremental contribution combined with the cumulative increase of all other sources of GHGs. The City's CAP Consistency Checklist also serves as the significance determination threshold for cumulative impacts related to climate change.

The City's CAP was adopted to ensure that emissions from activities in the City would not exceed established state targets. The CAP assumes a baseline level of construction and buildout of the land use and zoning as of the CAP's adoption. Land use changes, such as ones proposed by the Project, would potentially result in an increase in emissions compared to those assumed in the CAP by allowing a greater intensity of development or allowing land uses that have a higher rate of vehicle trips.

The first step is to assess a project's consistency with the growth projections utilized in the development of the CAP, as determined through the CAP Consistency Checklist. The second step is to review and evaluate a project's consistency with applicable strategies and actions of the CAP. The third step is to determine whether a project with a land use and/or zone designation change within a TPA would be consistent with the assumptions of the CAP. Step 3 would only apply if Step 1 is answered in the affirmative under Option B. The Project's consistency with the CAP Consistency Checklist is presented below.

4.2.1 Step 1: Land Use Consistency

*The Project would not be consistent with the existing General Plan and Community Plan land use designation, but would result in a less GHG-intensive land use***.** The first step in determining CAP consistency is to assess the Project's consistency with the growth projections used in the development

of the CAP. Step 1 allows for three options for concluding a project is consistent: Option A asks if the proposed project is consistent with the existing General Plan and Community Plan land use and zoning designations. The existing General Plan and Community Plan land use designations for the project site are Park, Open Space, and Recreation, and Open Space/ Golf Course, respectively, with a small portion in the south designated Commercial. The primary existing zoning designation is Residential Single Unit (RS-1-14), which would allow for construction of up to an estimated 831 dwelling units, compared to the 536 units proposed by the Project. The Project consists of a retirement community with 536 multi-family residential units and would therefore not be consistent with the existing single-family zoning designation or the existing open space land use designation. The applicant is proposing a Community Plan Amendment to re-designate the majority of the site to Low-Medium Density Residential with an associated rezone. Therefore, Option A would not apply to the Project. Option B asks if the proposed project would result in an increase in density within a TPA and, if so, requires the project to implement various actions included under Step 3 of the CAP Checklist. The Project is not located within a TPA; therefore, Option B would not apply to the Project.

Option C asks if the proposed project would result in an equivalent or less GHG-intensive project when compared to the existing designations. As detailed previously, operational GHG emissions were calculated for three scenarios for comparison purposes: the proposed Project, the existing RS-1-14 zoning designation based on 831 dwelling units, and the existing Community Plan Land Use as a golf course. The proposed Project would result in emissions of 1,827 MT CO_2e per year, which would be 110 MT CO_2e less than development as a golf course land use and 9,928 MT CO_2e less than the maximum potential development under the existing zoning. Because the Project would result in lower emissions than the existing land use, the proposed Project would be consistent with the CAP under Option C.

4.2.2 Step 2: CAP Measures Consistency

The Project would be consistent with applicable CAP measures. After determining consistency with Step 1 of the Checklist, Step 2 determines a project's consistency with applicable CAP measures. The Project's conformance with each CAP measure is described in Table 7, *CAP Measure Consistency*.

Table 7
CAP MEASURE CONSISTENCY

CAP Consistency Checklist Item	Consistency Evaluation
Strategy 1: Energy- and Water-Efficient Buildings	
1. Cool/Green Roofs • Would the project include roofing materials with a minimum 3-year aged solar reflection and thermal emittance or solar reflection index equal to or greater than the values specified in the voluntary measures under CALGreen Building Standards Code?; or • Would the project roof construction have a thermal mass over the roof membrane, including areas of vegetated (green) roofs, weighing at least 25 pounds per square foot as specified in the voluntary measures under CALGreen Building Standards Code?; or • Would the project include a combination of the above two options?	**Consistent**. Where not covered by solar panels, the Project would include roofing materials with a minimum 3-year aged solar reflection and thermal emittance or solar reflection index equal to or greater than the values specified in the voluntary measures under CALGreen Building Standards Code.

Table 7 (cont.)
CAP MEASURE CONSISTENCY

CAP Consistency Checklist Item	Consistency Evaluation
Strategy 1: Energy- and Water-Efficient Buildings (cont.)	
2. Plumbing fixtures and fittings With respect to plumbing fixtures or fittings provided as part of the project, would those low-flow fixtures/appliances be consistent with each of the following: Residential buildings: • Kitchen faucets: maximum flow rate not to exceed 1.5 gallons per minute at 60 psi; • Standard dishwashers: 4.25 gallons per cycle; • Compact dishwashers: 3.5 gallons per cycle; and • Clothes washers: water factor of 6 gallons per cubic feet of drum capacity? Nonresidential buildings: • Plumbing fixtures and fittings that do not exceed the maximum flow rate specified in Table A5.303.2.3.1 (voluntary measures) of the CALGreen Building Standards Code; and • Appliance and fixtures for commercial applications that meet the provisions of Section A5.303.3 (voluntary measures) of the CALGreen Building Standards Code?	**Consistent**. The Project would implement low-flow fixtures and appliances consistent with the measures specified for residential buildings.
Strategy 3: Bicycling, Walking, Transit & Land Use	
3. Electric Vehicle Charging • Multiple-family projects of 17 dwelling units or less: Would 3% of the total parking spaces required, or a minimum of one space, whichever is greater, be provided with a listed cabinet, box, or enclosure connected to a conduit linking the parking spaces with the electrical service, in a manner approved by the building and safety official, to allow for the future installation of electric vehicle supply equipment to provide electric vehicle charging stations at such time as it is needed for use by residents? • Multiple-family projects of more than 17 dwelling units: Of the total required listed cabinets, boxes, or enclosures, would 50% have the necessary electric vehicle supply equipment installed to provide active electric vehicle charging stations ready for use by residents? • Non-residential projects: Of the total required listed cabinets, boxes, or enclosures, would 50% have the necessary electric vehicle supply equipment installed to provide active electric vehicle charging stations ready for use?	**Consistent**. The Project would provide 1,241 parking spaces and far exceed City pre-wiring requirements (i.e., cabinets and conduits provided for future wiring) of 3 percent of parking required (a total of 37 spaces) for the future installation of EV charging stations, with 50 percent of that number (19 of the 37 spaces) to contain additional necessary equipment to be active vehicle charging stations. The Project proposes the 19 fully active EV charging stations and also would provide EV-ready pre-wiring in all 455 market-rate residential garages).
4. Bicycle Parking Spaces Would the project provide more short- and long-term bicycle parking spaces than required in the City's Municipal Code (Chapter 14, Article 2, Division 5)?	**Not Applicable**. As a residential development, this item would not apply to the Project.
5. Shower facilities If the Project includes nonresidential development that would accommodate over 10 tenant occupants (employees), would the project include changing/shower facilities in accordance with the voluntary measures under the CALGreen Building Standards Code?	**Not Applicable**. As a residential development, this item would not apply to the Project.

Table 7 (cont.)
CAP MEASURE CONSISTENCY

CAP Consistency Checklist Item	Consistency Evaluation
Strategy 3: Bicycling, Walking, Transit & Land Use (cont.)	
6. Designated Parking Spaces If the project includes a nonresidential use in a TPA, would the project provide designated parking for a combination of low-emitting, fuel efficient, and carpool/vanpool vehicles?	**Not Applicable**. As a residential development located outside a TPA, this item would not apply to the Project.
7. Transportation Demand Management Program If the project would accommodate over 50 tenant-occupants (employees), would it include a transportation demand management program that would be applicable to existing tenants and future tenants?	**Not Applicable**. As a residential development, this item would not apply to the Project.

As summarized in Table 7, the Project would be consistent with all applicable CAP Consistency Checklist Step 2 measures and would be consistent with the City's CAP with respect to planning and land use strategies. The Project would not impede the City's ability to implement the actions identified in the CAP to achieve the CAP's targets and associated GHG emission reductions.

4.2.3 Step 3: TPA Consistency

Not applicable. Because the Project site is not located in a City-designated TPA, defined by SB 743 as an area within one-half mile of a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service of 15 minutes or less during the morning and afternoon peak commute periods, Step 3 is not applicable.

4.2.4 Summary

Per Step 1 of the CAP consistency analysis, the Project would require a Community Plan amendment and zone change and the Project is not located in a TPA; therefore, the Project does not comply with Options A or B of Step 1 of the CAP Consistency Checklist. However, as demonstrated in this analysis, the Project would result in a less GHG-intensive land use than the assumptions utilized in development of the CAP; therefore, the Project would be consistent with Step 1 of the CAP Consistency Checklist under Option C.

Regarding Step 2, the Project would be consistent with all applicable CAP Consistency Checklist items and would implement all Step 2 strategies; therefore, the Project is consistent with Step 2. Step 3 consistency is not applicable to the Project because the Project is not located within a TPA.

As demonstrated in this report, the Project would be consistent with the CAP, and therefore, the Project would result in a less-than-significant cumulative impact regarding GHG emissions.

5.0 LIST OF PREPARERS

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Appendix A

CalEEMod Output

The Junipers

San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Retirement Community	536.00	Dwelling Unit	112.30	536,000.00	1533

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2024
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - 536 DU on 112.3 acres

Construction Phase - Construction schedule adjusted for 2023 buildout

Demolition - 10,983 of demo debris per Waste Management Plan

Grading - 12,100 tons of vegetation per Waste Management Plan
Balanced Grading per Hunsaker

Architectural Coating - Rule 67 Compliance

Vehicle Trips - Trip Rate: LLG2019
Trip Distance: SANDAG Series 13

Woodstoves - 137 NG fireplaces included in Single Detached and Clubhouse

Solid Waste - 322 tons of waste sent to landfills per Waste Management Plan

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation - LUT-5: 0.5 mile from center of Project.
LUT-6: 81 affordable units (81/536=0.15).
SDT-1: pedestrian access network connects offsite.

Area Mitigation -

Energy Mitigation - SunStreet2019 - Project will provide 1,396.22 kW DC or larger onsite PV system.
Berkeley Lab, Utility-Scale Solar 2018 Edition states CA average PV Capacity Factor is 28.9%
1,396.22 kW * 24 hr/day * 365.24 days/yr * 28.9% = 3,537,050.60 kWh/yr

Water Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	220.00	64.00
tblConstructionPhase	NumDays	3,100.00	610.00
tblConstructionPhase	NumDays	200.00	21.00
tblConstructionPhase	NumDays	310.00	65.00

tblConstructionPhase	NumDays	220.00	43.00
tblConstructionPhase	NumDays	120.00	65.00
tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFireplaces	NumberGas	294.80	137.00
tblFireplaces	NumberNoFireplace	53.60	399.00
tblFireplaces	NumberWood	187.60	0.00
tblGrading	MaterialExported	0.00	12,100.00
tblLandUse	LotAcreage	107.20	112.30
tblSolidWaste	SolidWasteGenerationRate	246.56	322.00
tblVehicleTrips	DV_TP	11.00	0.00
tblVehicleTrips	HO_TTP	39.60	0.00
tblVehicleTrips	HS_TTP	18.80	0.00
tblVehicleTrips	HW_TL	10.80	4.84
tblVehicleTrips	HW_TTP	41.60	100.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	86.00	100.00
tblVehicleTrips	ST_TR	2.03	4.00
tblVehicleTrips	SU_TR	1.95	4.00
tblVehicleTrips	WD_TR	2.40	4.00
tblWoodstoves	NumberCatalytic	26.80	0.00
tblWoodstoves	NumberNoncatalytic	26.80	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.0925	1.1065	0.5346	1.4400e-003	0.3391	0.0460	0.3851	0.1329	0.0426	0.1754	0.0000	134.7151	134.7151	0.0274	0.0000	135.3989
2020	0.5288	4.7175	3.7803	8.8700e-003	0.9562	0.2085	1.1646	0.4070	0.1937	0.6006	0.0000	796.5735	796.5735	0.1423	0.0000	800.1320
2021	0.4462	3.1643	3.6254	9.4100e-003	0.4533	0.1296	0.5829	0.1216	0.1218	0.2434	0.0000	849.6331	849.6331	0.0975	0.0000	852.0700
2022	1.0565	2.4043	2.9731	7.5200e-003	0.3481	0.0952	0.4433	0.0933	0.0893	0.1827	0.0000	677.5888	677.5888	0.0858	0.0000	679.7342
2023	1.3847	0.0307	0.0728	1.8000e-004	0.0130	1.5800e-003	0.0145	3.4500e-003	1.5700e-003	5.0100e-003	0.0000	15.8572	15.8572	5.9000e-004	0.0000	15.8720
Maximum	**1.3847**	**4.7175**	**3.7803**	**9.4100e-003**	**0.9562**	**0.2085**	**1.1646**	**0.4070**	**0.1937**	**0.6006**	**0.0000**	**849.6331**	**849.6331**	**0.1423**	**0.0000**	**852.0700**

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					
2019	0.0925	1.1065	0.5346	1.4400e-003	0.1640	0.0460	0.2100	0.0628	0.0426	0.1054	0.0000	134.7150	134.7150	0.0274	0.0000	135.3988
2020	0.5288	4.7175	3.7803	8.8700e-003	0.5871	0.2085	0.7956	0.2252	0.1937	0.4188	0.0000	796.5729	796.5729	0.1423	0.0000	800.1315
2021	0.4462	3.1642	3.6254	9.4100e-003	0.4533	0.1296	0.5829	0.1216	0.1218	0.2434	0.0000	849.6327	849.6327	0.0975	0.0000	852.0696
2022	1.0565	2.4043	2.9731	7.5200e-003	0.3481	0.0952	0.4433	0.0933	0.0893	0.1827	0.0000	677.5884	677.5884	0.0858	0.0000	679.7339
2023	1.3847	0.0307	0.0728	1.8000e-004	0.0130	1.5800e-003	0.0145	3.4500e-003	1.5700e-003	5.0100e-003	0.0000	15.8572	15.8572	5.9000e-004	0.0000	15.8720
Maximum	**1.3847**	**4.7175**	**3.7803**	**9.4100e-003**	**0.5871**	**0.2085**	**0.7956**	**0.2252**	**0.1937**	**0.4188**	**0.0000**	**849.6327**	**849.6327**	**0.1423**	**0.0000**	**852.0696**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**25.79**	**0.00**	**21.01**	**33.21**	**0.00**	**20.86**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	11-1-2019	1-31-2020	1.7683	1.7683
2	2-1-2020	4-30-2020	1.7129	1.7129
3	5-1-2020	7-31-2020	1.2277	1.2277
4	8-1-2020	10-31-2020	0.9996	0.9996
5	11-1-2020	1-31-2021	0.9749	0.9749
6	2-1-2021	4-30-2021	0.8804	0.8804

7	**5-1-2021**	**7-31-2021**	0.9040	0.9040
8	**8-1-2021**	**10-31-2021**	0.9071	0.9071
9	**11-1-2021**	**1-31-2022**	0.8853	0.8853
10	**2-1-2022**	**4-30-2022**	0.8008	0.8008
11	**5-1-2022**	**7-31-2022**	0.8221	0.8221
12	**8-1-2022**	**10-31-2022**	0.6815	0.6815
13	**11-1-2022**	**1-31-2023**	1.6268	1.6268
14	**2-1-2023**	**4-30-2023**	0.6743	0.6743
		Highest	1.7683	1.7683

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	3.0623	0.1390	4.0178	8.0000e-004		0.0296	0.0296		0.0296	0.0296	0.0000	114.4091	114.4091	8.3100e-003	1.9800e-003	115.2062
Energy	0.0324	0.2773	0.1180	1.7700e-003		0.0224	0.0224		0.0224	0.0224	0.0000	1,097.9104	1,097.9104	0.0374	0.0124	1,102.5279
Mobile	0.4458	1.7310	4.5618	0.0155	1.4232	0.0125	1.4357	0.3811	0.0116	0.3927	0.0000	1,434.4990	1,434.4990	0.0761	0.0000	1,436.4006
Waste						0.0000	0.0000		0.0000	0.0000	65.3631	0.0000	65.3631	3.8629	0.0000	161.9343
Water						0.0000	0.0000		0.0000	0.0000	11.0793	228.5468	239.6261	1.1472	0.0288	276.8792
Total	**3.5406**	**2.1472**	**8.6977**	**0.0181**	**1.4232**	**0.0645**	**1.4877**	**0.3811**	**0.0636**	**0.4447**	**76.4424**	**2,875.3652**	**2,951.8076**	**5.1318**	**0.0431**	**3,092.9482**

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	3.0623	0.1390	4.0178	8.0000e-004		0.0296	0.0296		0.0296	0.0296	0.0000	114.4091	114.4091	8.3100e-003	1.9800e-003	115.2062
Energy	0.0324	0.2773	0.1180	1.7700e-003		0.0224	0.0224		0.0224	0.0224	0.0000	-58.0288	-58.0288	-0.0091	2.7300e-003	-57.4430
Mobile	0.4312	1.6575	4.2415	0.0141	1.2777	0.0114	1.2891	0.3421	0.0106	0.3527	0.0000	1,301.5894	1,301.5894	0.0703	0.0000	1,303.3476
Waste						0.0000	0.0000		0.0000	0.0000	65.3631	0.0000	65.3631	3.8629	0.0000	161.9343
Water						0.0000	0.0000		0.0000	0.0000	8.8635	182.8374	191.7009	0.9177	0.0230	221.5033
Total	**3.5260**	**2.0737**	**8.3773**	**0.0166**	**1.2777**	**0.0634**	**1.3411**	**0.3421**	**0.0626**	**0.4047**	**74.2265**	**1,540.8072**	**1,615.0337**	**4.8501**	**0.0277**	**1,744.5484**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.41**	**3.42**	**3.68**	**7.97**	**10.22**	**1.63**	**9.85**	**10.22**	**1.54**	**8.98**	**2.90**	**46.41**	**45.29**	**5.49**	**35.68**	**43.60**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	11/1/2019	11/29/2019	5	21	
2	Site Preparation	Site Preparation	12/1/2019	2/28/2020	5	65	
3	Grading	Grading	3/1/2020	5/29/2020	5	65	
4	Building Construction	Building Construction	6/1/2020	9/30/2022	5	610	
5	Paving	Paving	10/1/2022	11/30/2022	5	43	
6	Architectural Coating	Architectural Coating	12/1/2022	2/28/2023	5	64	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 162.5

Acres of Paving: 0

Residential Indoor: 1,085,400; Residential Outdoor: 361,800; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	1,086.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	1,196.00	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
Building Construction	9	386.00	57.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	77.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 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					0.1190	0.0000	0.1190	0.0180	0.0000	0.0180	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0369	0.3757	0.2316	4.1000e-004		0.0189	0.0189		0.0175	0.0175	0.0000	36.3577	36.3577	0.0101	0.0000	36.6105
Total	**0.0369**	**0.3757**	**0.2316**	**4.1000e-004**	**0.1190**	**0.0189**	**0.1378**	**0.0180**	**0.0175**	**0.0356**	**0.0000**	**36.3577**	**36.3577**	**0.0101**	**0.0000**	**36.6105**

3.2 Demolition - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.7700e-003	0.1664	0.0363	4.3000e-004	9.2900e-003	6.2000e-004	9.9100e-003	2.5500e-003	5.9000e-004	3.1500e-003	0.0000	42.3320	42.3320	3.8300e-003	0.0000	42.4278
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.2000e-004	4.8000e-004	4.6100e-003	1.0000e-005	1.2600e-003	1.0000e-005	1.2700e-003	3.4000e-004	1.0000e-005	3.4000e-004	0.0000	1.1789	1.1789	4.0000e-005	0.0000	1.1798
Total	**5.3900e-003**	**0.1669**	**0.0409**	**4.4000e-004**	**0.0106**	**6.3000e-004**	**0.0112**	**2.8900e-003**	**6.0000e-004**	**3.4900e-003**	**0.0000**	**43.5109**	**43.5109**	**3.8700e-003**	**0.0000**	**43.6076**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					0.0535	0.0000	0.0535	8.1100e-003	0.0000	8.1100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0369	0.3757	0.2316	4.1000e-004		0.0189	0.0189		0.0175	0.0175	0.0000	36.3576	36.3576	0.0101	0.0000	36.6105
Total	**0.0369**	**0.3757**	**0.2316**	**4.1000e-004**	**0.0535**	**0.0189**	**0.0724**	**8.1100e-003**	**0.0175**	**0.0256**	**0.0000**	**36.3576**	**36.3576**	**0.0101**	**0.0000**	**36.6105**

3.2 Demolition - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.7700e-003	0.1664	0.0363	4.3000e-004	9.2900e-003	6.2000e-004	9.9100e-003	2.5500e-003	5.9000e-004	3.1500e-003	0.0000	42.3320	42.3320	3.8300e-003	0.0000	42.4278
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.2000e-004	4.8000e-004	4.6100e-003	1.0000e-005	1.2600e-003	1.0000e-005	1.2700e-003	3.4000e-004	1.0000e-005	3.4000e-004	0.0000	1.1789	1.1789	4.0000e-005	0.0000	1.1798
Total	**5.3900e-003**	**0.1669**	**0.0409**	**4.4000e-004**	**0.0106**	**6.3000e-004**	**0.0112**	**2.8900e-003**	**6.0000e-004**	**3.4900e-003**	**0.0000**	**43.5109**	**43.5109**	**3.8700e-003**	**0.0000**	**43.6076**

3.3 Site Preparation - 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					0.1994	0.0000	0.1994	0.1093	0.0000	0.1093	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0477	0.5013	0.2427	4.2000e-004		0.0263	0.0263		0.0242	0.0242	0.0000	37.5856	37.5856	0.0119	0.0000	37.8829
Total	**0.0477**	**0.5013**	**0.2427**	**4.2000e-004**	**0.1994**	**0.0263**	**0.2257**	**0.1093**	**0.0242**	**0.1335**	**0.0000**	**37.5856**	**37.5856**	**0.0119**	**0.0000**	**37.8829**

3.3 Site Preparation - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.7800e-003	0.0620	0.0135	1.6000e-004	8.5500e-003	2.3000e-004	8.7800e-003	2.2000e-003	2.2000e-004	2.4200e-003	0.0000	15.7790	15.7790	1.4300e-003	0.0000	15.8147
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.8000e-004	6.0000e-004	5.7900e-003	2.0000e-005	1.5900e-003	1.0000e-005	1.6000e-003	4.2000e-004	1.0000e-005	4.3000e-004	0.0000	1.4820	1.4820	5.0000e-005	0.0000	1.4832
Total	**2.5600e-003**	**0.0626**	**0.0193**	**1.8000e-004**	**0.0101**	**2.4000e-004**	**0.0104**	**2.6200e-003**	**2.3000e-004**	**2.8500e-003**	**0.0000**	**17.2610**	**17.2610**	**1.4800e-003**	**0.0000**	**17.2979**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					0.0897	0.0000	0.0897	0.0492	0.0000	0.0492	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0477	0.5013	0.2427	4.2000e-004		0.0263	0.0263		0.0242	0.0242	0.0000	37.5855	37.5855	0.0119	0.0000	37.8828
Total	**0.0477**	**0.5013**	**0.2427**	**4.2000e-004**	**0.0897**	**0.0263**	**0.1160**	**0.0492**	**0.0242**	**0.0734**	**0.0000**	**37.5855**	**37.5855**	**0.0119**	**0.0000**	**37.8828**

3.3 Site Preparation - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.7800e-003	0.0620	0.0135	1.6000e-004	8.5500e-003	2.3000e-004	8.7800e-003	2.2000e-003	2.2000e-004	2.4200e-003	0.0000	15.7790	15.7790	1.4300e-003	0.0000	15.8147
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.8000e-004	6.0000e-004	5.7900e-003	2.0000e-005	1.5900e-003	1.0000e-005	1.6000e-003	4.2000e-004	1.0000e-005	4.3000e-004	0.0000	1.4820	1.4820	5.0000e-005	0.0000	1.4832
Total	**2.5600e-003**	**0.0626**	**0.0193**	**1.8000e-004**	**0.0101**	**2.4000e-004**	**0.0104**	**2.6200e-003**	**2.3000e-004**	**2.8500e-003**	**0.0000**	**17.2610**	**17.2610**	**1.4800e-003**	**0.0000**	**17.2979**

3.3 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3891	0.0000	0.3891	0.2136	0.0000	0.2136	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0876	0.9120	0.4625	8.2000e-004		0.0472	0.0472		0.0435	0.0435	0.0000	71.8760	71.8760	0.0233	0.0000	72.4571
Total	**0.0876**	**0.9120**	**0.4625**	**8.2000e-004**	**0.3891**	**0.0472**	**0.4363**	**0.2136**	**0.0435**	**0.2571**	**0.0000**	**71.8760**	**71.8760**	**0.0233**	**0.0000**	**72.4571**

3.3 Site Preparation - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.1600e-003	0.1125	0.0258	3.1000e-004	9.3700e-003	3.6000e-004	9.7300e-003	2.5000e-003	3.4000e-004	2.8400e-003	0.0000	30.5106	30.5106	2.7500e-003	0.0000	30.5793
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4300e-003	1.0600e-003	0.0104	3.0000e-005	3.1000e-003	2.0000e-005	3.1300e-003	8.2000e-004	2.0000e-005	8.5000e-004	0.0000	2.8053	2.8053	8.0000e-005	0.0000	2.8074
Total	**4.5900e-003**	**0.1136**	**0.0361**	**3.4000e-004**	**0.0125**	**3.8000e-004**	**0.0129**	**3.3200e-003**	**3.6000e-004**	**3.6900e-003**	**0.0000**	**33.3159**	**33.3159**	**2.8300e-003**	**0.0000**	**33.3867**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					0.1751	0.0000	0.1751	0.0961	0.0000	0.0961	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0876	0.9120	0.4625	8.2000e-004		0.0472	0.0472		0.0435	0.0435	0.0000	71.8759	71.8759	0.0233	0.0000	72.4570
Total	**0.0876**	**0.9120**	**0.4625**	**8.2000e-004**	**0.1751**	**0.0472**	**0.2223**	**0.0961**	**0.0435**	**0.1396**	**0.0000**	**71.8759**	**71.8759**	**0.0233**	**0.0000**	**72.4570**

3.3 Site Preparation - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.1600e-003	0.1125	0.0258	3.1000e-004	9.3700e-003	3.6000e-004	9.7300e-003	2.5000e-003	3.4000e-004	2.8400e-003	0.0000	30.5106	30.5106	2.7500e-003	0.0000	30.5793
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4300e-003	1.0600e-003	0.0104	3.0000e-005	3.1000e-003	2.0000e-005	3.1300e-003	8.2000e-004	2.0000e-005	8.5000e-004	0.0000	2.8053	2.8053	8.0000e-005	0.0000	2.8074
Total	**4.5900e-003**	**0.1136**	**0.0361**	**3.4000e-004**	**0.0125**	**3.8000e-004**	**0.0129**	**3.3200e-003**	**3.6000e-004**	**3.6900e-003**	**0.0000**	**33.3159**	**33.3159**	**2.8300e-003**	**0.0000**	**33.3867**

3.4 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2819	0.0000	0.2819	0.1169	0.0000	0.1169	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1446	1.6314	1.0386	2.0200e-003		0.0707	0.0707		0.0650	0.0650	0.0000	177.0740	177.0740	0.0573	0.0000	178.5057
Total	**0.1446**	**1.6314**	**1.0386**	**2.0200e-003**	**0.2819**	**0.0707**	**0.3525**	**0.1169**	**0.0650**	**0.1819**	**0.0000**	**177.0740**	**177.0740**	**0.0573**	**0.0000**	**178.5057**

3.4 Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4000e-003	1.7700e-003	0.0174	5.0000e-005	5.2100e-003	4.0000e-005	5.2500e-003	1.3900e-003	3.0000e-005	1.4200e-003	0.0000	4.7117	4.7117	1.4000e-004	0.0000	4.7152
Total	**2.4000e-003**	**1.7700e-003**	**0.0174**	**5.0000e-005**	**5.2100e-003**	**4.0000e-005**	**5.2500e-003**	**1.3900e-003**	**3.0000e-005**	**1.4200e-003**	**0.0000**	**4.7117**	**4.7117**	**1.4000e-004**	**0.0000**	**4.7152**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					0.1269	0.0000	0.1269	0.0526	0.0000	0.0526	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1446	1.6314	1.0386	2.0200e-003		0.0707	0.0707		0.0650	0.0650	0.0000	177.0737	177.0737	0.0573	0.0000	178.5055
Total	**0.1446**	**1.6314**	**1.0386**	**2.0200e-003**	**0.1269**	**0.0707**	**0.1975**	**0.0526**	**0.0650**	**0.1176**	**0.0000**	**177.0737**	**177.0737**	**0.0573**	**0.0000**	**178.5055**

3.4 Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4000e-003	1.7700e-003	0.0174	5.0000e-005	5.2100e-003	4.0000e-005	5.2500e-003	1.3900e-003	3.0000e-005	1.4200e-003	0.0000	4.7117	4.7117	1.4000e-004	0.0000	4.7152
Total	**2.4000e-003**	**1.7700e-003**	**0.0174**	**5.0000e-005**	**5.2100e-003**	**4.0000e-005**	**5.2500e-003**	**1.3900e-003**	**3.0000e-005**	**1.4200e-003**	**0.0000**	**4.7117**	**4.7117**	**1.4000e-004**	**0.0000**	**4.7152**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1632	1.4773	1.2973	2.0700e-003		0.0860	0.0860		0.0809	0.0809	0.0000	178.3397	178.3397	0.0435	0.0000	179.4274
Total	**0.1632**	**1.4773**	**1.2973**	**2.0700e-003**		**0.0860**	**0.0860**		**0.0809**	**0.0809**	**0.0000**	**178.3397**	**178.3397**	**0.0435**	**0.0000**	**179.4274**

3.5 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0167	0.5003	0.1329	1.1900e-003	0.0291	2.4400e-003	0.0316	8.4100e-003	2.3300e-003	0.0108	0.0000	115.8088	115.8088	8.8800e-003	0.0000	116.0307
Worker	0.1096	0.0811	0.7953	2.3800e-003	0.2384	1.7100e-003	0.2401	0.0633	1.5800e-003	0.0649	0.0000	215.4475	215.4475	6.4700e-003	0.0000	215.6092
Total	**0.1263**	**0.5814**	**0.9283**	**3.5700e-003**	**0.2675**	**4.1500e-003**	**0.2716**	**0.0718**	**3.9100e-003**	**0.0757**	**0.0000**	**331.2563**	**331.2563**	**0.0154**	**0.0000**	**331.6399**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1632	1.4773	1.2973	2.0700e-003		0.0860	0.0860		0.0809	0.0809	0.0000	178.3395	178.3395	0.0435	0.0000	179.4272
Total	**0.1632**	**1.4773**	**1.2973**	**2.0700e-003**		**0.0860**	**0.0860**		**0.0809**	**0.0809**	**0.0000**	**178.3395**	**178.3395**	**0.0435**	**0.0000**	**179.4272**

3.5 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0167	0.5003	0.1329	1.1900e-003	0.0291	2.4400e-003	0.0316	8.4100e-003	2.3300e-003	0.0108	0.0000	115.8088	115.8088	8.8800e-003	0.0000	116.0307
Worker	0.1096	0.0811	0.7953	2.3800e-003	0.2384	1.7100e-003	0.2401	0.0633	1.5800e-003	0.0649	0.0000	215.4475	215.4475	6.4700e-003	0.0000	215.6092
Total	**0.1263**	**0.5814**	**0.9283**	**3.5700e-003**	**0.2675**	**4.1500e-003**	**0.2716**	**0.0718**	**3.9100e-003**	**0.0757**	**0.0000**	**331.2563**	**331.2563**	**0.0154**	**0.0000**	**331.6399**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2481	2.2749	2.1631	3.5100e-003		0.1251	0.1251		0.1176	0.1176	0.0000	302.2867	302.2867	0.0729	0.0000	304.1099
Total	**0.2481**	**2.2749**	**2.1631**	**3.5100e-003**		**0.1251**	**0.1251**		**0.1176**	**0.1176**	**0.0000**	**302.2867**	**302.2867**	**0.0729**	**0.0000**	**304.1099**

3.5 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0230	0.7644	0.2039	1.9900e-003	0.0494	1.6200e-003	0.0510	0.0143	1.5500e-003	0.0158	0.0000	194.4722	194.4722	0.0144	0.0000	194.8330
Worker	0.1751	0.1249	1.2585	3.9000e-003	0.4040	2.8600e-003	0.4068	0.1073	2.6300e-003	0.1100	0.0000	352.8743	352.8743	0.0101	0.0000	353.1271
Total	**0.1981**	**0.8894**	**1.4623**	**5.8900e-003**	**0.4533**	**4.4800e-003**	**0.4578**	**0.1216**	**4.1800e-003**	**0.1258**	**0.0000**	**547.3464**	**547.3464**	**0.0245**	**0.0000**	**547.9601**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2481	2.2749	2.1631	3.5100e-003		0.1251	0.1251		0.1176	0.1176	0.0000	302.2863	302.2863	0.0729	0.0000	304.1095
Total	**0.2481**	**2.2749**	**2.1631**	**3.5100e-003**		**0.1251**	**0.1251**		**0.1176**	**0.1176**	**0.0000**	**302.2863**	**302.2863**	**0.0729**	**0.0000**	**304.1095**

3.5 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0230	0.7644	0.2039	1.9900e-003	0.0494	1.6200e-003	0.0510	0.0143	1.5500e-003	0.0158	0.0000	194.4722	194.4722	0.0144	0.0000	194.8330
Worker	0.1751	0.1249	1.2585	3.9000e-003	0.4040	2.8600e-003	0.4068	0.1073	2.6300e-003	0.1100	0.0000	352.8743	352.8743	0.0101	0.0000	353.1271
Total	**0.1981**	**0.8894**	**1.4623**	**5.8900e-003**	**0.4533**	**4.4800e-003**	**0.4578**	**0.1216**	**4.1800e-003**	**0.1258**	**0.0000**	**547.3464**	**547.3464**	**0.0245**	**0.0000**	**547.9601**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1664	1.5225	1.5954	2.6300e-003		0.0789	0.0789		0.0742	0.0742	0.0000	225.9321	225.9321	0.0541	0.0000	227.2853
Total	**0.1664**	**1.5225**	**1.5954**	**2.6300e-003**		**0.0789**	**0.0789**		**0.0742**	**0.0742**	**0.0000**	**225.9321**	**225.9321**	**0.0541**	**0.0000**	**227.2853**

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0160	0.5393	0.1442	1.4700e-003	0.0369	1.0400e-003	0.0379	0.0107	1.0000e-003	0.0117	0.0000	143.9194	143.9194	0.0105	0.0000	144.1805
Worker	0.1238	0.0851	0.8729	2.8100e-003	0.3018	2.0900e-003	0.3039	0.0802	1.9200e-003	0.0821	0.0000	253.9772	253.9772	6.9200e-003	0.0000	254.1502
Total	**0.1398**	**0.6244**	**1.0171**	**4.2800e-003**	**0.3387**	**3.1300e-003**	**0.3418**	**0.0909**	**2.9200e-003**	**0.0938**	**0.0000**	**397.8965**	**397.8965**	**0.0174**	**0.0000**	**398.3307**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1664	1.5225	1.5954	2.6300e-003		0.0789	0.0789		0.0742	0.0742	0.0000	225.9318	225.9318	0.0541	0.0000	227.2850
Total	**0.1664**	**1.5225**	**1.5954**	**2.6300e-003**		**0.0789**	**0.0789**		**0.0742**	**0.0742**	**0.0000**	**225.9318**	**225.9318**	**0.0541**	**0.0000**	**227.2850**

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0160	0.5393	0.1442	1.4700e-003	0.0369	1.0400e-003	0.0379	0.0107	1.0000e-003	0.0117	0.0000	143.9194	143.9194	0.0105	0.0000	144.1805
Worker	0.1238	0.0851	0.8729	2.8100e-003	0.3018	2.0900e-003	0.3039	0.0802	1.9200e-003	0.0821	0.0000	253.9772	253.9772	6.9200e-003	0.0000	254.1502
Total	**0.1398**	**0.6244**	**1.0171**	**4.2800e-003**	**0.3387**	**3.1300e-003**	**0.3418**	**0.0909**	**2.9200e-003**	**0.0938**	**0.0000**	**397.8965**	**397.8965**	**0.0174**	**0.0000**	**398.3307**

3.6 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	0.0237	0.2392	0.3135	4.9000e-004		0.0122	0.0122		0.0112	0.0112	0.0000	43.0593	43.0593	0.0139	0.0000	43.4074
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0237**	**0.2392**	**0.3135**	**4.9000e-004**		**0.0122**	**0.0122**		**0.0112**	**0.0112**	**0.0000**	**43.0593**	**43.0593**	**0.0139**	**0.0000**	**43.4074**

3.6 Paving - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0600e-003	7.3000e-004	7.4800e-003	2.0000e-005	2.5900e-003	2.0000e-005	2.6000e-003	6.9000e-004	2.0000e-005	7.0000e-004	0.0000	2.1764	2.1764	6.0000e-005	0.0000	2.1779
Total	**1.0600e-003**	**7.3000e-004**	**7.4800e-003**	**2.0000e-005**	**2.5900e-003**	**2.0000e-005**	**2.6000e-003**	**6.9000e-004**	**2.0000e-005**	**7.0000e-004**	**0.0000**	**2.1764**	**2.1764**	**6.0000e-005**	**0.0000**	**2.1779**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0237	0.2392	0.3135	4.9000e-004		0.0122	0.0122		0.0112	0.0112	0.0000	43.0592	43.0592	0.0139	0.0000	43.4074
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0237**	**0.2392**	**0.3135**	**4.9000e-004**		**0.0122**	**0.0122**		**0.0112**	**0.0112**	**0.0000**	**43.0592**	**43.0592**	**0.0139**	**0.0000**	**43.4074**

3.6 Paving - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0600e-003	7.3000e-004	7.4800e-003	2.0000e-005	2.5900e-003	2.0000e-005	2.6000e-003	6.9000e-004	2.0000e-005	7.0000e-004	0.0000	2.1764	2.1764	6.0000e-005	0.0000	2.1779
Total	**1.0600e-003**	**7.3000e-004**	**7.4800e-003**	**2.0000e-005**	**2.5900e-003**	**2.0000e-005**	**2.6000e-003**	**6.9000e-004**	**2.0000e-005**	**7.0000e-004**	**0.0000**	**2.1764**	**2.1764**	**6.0000e-005**	**0.0000**	**2.1779**

3.7 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.7206					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.2500e-003	0.0155	0.0200	3.0000e-005		9.0000e-004	9.0000e-004		9.0000e-004	9.0000e-004	0.0000	2.8086	2.8086	1.8000e-004	0.0000	2.8132
Total	**0.7228**	**0.0155**	**0.0200**	**3.0000e-005**		**9.0000e-004**	**9.0000e-004**		**9.0000e-004**	**9.0000e-004**	**0.0000**	**2.8086**	**2.8086**	**1.8000e-004**	**0.0000**	**2.8132**

3.7 Architectural Coating - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.7900e-003	1.9200e-003	0.0197	6.0000e-005	6.7900e-003	5.0000e-005	6.8400e-003	1.8000e-003	4.0000e-005	1.8500e-003	0.0000	5.7159	5.7159	1.6000e-004	0.0000	5.7198
Total	**2.7900e-003**	**1.9200e-003**	**0.0197**	**6.0000e-005**	**6.7900e-003**	**5.0000e-005**	**6.8400e-003**	**1.8000e-003**	**4.0000e-005**	**1.8500e-003**	**0.0000**	**5.7159**	**5.7159**	**1.6000e-004**	**0.0000**	**5.7198**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.7206					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.2500e-003	0.0155	0.0200	3.0000e-005		9.0000e-004	9.0000e-004		9.0000e-004	9.0000e-004	0.0000	2.8086	2.8086	1.8000e-004	0.0000	2.8132
Total	**0.7228**	**0.0155**	**0.0200**	**3.0000e-005**		**9.0000e-004**	**9.0000e-004**		**9.0000e-004**	**9.0000e-004**	**0.0000**	**2.8086**	**2.8086**	**1.8000e-004**	**0.0000**	**2.8132**

3.7 Architectural Coating - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.7900e-003	1.9200e-003	0.0197	6.0000e-005	6.7900e-003	5.0000e-005	6.8400e-003	1.8000e-003	4.0000e-005	1.8500e-003	0.0000	5.7159	5.7159	1.6000e-004	0.0000	5.7198
Total	**2.7900e-003**	**1.9200e-003**	**0.0197**	**6.0000e-005**	**6.7900e-003**	**5.0000e-005**	**6.8400e-003**	**1.8000e-003**	**4.0000e-005**	**1.8500e-003**	**0.0000**	**5.7159**	**5.7159**	**1.6000e-004**	**0.0000**	**5.7198**

3.7 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	1.3756					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.0200e-003	0.0274	0.0380	6.0000e-005		1.4900e-003	1.4900e-003		1.4900e-003	1.4900e-003	0.0000	5.3618	5.3618	3.2000e-004	0.0000	5.3699
Total	**1.3796**	**0.0274**	**0.0380**	**6.0000e-005**		**1.4900e-003**	**1.4900e-003**		**1.4900e-003**	**1.4900e-003**	**0.0000**	**5.3618**	**5.3618**	**3.2000e-004**	**0.0000**	**5.3699**

3.7 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0400e-003	3.3400e-003	0.0348	1.2000e-004	0.0130	9.0000e-005	0.0131	3.4500e-003	8.0000e-005	3.5300e-003	0.0000	10.4954	10.4954	2.7000e-004	0.0000	10.5022
Total	**5.0400e-003**	**3.3400e-003**	**0.0348**	**1.2000e-004**	**0.0130**	**9.0000e-005**	**0.0131**	**3.4500e-003**	**8.0000e-005**	**3.5300e-003**	**0.0000**	**10.4954**	**10.4954**	**2.7000e-004**	**0.0000**	**10.5022**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.3756					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.0200e-003	0.0274	0.0380	6.0000e-005		1.4900e-003	1.4900e-003		1.4900e-003	1.4900e-003	0.0000	5.3618	5.3618	3.2000e-004	0.0000	5.3699
Total	**1.3796**	**0.0274**	**0.0380**	**6.0000e-005**		**1.4900e-003**	**1.4900e-003**		**1.4900e-003**	**1.4900e-003**	**0.0000**	**5.3618**	**5.3618**	**3.2000e-004**	**0.0000**	**5.3699**

3.7 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0400e-003	3.3400e-003	0.0348	1.2000e-004	0.0130	9.0000e-005	0.0131	3.4500e-003	8.0000e-005	3.5300e-003	0.0000	10.4954	10.4954	2.7000e-004	0.0000	10.5022
Total	**5.0400e-003**	**3.3400e-003**	**0.0348**	**1.2000e-004**	**0.0130**	**9.0000e-005**	**0.0131**	**3.4500e-003**	**8.0000e-005**	**3.5300e-003**	**0.0000**	**10.4954**	**10.4954**	**2.7000e-004**	**0.0000**	**10.5022**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Integrate Below Market Rate Housing

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.4312	1.6575	4.2415	0.0141	1.2777	0.0114	1.2891	0.3421	0.0106	0.3527	0.0000	1,301.5894	1,301.5894	0.0703	0.0000	1,303.3476
Unmitigated	0.4458	1.7310	4.5618	0.0155	1.4232	0.0125	1.4357	0.3811	0.0116	0.3927	0.0000	1,434.4990	1,434.4990	0.0761	0.0000	1,436.4006

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Retirement Community	2,144.00	2,144.00	2144.00	3,777,213	3,391,026
Total	2,144.00	2,144.00	2,144.00	3,777,213	3,391,026

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Retirement Community	4.84	7.30	7.50	100.00	0.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Retirement Community	0.606234	0.039465	0.179154	0.102641	0.014368	0.005395	0.016820	0.024508	0.001929	0.001857	0.005869	0.000761	0.000998

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Kilowatt Hours of Renewable Electricity Generated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	-379.1115	-379.1115	-0.0153	-0.0032	-380.4338
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	776.8277	776.8277	0.0313	6.4700e-003	779.5372
NaturalGas Mitigated	0.0324	0.2773	0.1180	1.7700e-003		0.0224	0.0224		0.0224	0.0224	0.0000	321.0827	321.0827	6.1500e-003	5.8900e-003	322.9907
NaturalGas Unmitigated	0.0324	0.2773	0.1180	1.7700e-003		0.0224	0.0224		0.0224	0.0224	0.0000	321.0827	321.0827	6.1500e-003	5.8900e-003	322.9907

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					
Retirement Community	6.01686e+006	0.0324	0.2773	0.1180	1.7700e-003		0.0224	0.0224		0.0224	0.0224	0.0000	321.0827	321.0827	6.1500e-003	5.8900e-003	322.9907
Total		**0.0324**	**0.2773**	**0.1180**	**1.7700e-003**		**0.0224**	**0.0224**		**0.0224**	**0.0224**	**0.0000**	**321.0827**	**321.0827**	**6.1500e-003**	**5.8900e-003**	**322.9907**

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					
Retirement Community	6.01686e+006	0.0324	0.2773	0.1180	1.7700e-003		0.0224	0.0224		0.0224	0.0224	0.0000	321.0827	321.0827	6.1500e-003	5.8900e-003	322.9907
Total		**0.0324**	**0.2773**	**0.1180**	**1.7700e-003**		**0.0224**	**0.0224**		**0.0224**	**0.0224**	**0.0000**	**321.0827**	**321.0827**	**6.1500e-003**	**5.8900e-003**	**322.9907**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Retirement Community	2.37701e+006	776.8277	0.0313	6.4700e-003	779.5372
Total		**776.8277**	**0.0313**	**6.4700e-003**	**779.5372**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Retirement Community	-1.16004e+006	-379.1115	-0.0153	-0.0032	-380.4338
Total		**-379.1115**	**-0.0153**	**-0.0032**	**-380.4338**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	3.0623	0.1390	4.0178	8.0000e-004		0.0296	0.0296		0.0296	0.0296	0.0000	114.4091	114.4091	8.3100e-003	1.9800e-003	115.2062
Unmitigated	3.0623	0.1390	4.0178	8.0000e-004		0.0296	0.0296		0.0296	0.0296	0.0000	114.4091	114.4091	8.3100e-003	1.9800e-003	115.2062

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	0.8385					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.0934					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0109	0.0932	0.0397	5.9000e-004		7.5300e-003	7.5300e-003		7.5300e-003	7.5300e-003	0.0000	107.9080	107.9080	2.0700e-003	1.9800e-003	108.5493
Landscaping	0.1196	0.0458	3.9782	2.1000e-004		0.0221	0.0221		0.0221	0.0221	0.0000	6.5010	6.5010	6.2400e-003	0.0000	6.6570
Total	**3.0623**	**0.1390**	**4.0178**	**8.0000e-004**		**0.0296**	**0.0296**		**0.0296**	**0.0296**	**0.0000**	**114.4091**	**114.4091**	**8.3100e-003**	**1.9800e-003**	**115.2063**

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	0.8385					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.0934					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0109	0.0932	0.0397	5.9000e-004		7.5300e-003	7.5300e-003		7.5300e-003	7.5300e-003	0.0000	107.9080	107.9080	2.0700e-003	1.9800e-003	108.5493
Landscaping	0.1196	0.0458	3.9782	2.1000e-004		0.0221	0.0221		0.0221	0.0221	0.0000	6.5010	6.5010	6.2400e-003	0.0000	6.6570
Total	**3.0623**	**0.1390**	**4.0178**	**8.0000e-004**		**0.0296**	**0.0296**		**0.0296**	**0.0296**	**0.0000**	**114.4091**	**114.4091**	**8.3100e-003**	**1.9800e-003**	**115.2063**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	191.7009	0.9177	0.0230	221.5033
Unmitigated	239.6261	1.1472	0.0288	276.8792

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Retirement Community	34.9226 / 22.0164	239.6261	1.1472	0.0288	276.8792
Total		**239.6261**	**1.1472**	**0.0288**	**276.8792**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Retirement Community	27.938 / 17.6131	191.7009	0.9177	0.0230	221.5033
Total		**191.7009**	**0.9177**	**0.0230**	**221.5033**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	65.3631	3.8629	0.0000	161.9343
Unmitigated	65.3631	3.8629	0.0000	161.9343

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Retirement Community	322	65.3631	3.8629	0.0000	161.9343
Total		**65.3631**	**3.8629**	**0.0000**	**161.9343**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Retirement Community	322	65.3631	3.8629	0.0000	161.9343
Total		**65.3631**	**3.8629**	**0.0000**	**161.9343**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

The Junipers

San Diego County, Mitigation Report

Construction Mitigation Summary

Phase	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Demolition	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

OFFROAD Equipment Mitigation

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	No Change	0	1	No Change	0.00
Concrete/Industrial Saws	Diesel	No Change	0	1	No Change	0.00
Cranes	Diesel	No Change	0	1	No Change	0.00
Excavators	Diesel	No Change	0	5	No Change	0.00
Forklifts	Diesel	No Change	0	3	No Change	0.00
Generator Sets	Diesel	No Change	0	1	No Change	0.00
Graders	Diesel	No Change	0	1	No Change	0.00
Pavers	Diesel	No Change	0	2	No Change	0.00
Paving Equipment	Diesel	No Change	0	2	No Change	0.00
Rollers	Diesel	No Change	0	2	No Change	0.00
Rubber Tired Dozers	Diesel	No Change	0	6	No Change	0.00
Scrapers	Diesel	No Change	0	2	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	No Change	0	9	No Change	0.00
Welders	Diesel	No Change	0	1	No Change	0.00

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	Unmitigated tons/yr						Unmitigated mt/yr					
Air Compressors	6.27000E-003	4.28600E-002	5.79800E-002	1.00000E-004	2.39000E-003	2.39000E-003	0.00000E+000	8.17041E+000	8.17041E+000	5.00000E-004	0.00000E+000	8.18300E+000
Concrete/Industrial Saws	4.85000E-003	3.76800E-002	3.88700E-002	7.00000E-005	2.41000E-003	2.41000E-003	0.00000E+000	5.64540E+000	5.64540E+000	4.00000E-004	0.00000E+000	5.65534E+000
Cranes	1.09520E-001	1.27396E+000	5.30380E-001	1.54000E-003	5.22800E-002	4.81000E-002	0.00000E+000	1.35284E+002	1.35284E+002	4.37500E-002	0.00000E+000	1.36377E+002
Excavators	2.41400E-002	2.41300E-001	3.15200E-001	5.00000E-004	1.16700E-002	1.07400E-002	0.00000E+000	4.40966E+001	4.40966E+001	1.41600E-002	0.00000E+000	4.44506E+001
Forklifts	1.17130E-001	1.06991E+000	1.06732E+000	1.40000E-003	7.55400E-002	6.94900E-002	0.00000E+000	1.22877E+002	1.22877E+002	3.97400E-002	0.00000E+000	1.23870E+002
Generator Sets	1.09540E-001	9.66540E-001	1.12459E+000	2.01000E-003	5.13200E-002	5.13200E-002	0.00000E+000	1.72388E+002	1.72388E+002	8.83000E-003	0.00000E+000	1.72609E+002
Graders	1.54600E-002	2.05580E-001	5.89700E-002	2.20000E-004	6.57000E-003	6.05000E-003	0.00000E+000	1.89496E+001	1.89496E+001	6.13000E-003	0.00000E+000	1.91028E+001
Pavers	8.90000E-003	9.02500E-002	1.24010E-001	2.00000E-004	4.29000E-003	3.94000E-003	0.00000E+000	1.77591E+001	1.77591E+001	5.74000E-003	0.00000E+000	1.79027E+001
Paving Equipment	7.66000E-003	7.47200E-002	1.09480E-001	1.80000E-004	3.64000E-003	3.35000E-003	0.00000E+000	1.53878E+001	1.53878E+001	4.98000E-003	0.00000E+000	1.55122E+001
Rollers	7.15000E-003	7.42100E-002	7.99900E-002	1.10000E-004	4.28000E-003	3.93000E-003	0.00000E+000	9.91232E+000	9.91232E+000	3.21000E-003	0.00000E+000	9.99247E+000
Rubber Tired Dozers	1.65980E-001	1.75125E+000	6.32110E-001	1.29000E-003	8.56200E-002	7.87700E-002	0.00000E+000	1.14219E+002	1.14219E+002	3.66500E-002	0.00000E+000	1.15136E+002
Scrapers	6.45400E-002	7.63890E-001	4.84810E-001	9.80000E-004	2.97900E-002	2.74100E-002	0.00000E+000	8.65055E+001	8.65055E+001	2.79800E-002	0.00000E+000	8.72049E+001
Tractors/Loaders/Backhoes	1.90530E-001	1.92452E+000	2.25338E+000	3.09000E-003	1.15230E-001	1.06010E-001	0.00000E+000	2.72079E+002	2.72079E+002	8.79100E-002	0.00000E+000	2.74277E+002
Welders	9.28200E-002	4.60540E-001	5.25710E-001	7.80000E-004	2.25900E-002	2.25900E-002	0.00000E+000	5.74073E+001	5.74073E+001	7.54000E-003	0.00000E+000	5.75957E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	Mitigated tons/yr						Mitigated mt/yr					
Air Compressors	6.27000E-003	4.28600E-002	5.79800E-002	1.00000E-004	2.39000E-003	2.39000E-003	0.00000E+000	8.17040E+000	8.17040E+000	5.00000E-004	0.00000E+000	8.18299E+000
Concrete/Industrial Saws	4.85000E-003	3.76800E-002	3.88700E-002	7.00000E-005	2.41000E-003	2.41000E-003	0.00000E+000	5.64539E+000	5.64539E+000	4.00000E-004	0.00000E+000	5.65533E+000
Cranes	1.09520E-001	1.27396E+000	5.30380E-001	1.54000E-003	5.22800E-002	4.81000E-002	0.00000E+000	1.35283E+002	1.35283E+002	4.37500E-002	0.00000E+000	1.36377E+002
Excavators	2.41400E-002	2.41300E-001	3.15200E-001	5.00000E-004	1.16700E-002	1.07400E-002	0.00000E+000	4.40965E+001	4.40965E+001	1.41600E-002	0.00000E+000	4.44505E+001
Forklifts	1.17130E-001	1.06991E+000	1.06732E+000	1.40000E-003	7.55400E-002	6.94900E-002	0.00000E+000	1.22876E+002	1.22876E+002	3.97400E-002	0.00000E+000	1.23870E+002
Generator Sets	1.09540E-001	9.66540E-001	1.12459E+000	2.01000E-003	5.13200E-002	5.13200E-002	0.00000E+000	1.72388E+002	1.72388E+002	8.83000E-003	0.00000E+000	1.72609E+002
Graders	1.54600E-002	2.05580E-001	5.89700E-002	2.20000E-004	6.57000E-003	6.05000E-003	0.00000E+000	1.89496E+001	1.89496E+001	6.13000E-003	0.00000E+000	1.91028E+001
Pavers	8.90000E-003	9.02500E-002	1.24010E-001	2.00000E-004	4.29000E-003	3.94000E-003	0.00000E+000	1.77591E+001	1.77591E+001	5.74000E-003	0.00000E+000	1.79027E+001
Paving Equipment	7.66000E-003	7.47200E-002	1.09480E-001	1.80000E-004	3.64000E-003	3.35000E-003	0.00000E+000	1.53878E+001	1.53878E+001	4.98000E-003	0.00000E+000	1.55122E+001
Rollers	7.15000E-003	7.42100E-002	7.99900E-002	1.10000E-004	4.28000E-003	3.93000E-003	0.00000E+000	9.91231E+000	9.91231E+000	3.21000E-003	0.00000E+000	9.99246E+000
Rubber Tired Dozers	1.65980E-001	1.75124E+000	6.32110E-001	1.29000E-003	8.56200E-002	7.87700E-002	0.00000E+000	1.14219E+002	1.14219E+002	3.66500E-002	0.00000E+000	1.15136E+002
Scrapers	6.45400E-002	7.63880E-001	4.84810E-001	9.80000E-004	2.97900E-002	2.74100E-002	0.00000E+000	8.65054E+001	8.65054E+001	2.79800E-002	0.00000E+000	8.72048E+001
Tractors/Loaders/Backhoes	1.90530E-001	1.92451E+000	2.25338E+000	3.09000E-003	1.15230E-001	1.06010E-001	0.00000E+000	2.72079E+002	2.72079E+002	8.79100E-002	0.00000E+000	2.74277E+002
Welders	9.28200E-002	4.60540E-001	5.25710E-001	7.80000E-004	2.25900E-002	2.25900E-002	0.00000E+000	5.74072E+001	5.74072E+001	7.54000E-003	0.00000E+000	5.75956E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Air Compressors	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.22393E-006	1.22393E-006	0.00000E+000	0.00000E+000	1.22205E-006
Concrete/Industrial Saws	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.77135E-006	1.77135E-006	0.00000E+000	0.00000E+000	1.76824E-006
Cranes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.25662E-006	1.25662E-006	0.00000E+000	0.00000E+000	1.17321E-006
Excavators	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.13388E-006	1.13388E-006	0.00000E+000	0.00000E+000	1.12485E-006
Forklifts	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.22074E-006	1.22074E-006	0.00000E+000	0.00000E+000	1.21095E-006
Generator Sets	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.16017E-006	1.16017E-006	0.00000E+000	0.00000E+000	1.15869E-006
Graders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.05543E-006	1.05543E-006	0.00000E+000	0.00000E+000	1.57045E-006
Pavers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.12618E-006	1.12618E-006	0.00000E+000	0.00000E+000	1.11715E-006
Paving Equipment	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.29973E-006	1.29973E-006	0.00000E+000	0.00000E+000	6.44653E-007
Rollers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.00885E-006	1.00885E-006	0.00000E+000	0.00000E+000	1.00075E-006
Rubber Tired Dozers	0.00000E+000	5.71021E-006	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.13816E-006	1.13816E-006	0.00000E+000	0.00000E+000	1.12910E-006
Scrapers	0.00000E+000	1.30909E-005	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.15600E-006	1.15600E-006	0.00000E+000	0.00000E+000	1.14672E-006
Tractors/Loaders/Backhoes	0.00000E+000	5.19610E-006	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.17613E-006	1.17613E-006	0.00000E+000	0.00000E+000	1.16670E-006
Welders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.21936E-006	1.21936E-006	0.00000E+000	0.00000E+000	1.21537E-006

Fugitive Dust Mitigation

Yes/No	Mitigation Measure	Mitigation Input		Mitigation Input		Mitigation Input	
No	Soil Stabilizer for unpaved Roads	PM10 Reduction	0.00	PM2.5 Reduction	0.00		
No	Replace Ground Cover of Area Disturbed	PM10 Reduction	0.00	PM2.5 Reduction	0.00		
Yes	Water Exposed Area	PM10 Reduction	55.00	PM2.5 Reduction	55.00	Frequency (per day)	2.00

Yes	Unpaved Road Mitigation	Moisture Content %	12.00	Vehicle Speed (mph)	15.00		
No	Clean Paved Road	% PM Reduction	0.00				

		Unmitigated		Mitigated		Percent Reduction	
Phase	Source	PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	Roads	0.02	0.01	0.02	0.01	0.00	0.00
Building Construction	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Roads	1.06	0.28	1.06	0.28	0.00	0.00
Demolition	Fugitive Dust	0.12	0.02	0.05	0.01	0.55	0.55
Demolition	Roads	0.01	0.00	0.01	0.00	0.00	0.00
Grading	Fugitive Dust	0.28	0.12	0.13	0.05	0.55	0.55
Grading	Roads	0.01	0.00	0.01	0.00	0.00	0.00
Paving	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	Fugitive Dust	0.59	0.32	0.26	0.15	0.55	0.55
Site Preparation	Roads	0.02	0.01	0.02	0.01	0.00	0.00

Operational Percent Reduction Summary

Category	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	148.80	148.80	148.80	148.84	148.80
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	3.27	4.25	7.02	9.29	8.43	8.46	0.00	9.27	9.27	7.53	0.00	9.26
Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	20.00	20.00	20.00	20.00	19.99	20.00
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Operational Mobile Mitigation

Project Setting: Suburban Center

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value
No	Land Use	Increase Density	0.00	0.00	0.00	
No	Land Use	Increase Diversity	-0.01	0.13		
No	Land Use	Improve Walkability Design	0.00	0.00		
No	Land Use	Improve Destination Accessibility	0.00	0.00		
Yes	Land Use	Increase Transit Accessibility	0.08	0.50		
Yes	Land Use	Integrate Below Market Rate Housing	0.01	15.00		
	Land Use	Land Use SubTotal	0.08			

Yes	Neighborhood Enhancements	Improve Pedestrian Network	2.00	Project Site and Connecting Off-Site		
No	Neighborhood Enhancements	Provide Traffic Calming Measures			25.00	
No	Neighborhood Enhancements	Implement NEV Network	0.00			
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.02			
No	Parking Policy Pricing	Limit Parking Supply	0.00	0.00		
No	Parking Policy Pricing	Unbundle Parking Costs	0.00	0.00		
No	Parking Policy Pricing	On-street Market Pricing	0.00	0.00		
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00			
No	Transit Improvements	Provide BRT System	0.00	0.00		
No	Transit Improvements	Expand Transit Network	0.00	0.00		
No	Transit Improvements	Increase Transit Frequency	0.00		0.00	
	Transit Improvements	Transit Improvements Subtotal	0.00			
		Land Use and Site Enhancement Subtotal	0.10			
No	Commute	Implement Trip Reduction Program				
No	Commute	Transit Subsidy				
No	Commute	Implement Employee Parking "Cash Out"	4.50			
No	Commute	Workplace Parking Charge		0.00		
No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00			
No	Commute	Market Commute Trip Reduction Option	0.00			
No	Commute	Employee Vanpool/Shuttle	0.00		2.00	
No	Commute	Provide Ride Sharing Program	10.00			
	Commute	Commute Subtotal	0.00			

No	School Trip	Implement School Bus Program	0.00			
		Total VMT Reduction	0.10			

Area Mitigation

Measure Implemented	Mitigation Measure	Input Value
No	Only Natural Gas Hearth	
No	No Hearth	
No	Use Low VOC Cleaning Supplies	
No	Use Low VOC Paint (Residential Interior)	250.00
No	Use Low VOC Paint (Residential Exterior)	250.00
No	Use Low VOC Paint (Non-residential Interior)	250.00
No	Use Low VOC Paint (Non-residential Exterior)	250.00
No	Use Low VOC Paint (Parking)	250.00
No	% Electric Lawnmower	0.00
No	% Electric Leafblower	0.00
No	% Electric Chainsaw	0.00

Energy Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Exceed Title 24	0.00	
No	Install High Efficiency Lighting	0.00	
Yes	On-site Renewable	3,537,050.60	0.00

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00
DishWasher		15.00
Fan		50.00
Refrigerator		15.00

Water Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
Yes	Apply Water Conservation on Strategy	20.00	20.00
No	Use Reclaimed Water	0.00	0.00
No	Use Grey Water	0.00	
No	Install low-flow bathroom faucet	32.00	
No	Install low-flow Kitchen faucet	18.00	
No	Install low-flow Toilet	20.00	
No	Install low-flow Shower	20.00	
No	Turf Reduction	0.00	
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape	0.00	0.00

Solid Waste Mitigation

Mitigation Measures	Input Value

Institute Recycling and Composting Services Percent Reduction in Waste Disposed	

Junipers Project - Zoning Analysis (831 DU)

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	831.00	Dwelling Unit	112.30	1,495,800.00	2377

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2024
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Junipers Project - Zoning Analysis (831 DU) - San Diego County, Annual

Project Characteristics -

Land Use - 112.3-acre project site

Construction Phase - Demo, SitePrep, Grading, and Paving same as project. Building and coating scaled based on DUs.

Demolition -

Grading -

Vehicle Trips - Trip rates and distance provided by Linscott Law & Greenspan Engineers (LLG)

Woodstoves - Natural gas fireplaces assumed

Area Mitigation -

Energy Mitigation - 2019 Title 24 requirement to provide 2,381.64 kW DC (2.866 kW per DU) onsite PV system.
Berkeley Lab, Utility-Scale Solar 2018 Edition states CA average PV Capacity Factor is 28.9%
2,381.64 kW * 24 hr/day * 365.24 days/yr * 28.9% = 6,033,435 kWh/yr

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	220.00	99.00
tblConstructionPhase	NumDays	3,100.00	945.00
tblConstructionPhase	NumDays	200.00	21.00
tblConstructionPhase	NumDays	310.00	65.00
tblConstructionPhase	NumDays	220.00	43.00
tblConstructionPhase	NumDays	120.00	65.00
tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFireplaces	NumberGas	457.05	831.00
tblFireplaces	NumberNoFireplace	83.10	0.00
tblFireplaces	NumberWood	290.85	0.00
tblLandUse	LotAcreage	269.81	112.30
tblVehicleTrips	DV_TP	11.00	0.00
tblVehicleTrips	HO_TTP	39.60	0.00
tblVehicleTrips	HS_TTP	18.80	0.00
tblVehicleTrips	HW_TL	10.80	7.92
tblVehicleTrips	HW_TTP	41.60	100.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	86.00	100.00
tblVehicleTrips	ST_TR	9.91	10.00
tblVehicleTrips	SU_TR	8.62	10.00
tblVehicleTrips	WD_TR	9.52	10.00
tblWoodstoves	NumberCatalytic	41.55	0.00
tblWoodstoves	NumberNoncatalytic	41.55	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019											0.0000	78.1243	78.1243	0.0222	0.0000	78.6801
2020											0.0000	782.5189	782.5189	0.1431	0.0000	786.0969
2021											0.0000	879.2766	879.2766	0.1033	0.0000	881.8591
2022											0.0000	863.1759	863.1759	0.1011	0.0000	865.7025
2023											0.0000	845.7169	845.7169	0.0981	0.0000	848.1689
2024											0.0000	108.3012	108.3012	0.0189	0.0000	108.7730
Maximum											**0.0000**	**879.2766**	**879.2766**	**0.1431**	**0.0000**	**881.8591**

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					
2019											0.0000	78.1242	78.1242	0.0222	0.0000	78.6800
2020											0.0000	782.5184	782.5184	0.1431	0.0000	786.0964
2021											0.0000	879.2762	879.2762	0.1033	0.0000	881.8587
2022											0.0000	863.1755	863.1755	0.1011	0.0000	865.7021
2023											0.0000	845.7165	845.7165	0.0981	0.0000	848.1686
2024											0.0000	108.3011	108.3011	0.0189	0.0000	108.7729
Maximum											**0.0000**	**879.2762**	**879.2762**	**0.1431**	**0.0000**	**881.8587**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area											0.0000	664.6160	664.6160	0.0222	0.0120	668.7474
Energy											0.0000	3,235.7642	3,235.7642	0.1084	0.0373	3,249.5959
Mobile											0.0000	8,766.3772	8,766.3772	0.4332	0.0000	8,777.2064
Waste											197.8289	0.0000	197.8289	11.6914	0.0000	490.1127
Water											17.1771	354.3328	371.5099	1.7785	0.0446	429.2660
Total											**215.0060**	**13,021.0902**	**13,236.0962**	**14.0336**	**0.0939**	**13,614.9283**

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	664.6160	664.6160	0.0222	0.0120	668.7474
Energy											0.0000	1,263.9847	1,263.9847	0.0290	0.0209	1,270.9390
Mobile											0.0000	8,766.3772	8,766.3772	0.4332	0.0000	8,777.2064
Waste											197.8289	0.0000	197.8289	11.6914	0.0000	490.1127
Water											17.1771	354.3328	371.5099	1.7785	0.0446	429.2660
Total											**215.0060**	**11,049.3107**	**11,264.3167**	**13.9543**	**0.0775**	**11,636.2715**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**15.14**	**14.90**	**0.57**	**17.48**	**14.53**

3.0 Construction Detail

Construction Phase

Junipers Project - Zoning Analysis (831 DU) - San Diego County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	11/1/2019	11/29/2019	5	21	
2	Site Preparation	Site Preparation	12/1/2019	2/28/2020	5	65	
3	Grading	Grading	3/1/2020	5/29/2020	5	65	
4	Building Construction	Building Construction	6/1/2020	1/12/2024	5	945	
5	Paving	Paving	1/13/2024	3/13/2024	5	43	
6	Architectural Coating	Architectural Coating	3/14/2024	7/30/2024	5	99	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 162.5

Acres of Paving: 0

Residential Indoor: 3,028,995; Residential Outdoor: 1,009,665; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Junipers Project - Zoning Analysis (831 DU) - San Diego County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	39.00	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
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	299.00	89.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	60.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 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	36.3577	36.3577	0.0101	0.0000	36.6105
Total											**0.0000**	**36.3577**	**36.3577**	**0.0101**	**0.0000**	**36.6105**

3.2 Demolition - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	1.5202	1.5202	1.4000e-004	0.0000	1.5237
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.1789	1.1789	4.0000e-005	0.0000	1.1798
Total											**0.0000**	**2.6991**	**2.6991**	**1.8000e-004**	**0.0000**	**2.7035**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	36.3576	36.3576	0.0101	0.0000	36.6105
Total											**0.0000**	**36.3576**	**36.3576**	**0.0101**	**0.0000**	**36.6105**

3.2 Demolition - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	1.5202	1.5202	1.4000e-004	0.0000	1.5237
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.1789	1.1789	4.0000e-005	0.0000	1.1798
Total											**0.0000**	**2.6991**	**2.6991**	**1.8000e-004**	**0.0000**	**2.7035**

3.3 Site Preparation - 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	37.5856	37.5856	0.0119	0.0000	37.8829
Total											**0.0000**	**37.5856**	**37.5856**	**0.0119**	**0.0000**	**37.8829**

3.3 Site Preparation - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.4820	1.4820	5.0000e-005	0.0000	1.4832
Total											**0.0000**	**1.4820**	**1.4820**	**5.0000e-005**	**0.0000**	**1.4832**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	37.5855	37.5855	0.0119	0.0000	37.8828
Total											**0.0000**	**37.5855**	**37.5855**	**0.0119**	**0.0000**	**37.8828**

3.3 Site Preparation - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.4820	1.4820	5.0000e-005	0.0000	1.4832
Total											**0.0000**	**1.4820**	**1.4820**	**5.0000e-005**	**0.0000**	**1.4832**

3.3 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	71.8760	71.8760	0.0233	0.0000	72.4571
Total											**0.0000**	**71.8760**	**71.8760**	**0.0233**	**0.0000**	**72.4571**

3.3 Site Preparation - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	2.8053	2.8053	8.0000e-005	0.0000	2.8074
Total											**0.0000**	**2.8053**	**2.8053**	**8.0000e-005**	**0.0000**	**2.8074**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	71.8759	71.8759	0.0233	0.0000	72.4570
Total											**0.0000**	**71.8759**	**71.8759**	**0.0233**	**0.0000**	**72.4570**

3.3 Site Preparation - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	2.8053	2.8053	8.0000e-005	0.0000	2.8074
Total											**0.0000**	**2.8053**	**2.8053**	**8.0000e-005**	**0.0000**	**2.8074**

3.4 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	177.0740	177.0740	0.0573	0.0000	178.5057
Total											**0.0000**	**177.0740**	**177.0740**	**0.0573**	**0.0000**	**178.5057**

3.4 Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	4.7117	4.7117	1.4000e-004	0.0000	4.7152
Total											**0.0000**	**4.7117**	**4.7117**	**1.4000e-004**	**0.0000**	**4.7152**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	177.0737	177.0737	0.0573	0.0000	178.5055
Total											**0.0000**	**177.0737**	**177.0737**	**0.0573**	**0.0000**	**178.5055**

3.4 Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	4.7117	4.7117	1.4000e-004	0.0000	4.7152
Total											**0.0000**	**4.7117**	**4.7117**	**1.4000e-004**	**0.0000**	**4.7152**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	178.3397	178.3397	0.0435	0.0000	179.4274
Total											**0.0000**	**178.3397**	**178.3397**	**0.0435**	**0.0000**	**179.4274**

3.5 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	180.8242	180.8242	0.0139	0.0000	181.1708
Worker											0.0000	166.8881	166.8881	5.0100e-003	0.0000	167.0134
Total											**0.0000**	**347.7123**	**347.7123**	**0.0189**	**0.0000**	**348.1841**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	178.3395	178.3395	0.0435	0.0000	179.4272
Total											**0.0000**	**178.3395**	**178.3395**	**0.0435**	**0.0000**	**179.4272**

3.5 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	180.8242	180.8242	0.0139	0.0000	181.1708
Worker											0.0000	166.8881	166.8881	5.0100e-003	0.0000	167.0134
Total											**0.0000**	**347.7123**	**347.7123**	**0.0189**	**0.0000**	**348.1841**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	302.2867	302.2867	0.0729	0.0000	304.1099
Total											**0.0000**	**302.2867**	**302.2867**	**0.0729**	**0.0000**	**304.1099**

3.5 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	303.6495	303.6495	0.0225	0.0000	304.2129
Worker											0.0000	273.3404	273.3404	7.8300e-003	0.0000	273.5363
Total											**0.0000**	**576.9900**	**576.9900**	**0.0304**	**0.0000**	**577.7492**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	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**

3.5 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	303.6495	303.6495	0.0225	0.0000	304.2129
Worker											0.0000	273.3404	273.3404	7.8300e-003	0.0000	273.5363
Total											**0.0000**	**576.9900**	**576.9900**	**0.0304**	**0.0000**	**577.7492**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	301.2428	301.2428	0.0722	0.0000	303.0471
Total											**0.0000**	**301.2428**	**301.2428**	**0.0722**	**0.0000**	**303.0471**

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	299.6216	299.6216	0.0218	0.0000	300.1653
Worker											0.0000	262.3115	262.3115	7.1500e-003	0.0000	262.4902
Total											**0.0000**	**561.9331**	**561.9331**	**0.0289**	**0.0000**	**562.6555**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	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**

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	299.6216	299.6216	0.0218	0.0000	300.1653
Worker											0.0000	262.3115	262.3115	7.1500e-003	0.0000	262.4902
Total											**0.0000**	**561.9331**	**561.9331**	**0.0289**	**0.0000**	**562.6555**

3.5 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**

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	292.0790	292.0790	0.0199	0.0000	292.5755
Worker											0.0000	252.2917	252.2917	6.5400e-003	0.0000	252.4552
Total											**0.0000**	**544.3707**	**544.3707**	**0.0264**	**0.0000**	**545.0306**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	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**

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	292.0790	292.0790	0.0199	0.0000	292.5755
Worker											0.0000	252.2917	252.2917	6.5400e-003	0.0000	252.4552
Total											**0.0000**	**544.3707**	**544.3707**	**0.0264**	**0.0000**	**545.0306**

3.5 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	11.5925	11.5925	2.7400e-003	0.0000	11.6610
Total											**0.0000**	**11.5925**	**11.5925**	**2.7400e-003**	**0.0000**	**11.6610**

3.5 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	11.1624	11.1624	7.5000e-004	0.0000	11.1813
Worker											0.0000	9.3215	9.3215	2.3000e-004	0.0000	9.3273
Total											**0.0000**	**20.4839**	**20.4839**	**9.8000e-004**	**0.0000**	**20.5086**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	11.5924	11.5924	2.7400e-003	0.0000	11.6610
Total											**0.0000**	**11.5924**	**11.5924**	**2.7400e-003**	**0.0000**	**11.6610**

3.5 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	11.1624	11.1624	7.5000e-004	0.0000	11.1813
Worker											0.0000	9.3215	9.3215	2.3000e-004	0.0000	9.3273
Total											**0.0000**	**20.4839**	**20.4839**	**9.8000e-004**	**0.0000**	**20.5086**

3.6 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	43.0570	43.0570	0.0139	0.0000	43.4052
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											**0.0000**	**43.0570**	**43.0570**	**0.0139**	**0.0000**	**43.4052**

3.6 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	2.0108	2.0108	5.0000e-005	0.0000	2.0121
Total											**0.0000**	**2.0108**	**2.0108**	**5.0000e-005**	**0.0000**	**2.0121**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	43.0570	43.0570	0.0139	0.0000	43.4051
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											**0.0000**	**43.0570**	**43.0570**	**0.0139**	**0.0000**	**43.4051**

3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	2.0108	2.0108	5.0000e-005	0.0000	2.0121
Total											**0.0000**	**2.0108**	**2.0108**	**5.0000e-005**	**0.0000**	**2.0121**

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	12.6386	12.6386	7.1000e-004	0.0000	12.6564
Total											**0.0000**	**12.6386**	**12.6386**	**7.1000e-004**	**0.0000**	**12.6564**

3.7 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	18.5183	18.5183	4.6000e-004	0.0000	18.5298
Total											**0.0000**	**18.5183**	**18.5183**	**4.6000e-004**	**0.0000**	**18.5298**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	12.6386	12.6386	7.1000e-004	0.0000	12.6564
Total											**0.0000**	**12.6386**	**12.6386**	**7.1000e-004**	**0.0000**	**12.6564**

3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	18.5183	18.5183	4.6000e-004	0.0000	18.5298
Total											**0.0000**	**18.5183**	**18.5183**	**4.6000e-004**	**0.0000**	**18.5298**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											0.0000	8,766.3772	8,766.3772	0.4332	0.0000	8,777.2064
Unmitigated											0.0000	8,766.3772	8,766.3772	0.4332	0.0000	8,777.2064

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	8,310.00	8,310.00	8310.00	23,956,733	23,956,733
Total	8,310.00	8,310.00	8,310.00	23,956,733	23,956,733

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	7.92	7.30	7.50	100.00	0.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.606234	0.039465	0.179154	0.102641	0.014368	0.005395	0.016820	0.024508	0.001929	0.001857	0.005869	0.000761	0.000998

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Kilowatt Hours of Renewable Electricity Generated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated											0.0000	226.8841	226.8841	9.1300e-003	1.8900e-003	227.6755
Electricity Unmitigated											0.0000	2,198.6636	2,198.6636	0.0885	0.0183	2,206.3323
NaturalGas Mitigated											0.0000	1,037.1006	1,037.1006	0.0199	0.0190	1,043.2635
NaturalGas Unmitigated											0.0000	1,037.1006	1,037.1006	0.0199	0.0190	1,043.2635

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	1.94345e+007											0.0000	1,037.1006	1,037.1006	0.0199	0.0190	1,043.2635
Total												**0.0000**	**1,037.1006**	**1,037.1006**	**0.0199**	**0.0190**	**1,043.2635**

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	1.94345e+007											0.0000	1,037.1006	1,037.1006	0.0199	0.0190	1,043.2635
Total												**0.0000**	**1,037.1006**	**1,037.1006**	**0.0199**	**0.0190**	**1,043.2635**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	6.72768e+006	2,198.6636	0.0885	0.0183	2,206.3323
Total		**2,198.6636**	**0.0885**	**0.0183**	**2,206.3323**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	694241	226.8841	9.1300e-003	1.8900e-003	227.6755
Total		**226.8841**	**9.1300e-003**	**1.8900e-003**	**227.6755**

6.0 Area Detail

6.1 Mitigation Measures Area

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											0.0000	664.6160	664.6160	0.0222	0.0120	668.7474
Unmitigated											0.0000	664.6160	664.6160	0.0222	0.0120	668.7474

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											0.0000	654.5370	654.5370	0.0126	0.0120	658.4266
Landscaping											0.0000	10.0790	10.0790	9.6700e-003	0.0000	10.3208
Total											**0.0000**	**664.6160**	**664.6160**	**0.0222**	**0.0120**	**668.7474**

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											0.0000	654.5370	654.5370	0.0126	0.0120	658.4266
Landscaping											0.0000	10.0790	10.0790	9.6700e-003	0.0000	10.3208
Total											**0.0000**	**664.6160**	**664.6160**	**0.0222**	**0.0120**	**668.7474**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	371.5099	1.7785	0.0446	429.2660
Unmitigated	371.5099	1.7785	0.0446	429.2660

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	54.143 / 34.1336	371.5099	1.7785	0.0446	429.2660
Total		**371.5099**	**1.7785**	**0.0446**	**429.2660**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	54.143 / 34.1336	371.5099	1.7785	0.0446	429.2660
Total		**371.5099**	**1.7785**	**0.0446**	**429.2660**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	197.8289	11.6914	0.0000	490.1127
Unmitigated	197.8289	11.6914	0.0000	490.1127

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	974.57	197.8289	11.6914	0.0000	490.1127
Total		**197.8289**	**11.6914**	**0.0000**	**490.1127**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	974.57	197.8289	11.6914	0.0000	490.1127
Total		**197.8289**	**11.6914**	**0.0000**	**490.1127**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Junipers Project - Golf Course Land Use Analysis

San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Golf Course	110.41	Acre	110.41	4,809,459.60	0
Racquet Club	80.46	1000sqft	1.85	80,460.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2024
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Junipers Project - Golf Course Land Use Analysis - San Diego County, Annual

Project Characteristics -

Land Use -

Construction Phase - Scaled from Palo Alto Golf Course Reconfiguration Project DEIR (State Clearinghouse #2013012053)

Off-road Equipment - Palo Alto Golf Course Reconfiguration Project DEIR (State Clearinghouse #2013012053)

Off-road Equipment - Palo Alto Golf Course Reconfiguration Project DEIR (State Clearinghouse #2013012053)

Off-road Equipment - Palo Alto Golf Course Reconfiguration Project DEIR (State Clearinghouse #2013012053)

Off-road Equipment -

Off-road Equipment - Palo Alto Golf Course Reconfiguration Project DEIR (State Clearinghouse #2013012053)

Trips and VMT - Palo Alto Golf Course Reconfiguration Project DEIR (State Clearinghouse #2013012053)

Demolition -

Grading - Palo Alto Golf Course Reconfiguration Project DEIR (State Clearinghouse #2013012053)

Vehicle Trips - Trip rates and lengths provided by Linscott Law & Greenspan Engineers (LLG)

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	3,100.00	53.00
tblConstructionPhase	NumDays	200.00	10.00
tblConstructionPhase	NumDays	310.00	62.00
tblConstructionPhase	NumDays	310.00	136.00
tblConstructionPhase	NumDays	120.00	90.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00

Junipers Project - Golf Course Land Use Analysis - San Diego County, Annual

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	7.00	4.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblTripsAndVMT	HaulingTripNumber	0.00	2,636.00
tblTripsAndVMT	HaulingTripNumber	112.00	1,129.00
tblTripsAndVMT	VendorTripNumber	801.00	5.00
tblTripsAndVMT	WorkerTripNumber	8.00	15.00
tblTripsAndVMT	WorkerTripNumber	15.00	20.00
tblTripsAndVMT	WorkerTripNumber	2,054.00	20.00
tblVehicleTrips	CC_TL	7.30	6.30
tblVehicleTrips	CC_TL	7.30	6.30
tblVehicleTrips	CC_TTP	48.00	100.00
tblVehicleTrips	CC_TTP	69.50	100.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	CW_TTP	11.50	0.00
tblVehicleTrips	DV_TP	39.00	0.00
tblVehicleTrips	DV_TP	39.00	0.00
tblVehicleTrips	PB_TP	9.00	0.00
tblVehicleTrips	PB_TP	9.00	0.00
tblVehicleTrips	PR_TP	52.00	100.00
tblVehicleTrips	PR_TP	52.00	100.00
tblVehicleTrips	ST_TR	5.82	8.00
tblVehicleTrips	ST_TR	21.35	0.37

tblVehicleTrips	SU_TR	5.88	8.00
tblVehicleTrips	SU_TR	17.40	0.37
tblVehicleTrips	WD_TR	5.04	8.00
tblVehicleTrips	WD_TR	14.03	0.37

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					
2019											0.0000	125.4513	125.4513	0.0278	0.0000	126.1458
2020											0.0000	512.6150	512.6150	0.1374	0.0000	516.0507
Maximum											**0.0000**	**512.6150**	**512.6150**	**0.1374**	**0.0000**	**516.0507**

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					
2019											0.0000	125.4512	125.4512	0.0278	0.0000	126.1457
2020											0.0000	512.6146	512.6146	0.1374	0.0000	516.0502
Maximum											**0.0000**	**512.6146**	**512.6146**	**0.1374**	**0.0000**	**516.0502**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area											0.0000	3.4100e-003	3.4100e-003	1.0000e-005	0.0000	3.6300e-003
Energy											0.0000	268.1463	268.1463	9.7500e-003	2.7300e-003	269.2035
Mobile											0.0000	777.8965	777.8965	0.0396	0.0000	778.8865
Waste											113.9388	0.0000	113.9388	6.7336	0.0000	282.2786
Water											1.5097	508.4826	509.9923	0.1755	7.9000e-003	516.7334
Total											**115.4485**	**1,554.5289**	**1,669.9774**	**6.9585**	**0.0106**	**1,847.1056**

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	3.4100e-003	3.4100e-003	1.0000e-005	0.0000	3.6300e-003
Energy											0.0000	268.1463	268.1463	9.7500e-003	2.7300e-003	269.2035
Mobile											0.0000	777.8965	777.8965	0.0396	0.0000	778.8865
Waste											113.9388	0.0000	113.9388	6.7336	0.0000	282.2786
Water											1.5097	508.4826	509.9923	0.1755	7.9000e-003	516.7334
Total											**115.4485**	**1,554.5289**	**1,669.9774**	**6.9585**	**0.0106**	**1,847.1056**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Junipers Project - Golf Course Land Use Analysis - San Diego County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Import Fill, Mobilization, Staking and Layout	Site Preparation	11/1/2019	3/5/2020	5	90	
2	Demolition	Demolition	2/17/2020	2/28/2020	5	10	
3	Rough Grading	Grading	3/1/2020	5/26/2020	5	62	
4	Fine Grading	Grading	3/1/2020	9/7/2020	5	136	
5	Construction	Building Construction	3/28/2020	6/10/2020	5	53	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Junipers Project - Golf Course Land Use Analysis - San Diego County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Import Fill, Mobilization, Staking and Layout	Rubber Tired Dozers	3	8.00	247	0.40
Import Fill, Mobilization, Staking and Layout	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Demolition	Rubber Tired Loaders	1	8.00	203	0.36
Rough Grading	Excavators	0	8.00	158	0.38
Rough Grading	Graders	0	8.00	187	0.41
Rough Grading	Rubber Tired Dozers	1	8.00	247	0.40
Rough Grading	Scrapers	4	8.00	367	0.48
Rough Grading	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Fine Grading	Rubber Tired Dozers	1	8.00	247	0.40
Fine Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Fine Grading	Trenchers	1	4.00	78	0.50
Construction	Cranes	1	4.00	231	0.29
Construction	Forklifts	0	8.00	89	0.20
Construction	Generator Sets	0	8.00	84	0.74
Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Construction	Welders	0	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
Import Fill, Mobilization, Staking a	7	18.00	0.00	2,636.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	3	15.00	0.00	1,129.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Rough Grading	6	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Construction	2	20.00	5.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Fine Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Import Fill, Mobilization, Staking and Layout - 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	73.4627	73.4627	0.0232	0.0000	74.0437
Total											**0.0000**	**73.4627**	**73.4627**	**0.0232**	**0.0000**	**74.0437**

3.2 Import Fill, Mobilization, Staking and Layout - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	49.0919	49.0919	4.4400e-003	0.0000	49.2031
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	2.8967	2.8967	9.0000e-005	0.0000	2.8990
Total											**0.0000**	**51.9886**	**51.9886**	**4.5300e-003**	**0.0000**	**52.1021**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	73.4626	73.4626	0.0232	0.0000	74.0437
Total											**0.0000**	**73.4626**	**73.4626**	**0.0232**	**0.0000**	**74.0437**

3.2 Import Fill, Mobilization, Staking and Layout - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	49.0919	49.0919	4.4400e-003	0.0000	49.2031
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	2.8967	2.8967	9.0000e-005	0.0000	2.8990
Total											**0.0000**	**51.9886**	**51.9886**	**4.5300e-003**	**0.0000**	**52.1021**

3.2 Import Fill, Mobilization, Staking and Layout - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	78.5621	78.5621	0.0254	0.0000	79.1973
Total											**0.0000**	**78.5621**	**78.5621**	**0.0254**	**0.0000**	**79.1973**

3.2 Import Fill, Mobilization, Staking and Layout - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	53.0842	53.0842	4.7800e-003	0.0000	53.2037
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	3.0662	3.0662	9.0000e-005	0.0000	3.0685
Total											**0.0000**	**56.1504**	**56.1504**	**4.8700e-003**	**0.0000**	**56.2722**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	78.5620	78.5620	0.0254	0.0000	79.1972
Total											**0.0000**	**78.5620**	**78.5620**	**0.0254**	**0.0000**	**79.1972**

3.2 Import Fill, Mobilization, Staking and Layout - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	53.0842	53.0842	4.7800e-003	0.0000	53.2037
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	3.0662	3.0662	9.0000e-005	0.0000	3.0685
Total											**0.0000**	**56.1504**	**56.1504**	**4.8700e-003**	**0.0000**	**56.2722**

3.3 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	10.2505	10.2505	3.3200e-003	0.0000	10.3334
Total											**0.0000**	**10.2505**	**10.2505**	**3.3200e-003**	**0.0000**	**10.3334**

3.3 Demolition - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	43.5370	43.5370	3.9200e-003	0.0000	43.6350
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.5437	0.5437	2.0000e-005	0.0000	0.5441
Total											**0.0000**	**44.0807**	**44.0807**	**3.9400e-003**	**0.0000**	**44.1791**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	10.2505	10.2505	3.3200e-003	0.0000	10.3334
Total											**0.0000**	**10.2505**	**10.2505**	**3.3200e-003**	**0.0000**	**10.3334**

3.3 Demolition - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	43.5370	43.5370	3.9200e-003	0.0000	43.6350
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.5437	0.5437	2.0000e-005	0.0000	0.5441
Total											**0.0000**	**44.0807**	**44.0807**	**3.9400e-003**	**0.0000**	**44.1791**

3.4 Rough Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	194.6368	194.6368	0.0630	0.0000	196.2106
Total											**0.0000**	**194.6368**	**194.6368**	**0.0630**	**0.0000**	**196.2106**

3.4 Rough Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	4.4942	4.4942	1.3000e-004	0.0000	4.4976
Total											**0.0000**	**4.4942**	**4.4942**	**1.3000e-004**	**0.0000**	**4.4976**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	194.6366	194.6366	0.0630	0.0000	196.2103
Total											**0.0000**	**194.6366**	**194.6366**	**0.0630**	**0.0000**	**196.2103**

3.4 Rough Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	4.4942	4.4942	1.3000e-004	0.0000	4.4976
Total											**0.0000**	**4.4942**	**4.4942**	**1.3000e-004**	**0.0000**	**4.4976**

3.5 Fine Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	98.2258	98.2258	0.0318	0.0000	99.0200
Total											**0.0000**	**98.2258**	**98.2258**	**0.0318**	**0.0000**	**99.0200**

3.5 Fine Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	4.9292	4.9292	1.5000e-004	0.0000	4.9329
Total											**0.0000**	**4.9292**	**4.9292**	**1.5000e-004**	**0.0000**	**4.9329**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	98.2257	98.2257	0.0318	0.0000	99.0199
Total											**0.0000**	**98.2257**	**98.2257**	**0.0318**	**0.0000**	**99.0199**

3.5 Fine Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	4.9292	4.9292	1.5000e-004	0.0000	4.9329
Total											**0.0000**	**4.9292**	**4.9292**	**1.5000e-004**	**0.0000**	**4.9329**

3.6 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	13.9474	13.9474	4.5100e-003	0.0000	14.0601
Total											**0.0000**	**13.9474**	**13.9474**	**4.5100e-003**	**0.0000**	**14.0601**

3.6 Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	3.4962	3.4962	2.7000e-004	0.0000	3.5029
Worker											0.0000	3.8418	3.8418	1.2000e-004	0.0000	3.8447
Total											**0.0000**	**7.3380**	**7.3380**	**3.9000e-004**	**0.0000**	**7.3476**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	13.9473	13.9473	4.5100e-003	0.0000	14.0601
Total											**0.0000**	**13.9473**	**13.9473**	**4.5100e-003**	**0.0000**	**14.0601**

3.6 Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	3.4962	3.4962	2.7000e-004	0.0000	3.5029
Worker											0.0000	3.8418	3.8418	1.2000e-004	0.0000	3.8447
Total											**0.0000**	**7.3380**	**7.3380**	**3.9000e-004**	**0.0000**	**7.3476**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											0.0000	777.8965	777.8965	0.0396	0.0000	778.8865
Unmitigated											0.0000	777.8965	777.8965	0.0396	0.0000	778.8865

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Golf Course	883.28	883.28	883.28	2,025,538	2,025,538
Racquet Club	29.77	29.77	29.77	68,269	68,269
Total	913.05	913.05	913.05	2,093,807	2,093,807

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Golf Course	9.50	6.30	7.30	0.00	100.00	0.00	100	0	0
Racquet Club	9.50	6.30	7.30	0.00	100.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Golf Course	0.606234	0.039465	0.179154	0.102641	0.014368	0.005395	0.016820	0.024508	0.001929	0.001857	0.005869	0.000761	0.000998
Racquet Club	0.606234	0.039465	0.179154	0.102641	0.014368	0.005395	0.016820	0.024508	0.001929	0.001857	0.005869	0.000761	0.000998

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	218.5117	218.5117	8.8000e-003	1.8200e-003	219.2739
Electricity Unmitigated											0.0000	218.5117	218.5117	8.8000e-003	1.8200e-003	219.2739
NaturalGas Mitigated											0.0000	49.6346	49.6346	9.5000e-004	9.1000e-004	49.9296
NaturalGas Unmitigated											0.0000	49.6346	49.6346	9.5000e-004	9.1000e-004	49.9296

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					
Golf Course	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Racquet Club	930118											0.0000	49.6346	49.6346	9.5000e-004	9.1000e-004	49.9296
Total												**0.0000**	**49.6346**	**49.6346**	**9.5000e-004**	**9.1000e-004**	**49.9296**

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					
Golf Course	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Racquet Club	930118											0.0000	49.6346	49.6346	9.5000e-004	9.1000e-004	49.9296
Total												**0.0000**	**49.6346**	**49.6346**	**9.5000e-004**	**9.1000e-004**	**49.9296**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Golf Course	0	0.0000	0.0000	0.0000	0.0000
Racquet Club	668623	218.5117	8.8000e-003	1.8200e-003	219.2739
Total		**218.5117**	**8.8000e-003**	**1.8200e-003**	**219.2739**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Golf Course	0	0.0000	0.0000	0.0000	0.0000
Racquet Club	668623	218.5117	8.8000e-003	1.8200e-003	219.2739
Total		**218.5117**	**8.8000e-003**	**1.8200e-003**	**219.2739**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											0.0000	3.4100e-003	3.4100e-003	1.0000e-005	0.0000	3.6300e-003
Unmitigated											0.0000	3.4100e-003	3.4100e-003	1.0000e-005	0.0000	3.6300e-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	3.4100e-003	3.4100e-003	1.0000e-005	0.0000	3.6300e-003
Total											**0.0000**	**3.4100e-003**	**3.4100e-003**	**1.0000e-005**	**0.0000**	**3.6300e-003**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating											0.0000	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	3.4100e-003	3.4100e-003	1.0000e-005	0.0000	3.6300e-003
Total											**0.0000**	**3.4100e-003**	**3.4100e-003**	**1.0000e-005**	**0.0000**	**3.6300e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	509.9923	0.1755	7.9000e-003	516.7334
Unmitigated	509.9923	0.1755	7.9000e-003	516.7334

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Golf Course	0 / 131.551	477.6430	0.0192	3.9800e-003	479.3090
Racquet Club	4.75866 / 2.9166	32.3493	0.1563	3.9200e-003	37.4245
Total		**509.9923**	**0.1755**	**7.9000e-003**	**516.7334**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Golf Course	0 / 131.551	477.6430	0.0192	3.9800e-003	479.3090
Racquet Club	4.75866 / 2.9166	32.3493	0.1563	3.9200e-003	37.4245
Total		**509.9923**	**0.1755**	**7.9000e-003**	**516.7334**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	113.9388	6.7336	0.0000	282.2786
Unmitigated	113.9388	6.7336	0.0000	282.2786

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Golf Course	102.68	20.8431	1.2318	0.0000	51.6379
Racquet Club	458.62	93.0957	5.5018	0.0000	230.6407
Total		**113.9388**	**6.7336**	**0.0000**	**282.2786**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Golf Course	102.68	20.8431	1.2318	0.0000	51.6379
Racquet Club	458.62	93.0957	5.5018	0.0000	230.6407
Total		**113.9388**	**6.7336**	**0.0000**	**282.2786**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

The Junipers - Golf Course Land Use Analysis

Onsite Fuel Usage

Fuel	*Quantity* [1]	*Emission Factor* [2] *(g CO_2/gal)*	*MT CO_2*
Gas	4200	8,890.40	37.34
Diesel	3063	10,160.46	31.12
TOTAL			**68.46**

[1] GCSAA 2017

[2] USEIA 2017

Appendix B

CAP Consistency Checklist

CLIMATE ACTION PLAN CONSISTENCY CHECKLIST INTRODUCTION

In December 2015, the City adopted a Climate Action Plan (CAP) that outlines the actions that City will undertake to achieve its proportional share of State greenhouse gas (GHG) emission reductions. The purpose of the Climate Action Plan Consistency Checklist (Checklist) is to, in conjunction with the CAP, provide a streamlined review process for proposed new development projects that are subject to discretionary review and trigger environmental review pursuant to the California Environmental Quality Act (CEQA).[1]

Analysis of GHG emissions and potential climate change impacts from new development is required under CEQA. The CAP is a plan for the reduction of GHG emissions in accordance with CEQA Guidelines Section 15183.5. Pursuant to CEQA Guidelines Sections 15064(h)(3), 15130(d), and 15183(b), a project's incremental contribution to a cumulative GHG emissions effect may be determined not to be cumulatively considerable if it complies with the requirements of the CAP.

This Checklist is part of the CAP and contains measures that are required to be implemented on a project-by-project basis to ensure that the specified emissions targets identified in the CAP are achieved. Implementation of these measures would ensure that new development is consistent with the CAP's assumptions for relevant CAP strategies toward achieving the identified GHG reduction targets. Projects that are consistent with the CAP as determined through the use of this Checklist may rely on the CAP for the cumulative impacts analysis of GHG emissions. Projects that are not consistent with the CAP must prepare a comprehensive project-specific analysis of GHG emissions, including quantification of existing and projected GHG emissions and incorporation of the measures in this Checklist to the extent feasible. Cumulative GHG impacts would be significant for any project that is not consistent with the CAP.

The Checklist may be updated to incorporate new GHG reduction techniques or to comply with later amendments to the CAP or local, State, or federal law.

[1] Certain projects seeking ministerial approval may be required to complete the Checklist. For example, projects in a Community Plan Implementation Overlay Zone may be required to use the Checklist to qualify for ministerial level review. See Supplemental Development Regulations in the project's community plan to determine applicability.

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CAP CONSISTENCY CHECKLIST SUBMITTAL APPLICATION

- The Checklist is required only for projects subject to CEQA review.[2]
- If required, the Checklist must be included in the project submittal package. Application submittal procedures can be found in Chapter 11: Land Development Procedures of the City's Municipal Code.
- The requirements in the Checklist will be included in the project's conditions of approval.
- The applicant must provide an explanation of how the proposed project will implement the requirements described herein to the satisfaction of the Planning Department.

Application Information

Contact Information

Project No./Name:	544941 - The Junipers		
Property Address:	14455 Penasquitos Drive, San Diego, CA 92129		
Applicant Name/Co.:	Mr. Ryan Green		
Contact Phone:	858.618.4933	Contact Email:	ryan.green@lennar.com

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

Consultant Name:	Victor Ortiz	Contact Phone:	(619) 462-1515
Company Name:	HELIX Environmental Planning	Contact Email:	VictorO@helixepi.com

Project Information

1. What is the size of the project (acres)? 112.3 acres
2. Identify all applicable proposed land uses:
   - ☐ Residential (indicate # of single-family units):
   - ■ Residential (indicate # of multi-family units): 536 units
   - ☐ Commercial (total square footage):
   - ☐ Industrial (total square footage):
   - ☐ Other (describe):
3. Is the project or a portion of the project located in a Transit Priority Area? ☐ Yes ■ No
4. Provide a brief description of the project proposed:

The project would redevelop a former golf course property, currently sitting fallow, into an age-restricted (55+) community with 536 multi-family residential units.

[2] Certain projects seeking ministerial approval may be required to complete the Checklist. For example, projects in a Community Plan Implementation Overlay Zone may be required to use the Checklist to qualify for ministerial level review. See Supplemental Development Regulations in the project's community plan to determine applicability.

CAP CONSISTENCY CHECKLIST QUESTIONS

Step 1: Land Use Consistency

The first step in determining CAP consistency for discretionary development projects is to assess the project's consistency with the growth projections used in the development of the CAP. This section allows the City to determine a project's consistency with the land use assumptions used in the CAP.

Step 1: Land Use Consistency		
Checklist Item (Check the appropriate box and provide explanation and supporting documentation for your answer)	Yes	No
A. Is the proposed project consistent with the existing General Plan and Community Plan land use and zoning designations?;[3] OR, B. If the proposed project is not consistent with the existing land use plan and zoning designations, and includes a land use plan and/or zoning designation amendment, would the proposed amendment result in an increased density within a Transit Priority Area (TPA)[4] and implement CAP Strategy 3 actions, as determined in Step 3 to the satisfaction of the Development Services Department?; OR, C. If the proposed project is not consistent with the existing land use plan and zoning designations, does the project include a land use plan and/or zoning designation amendment that would result in an equivalent or less GHG-intensive project when compared to the existing designations?	☑	☐

If "***Yes***," proceed to Step 2 of the Checklist. For question B above, complete Step 3. For question C above, provide estimated project emissions under both existing and proposed designation(s) for comparison. Compare the maximum buildout of the existing designation and the maximum buildout of the proposed designation.

If "***No***," in accordance with the City's Significance Determination Thresholds, the project's GHG impact is significant. The project must nonetheless incorporate each of the measures identified in Step 2 to mitigate cumulative GHG emissions impacts unless the decision maker finds that a measure is infeasible in accordance with CEQA Guidelines Section 15091. Proceed and complete Step 2 of the Checklist.

The existing General Plan and Community Plan land use designations for the project site are both "Open Space" and a small portion "Commercial." The community plan identifies the site specifically for use as a golf course. The applicant is proposing a Community Plan Amendment to redesignate most of the site to Low-Medium Density Residential. The existing zoning designation for the majority of the site is multi-family Residential Single Unit RS-1-14, which would allow for construction of up to an estimated 831 dwelling units, compared to the 536 units proposed by the project. The project consists of an age-restricted (55+) community with 536 multi-family residential units and would therefore not be consistent with the existing zoning or the existing land use designations. The applicant is proposing a Community Plan Amendment to re-designate the site to Low-Medium Density Residential. Therefore, Option A would not apply to the project. The project is not located within a TPA; therefore, Option B would not apply to the project.

GHG emissions were calculated for three scenarios for comparison purposes: the proposed project (Scenario 1), the existing RS-1-14 zoning designation based on 831 dwelling units (Scenario 2), and the existing Community Plan Land Use designation as a golf course (Scenario 3). The proposed project would result in emissions of 1,827 MT CO2e per year, which would be 110 MT CO2e less than development as a golf course and 9,928 MT CO2e less than the maximum potential development under the existing zoning. Because the project would result in fewer emissions than the existing land use or zoning designations, the proposed project would be consistent with the CAP under Option C.

[3] This question may also be answered in the affirmative if the project is consistent with SANDAG Series 12 growth projections, which were used to determine the CAP projections, as determined by the Planning Department.

[4] This category applies to all projects that answered in the affirmative to question 3 on the previous page: Is the project or a portion of the project located in a transit priority area.

Step 2: CAP Strategies Consistency

The second step of the CAP consistency review is to review and evaluate a project's consistency with the applicable strategies and actions of the CAP. Step 2 only applies to development projects that involve permits that would require a certificate of occupancy from the Building Official or projects comprised of one and two family dwellings or townhouses as defined in the California Residential Code and their accessory structures.[5] All other development projects that would not require a certificate of occupancy from the Building Official shall implement Best Management Practices for construction activities as set forth in the Greenbook (for public projects).

Step 2: CAP Strategies Consistency			
Checklist Item (Check the appropriate box and provide explanation for your answer)	Yes	No	N/A
Strategy 1: Energy & Water Efficient Buildings			
1. *Cool/Green Roofs*. • Would the project include roofing materials with a minimum 3-year aged solar reflection and thermal emittance or solar reflection index equal to or greater than the values specified in the voluntary measures under California Green Building Standards Code (Attachment A)?; OR • Would the project roof construction have a thermal mass over the roof membrane, including areas of vegetated (green) roofs, weighing at least 25 pounds per square foot as specified in the voluntary measures under California Green Building Standards Code?; OR • Would the project include a combination of the above two options? Check "N/A" only if the project does not include a roof component. The project would include extensive solar panels. Where roofing materials are exposed, they will be built with a minimum 3-year aged solar reflection and thermal emittance or solar reflection index equal to or greater than the values specified in the voluntary measures under California Green Building Standards Code.	☑	☐	☐

[5] Actions that are not subject to Step 2 would include, for example: 1) discretionary map actions that do not propose specific development, 2) permits allowing wireless communication facilities, 3) special events permits, 4) use permits or other permits that do not result in the expansion or enlargement of a building (e.g., decks, garages, etc.), and 5) non-building infrastructure projects such as roads and pipelines. Because such actions would not result in new occupancy buildings from which GHG emissions reductions could be achieved, the items contained in Step 2 would not be applicable.

2. *Plumbing fixtures and fittings* With respect to plumbing fixtures or fittings provided as part of the project, would those low-flow fixtures/appliances be consistent with each of the following: Residential buildings: • Kitchen faucets: maximum flow rate not to exceed 1.5 gallons per minute at 60 psi; • Standard dishwashers: 4.25 gallons per cycle; • Compact dishwashers: 3.5 gallons per cycle; and • Clothes washers: water factor of 6 gallons per cubic feet of drum capacity? Nonresidential buildings: • Plumbing fixtures and fittings that do not exceed the maximum flow rate specified in Table A5.303.2.3.1 (voluntary measures) of the California Green Building Standards Code (See Attachment A); and • Appliances and fixtures for commercial applications that meet the provisions of Section A5.303.3 (voluntary measures) of the California Green Building Standards Code (See Attachment A)? Check "N/A" only if the project does not include any plumbing fixtures or fittings. The project would implement low-flow fixtures/appliances consistent with the measures specified for residential buildings.	☑	☐	☐

Strategy 3: Bicycling, Walking, Transit & Land Use			
3. *Electric Vehicle Charging* • Multiple-family projects of 17 dwelling units or less: Would 3% of the total parking spaces required, or a minimum of one space, whichever is greater, be provided with a listed cabinet, box or enclosure connected to a conduit linking the parking spaces with the electrical service, in a manner approved by the building and safety official, to allow for the future installation of electric vehicle supply equipment to provide electric vehicle charging stations at such time as it is needed for use by residents? • Multiple-family projects of more than 17 dwelling units: Of the total required listed cabinets, boxes or enclosures, would 50% have the necessary electric vehicle supply equipment installed to provide active electric vehicle charging stations ready for use by residents? • Non-residential projects: Of the total required listed cabinets, boxes or enclosures, would 50% have the necessary electric vehicle supply equipment installed to provide active electric vehicle charging stations ready for use? Check "N/A" only if the project is a single-family project or would not require the provision of listed cabinets, boxes, or enclosures connected to a conduit linking the parking spaces with electrical service, e.g., projects requiring fewer than 10 parking spaces. The project would provide 1,241 parking spaces. At least 3% of these spaces (37) would be pre-wired for the future installation of an electric vehicle charging station. At least half of those spaces (19) would be supplied with the necessary equipment to provide active vehicle charging stations ready for resident use.	☑	☐	☐
Strategy 3: Bicycling, Walking, Transit & Land Use (Complete this section if project includes non-residential or mixed uses)			
4. *Bicycle Parking Spaces* Would the project provide more short- and long-term bicycle parking spaces than required in the City's Municipal Code (Chapter 14, Article 2, Division 5)?[6] Check "N/A" only if the project is a residential project. As a residential development, this item would not apply to the project.	☐	☐	☑

[6] Non-portable bicycle corrals within 600 feet of project frontage can be counted towards the project's bicycle parking requirements.

5. *Shower facilities*

If the project includes nonresidential development that would accommodate over 10 tenant occupants (employees), would the project include changing/shower facilities in accordance with the voluntary measures under the California Green Building Standards Code as shown in the table below?

Number of Tenant Occupants (Employees)	Shower/Changing Facilities Required	Two-Tier (12" X 15" X 72") Personal Effects Lockers Required
0-10	0	0
11-50	1 shower stall	2
51-100	1 shower stall	3
101-200	1 shower stall	4
Over 200	1 shower stall plus 1 additional shower stall for each 200 additional tenant-occupants	1 two-tier locker plus 1 two-tier locker for each 50 additional tenant-occupants

Check "N/A" only if the project is a residential project, or if it does not include nonresidential development that would accommodate over 10 tenant occupants (employees).

As a residential development, this item would not apply to the project.

☐	☐	☑

6. *Designated Parking Spaces*

If the project includes a nonresidential use in a TPA, would the project provide designated parking for a combination of low-emitting, fuel-efficient, and carpool/vanpool vehicles in accordance with the following table?

Number of Required Parking Spaces	Number of Designated Parking Spaces
0-9	0
10-25	2
26-50	4
51-75	6
76-100	9
101-150	11
151-200	18
201 and over	At least 10% of total

This measure does not cover electric vehicles. See Question 4 for electric vehicle parking requirements.

Note: Vehicles bearing Clean Air Vehicle stickers from expired HOV lane programs may be considered eligible for designated parking spaces. The required designated parking spaces are to be provided within the overall minimum parking requirement, not in addition to it.

Check "N/A" only if the project is a residential project, or if it does not include nonresidential use in a TPA.

As a residential development, this item would not apply to the project.

☐	☐	☑

7. *Transportation Demand Management Program* If the project would accommodate over 50 tenant-occupants (employees), would it include a transportation demand management program that would be applicable to existing tenants and future tenants that includes: At least one of the following components: • Parking cash out program • Parking management plan that includes charging employees market-rate for single-occupancy vehicle parking and providing reserved, discounted, or free spaces for registered carpools or vanpools • Unbundled parking whereby parking spaces would be leased or sold separately from the rental or purchase fees for the development for the life of the development And at least three of the following components: • Commitment to maintaining an employer network in the SANDAG iCommute program and promoting its RideMatcher service to tenants/employees • On-site carsharing vehicle(s) or bikesharing • Flexible or alternative work hours • Telework program • Transit, carpool, and vanpool subsidies • Pre-tax deduction for transit or vanpool fares and bicycle commute costs • Access to services that reduce the need to drive, such as cafes, commercial stores, banks, post offices, restaurants, gyms, or childcare, either onsite or within 1,320 feet (1/4 mile) of the structure/use? Check "N/A" only if the project is a residential project or if it would not accommodate over 50 tenant-occupants (employees). As a residential development, this item would not apply to the project.	☐	☐	☑

Step 3: Project CAP Conformance Evaluation (if applicable)

The third step of the CAP consistency review only applies if Step 1 is answered in the affirmative under option B. The purpose of this step is to determine whether a project that is located in a TPA but that includes a land use plan and/or zoning designation amendment is nevertheless consistent with the assumptions in the CAP because it would implement CAP Strategy 3 actions. In general, a project that would result in a reduction in density inside a TPA would not be consistent with Strategy 3.The following questions must each be answered in the affirmative and fully explained.

1. **Would the proposed project implement the General Plan's City of Villages strategy in an identified Transit Priority Area (TPA) that will result in an increase in the capacity for transit-supportive residential and/or employment densities?**
   Considerations for this question:
   - Does the proposed land use and zoning designation associated with the project provide capacity for transit-supportive residential densities within the TPA?
   - Is the project site suitable to accommodate mixed-use village development, as defined in the General Plan, within the TPA?
   - Does the land use and zoning associated with the project increase the capacity for transit-supportive employment intensities within the TPA?

2. **Would the proposed project implement the General Plan's Mobility Element in Transit Priority Areas to increase the use of transit?**
   Considerations for this question:
   - Does the proposed project support/incorporate identified transit routes and stops/stations?
   - Does the project include transit priority measures?

3. **Would the proposed project implement pedestrian improvements in Transit Priority Areas to increase walking opportunities?**
   Considerations for this question:
   - Does the proposed project circulation system provide multiple and direct pedestrian connections and accessibility to local activity centers (such as transit stations, schools, shopping centers, and libraries)?
   - Does the proposed project urban design include features for walkability to promote a transit supportive environment?

4. **Would the proposed project implement the City of San Diego's Bicycle Master Plan to increase bicycling opportunities?**
   Considerations for this question:
   - Does the proposed project circulation system include bicycle improvements consistent with the Bicycle Master Plan?
   - Does the overall project circulation system provide a balanced, multimodal, "complete streets" approach to accommodate mobility needs of all users?

5. **Would the proposed project incorporate implementation mechanisms that support Transit Oriented Development?**
   Considerations for this question:
   - Does the proposed project include new or expanded urban public spaces such as plazas, pocket parks, or urban greens in the TPA?
   - Does the land use and zoning associated with the proposed project increase the potential for jobs within the TPA?
   - Do the zoning/implementing regulations associated with the proposed project support the efficient use of parking through mechanisms such as: shared parking, parking districts, unbundled parking, reduced parking, paid or time-limited parking, etc.?

6. **Would the proposed project implement the Urban Forest Management Plan to increase urban tree canopy coverage?**
   Considerations for this question:
   - Does the proposed project provide at least three different species for the primary, secondary and accent trees in order to accommodate varying parkway widths?
   - Does the proposed project include policies or strategies for preserving existing trees?
   - Does the proposed project incorporate tree planting that will contribute to the City's 20% urban canopy tree coverage goal?

CLIMATE ACTION PLAN CONSISTENCY CHECKLIST
ATTACHMENT A

This attachment provides performance standards for applicable Climate Action Pan (CAP) Consistency Checklist measures.

Table 1 Roof Design Values for Question 1: Cool/Green Roofs supporting Strategy 1: Energy & Water Efficient Buildings of the Climate Action Plan

Land Use Type	Roof Slope	Minimum 3-Year Aged Solar Reflectance	Thermal Emittance	Solar Reflective Index
Low-Rise Residential	≤ 2:12	0.55	0.75	64
	> 2:12	0.20	0.75	16
High-Rise Residential Buildings, Hotels and Motels	≤ 2:12	0.55	0.75	64
	> 2:12	0.20	0.75	16
Non-Residential	≤ 2:12	0.55	0.75	64
	> 2:12	0.20	0.75	16

Source: Adapted from the California Green Building Standards Code (CALGreen) Tier 1 residential and non-residential voluntary measures shown in Tables A4.106.5.1 and A5.106.11.2.2, respectively. Roof installation and verification shall occur in accordance with the CALGreen Code.

CALGreen does not include recommended values for low-rise residential buildings with roof slopes of ≤ 2:12 for San Diego's climate zones (7 and 10). Therefore, the values for climate zone 15 that covers Imperial County are adapted here.

Solar Reflectance Index (SRI) equal to or greater than the values specified in this table may be used as an alternative to compliance with the aged solar reflectance values and thermal emittance.

Table 2	Fixture Flow Rates for Non-Residential Buildings related to Question 2: Plumbing Fixtures and Fittings supporting Strategy 1: Energy & Water Efficient Buildings of the Climate Action Plan
Fixture Type	**Maximum Flow Rate**
Showerheads	1.8 gpm @ 80 psi
Lavatory Faucets	0.35 gpm @60 psi
Kitchen Faucets	1.6 gpm @ 60 psi
Wash Fountains	1.6 [rim space(in.)/20 gpm @ 60 psi]
Metering Faucets	0.18 gallons/cycle
Metering Faucets for Wash Fountains	0.18 [rim space(in.)/20 gpm @ 60 psi]
Gravity Tank-type Water Closets	1.12 gallons/flush
Flushometer Tank Water Closets	1.12 gallons/flush
Flushometer Valve Water Closets	1.12 gallons/flush
Electromechanical Hydraulic Water Closets	1.12 gallons/flush
Urinals	0.5 gallons/flush

Source: Adapted from the California Green Building Standards Code (CALGreen) Tier 1 non-residential voluntary measures shown in Tables A5.303.2.3.1 and A5.106.11.2.2, respectively. See the California Plumbing Code for definitions of each fixture type.

Where complying faucets are unavailable, aerators rated at 0.35 gpm or other means may be used to achieve reduction.

Acronyms:
gpm = gallons per minute
psi = pounds per square inch (unit of pressure)
in. = inch

Table 3	**Standards for Appliances and Fixtures for Commercial Application related to Question 2: Plumbing Fixtures and Fittings supporting Strategy 1: Energy & Water Efficient Buildings of the Climate Action Plan**	
Appliance/Fixture Type	**Standard**	
Clothes Washers	Maximum Water Factor (WF) that will reduce the use of water by 10 percent below the California Energy Commissions' WF standards for commercial clothes washers located in Title 20 of the *California Code of Regulations*.	
Conveyor-type Dishwashers	0.70 maximum gallons per rack (2.6 L) (High-Temperature)	0.62 maximum gallons per rack (4.4 L) (Chemical)
Door-type Dishwashers	0.95 maximum gallons per rack (3.6 L) (High-Temperature)	1.16 maximum gallons per rack (2.6 L) (Chemical)
Undercounter-type Dishwashers	0.90 maximum gallons per rack (3.4 L) (High-Temperature)	0.98 maximum gallons per rack (3.7 L) (Chemical)
Combination Ovens	Consume no more than 10 gallons per hour (38 L/h) in the full operational mode.	
Commercial Pre-rinse Spray Valves (manufactured on or after January 1, 2006)	Function at equal to or less than 1.6 gallons per minute (0.10 L/s) at 60 psi (414 kPa) and • Be capable of cleaning 60 plates in an average time of not more than 30 seconds per plate. • Be equipped with an integral automatic shutoff. • Operate at static pressure of at least 30 psi (207 kPa) when designed for a flow rate of 1.3 gallons per minute (0.08 L/s) or less.	

Source: Adapted from the California Green Building Standards Code (CALGreen) Tier 1 non-residential voluntary measures shown in Section A5.303.3. See the California Plumbing Code for definitions of each appliance/fixture type.

Acronyms:
L = liter
L/h = liters per hour
L/s = liters per second
psi = pounds per square inch (unit of pressure)
kPa = kilopascal (unit of pressure)

Appendix C

SANDAG Series 13 Data

Table C
SANDAG Vehicle Miles of Travel Report

Scenario ID **991** **Junipers - 2020 Junipers - Project Site**

VMT per Resident						
		Residents	**Total Trips**	**Person Miles of Travel**	**Vehicle Miles of Travel**	**VMT per Resident**
Regionwide		3,435,715	12,302,411	77,559,665	56,353,219	16.4
Jurisdiction	San Diego	1,453,025	5,228,315	29,404,995	20,993,979	14.4
CPA	Rancho Penasquitos	45,928	171,466	1,190,810	879,796	19.2
Project Site		2,601	10,041	65,988	48,580	**18.7**

VMT per Employee						
		Employees	**Total Trips**	**Person Miles of Travel**	**Vehicle Miles of Travel**	**VMT per Employee**
Regionwide		1,444,771	4,995,914	41,235,140	35,989,589	24.9
Jurisdiction	San Diego	783,383	2,649,114	21,579,539	18,994,993	24.2
CPA	Rancho Penasquitos	5,091	19,414	158,538	132,534	26.0
Project Site		253	944	6,770	5,583	**22.1**

Report Generated: 01/10/19

TRIP GENERATION RATE SUMMARY
(WEEKDAY)

LAND USE	DRIVEWAY [1] [2] VEHICLE TRIP RATE	CUMULATIVE [8] VEHICLE TRIP RATE	PEAK HOUR AND IN/OUT RATIO AM (IN:OUT)	PM (IN:OUT)
LODGING [3]				
Hotel (w/convention facilities/restaurant)	10 trips/room; 300 trips/acre	10 trips/room; 300 trips/acre	6% (6:4)	8% (6:4)
Motel	9 trips/room; 200 trips/acre	9 trips/room; 200 trips/acre	8% (4:6)	9% (4:6)
Resort Hotel	8 trips/room; 100 trips/acre	8 trips/room; 100 trips/acre	5% (6:4)	7% (6:4)
MILITARY BASE [3]	2.5 trips/employee (military or civilian)	2.5 trips/employee (military or civilian)	9% (9:1)	10% (6:4)
OFFICE				
Commercial Office [6]	Ln(T) = 0.756 Ln(x) + 3.95; 450 trips/acre	Ln(T) = 0.756 Ln(x) + 3.95; 450 trips/acre	13% (9:1)	14% (2:8)
Corporate Headquarters/Single Tenant Office	10 trips/1,000 sq. ft.	10 trips/1,000 sq. ft.	15% (9:1)	15% (1:9)
Department of Motor Vehicles	180 trips/1,000 sq. ft.; 900 trips/acre	18 trips/1,000 sq. ft.	6% (6:4)	11% (4:6)
Government Office (Civic Center):	30 trips/1,000 sq. ft.		9% (9:1)	12% (3:7)
Less than 100,000 sq. ft.		20 trips/1,000 sq. ft.	9% (9:1)	12% (3:7)
100,000 sq. ft. or more		16 trips/1,000 sq. ft.	9% (9:1)	12% (3:7)
Medical Office:	50 trips/1,000 sq. ft.; 500 trips/acre		6% (8:2)	10% (3:7)
Less than 100,000 sq. ft.		20 trips/1,000 sq. ft.	6% (8:2)	10% (3:7)
100,000 sq. ft. or more		16 trips/1,000 sq. ft.	6% (8:2)	10% (3:7)
Post Office:				
Distribution (central/walk-in only)	90 trips/1,000 sq. ft.	76 trips/1,000 sq. ft.	5%	7%
Community (without mail drop lane)	200 trips/1,000 sq. ft.; 1,300 trips/acre	168 trips/1,000 sq. ft.; 1,092 trips/acre	6% (6:4)	9% (5.5)
Community (with mail drop lane)	300 trips/1,000 sq. ft.; 2,000 trips/acre		7% (5:5)	9% (3.7)
Less than 100,000 sq. ft.		168 trips/1,000 sq. ft.; 1,092 trips/acre	7% (5:5)	7% (6:4)
100,000 sq. ft. or more		252 trips/1,000 sq. ft.; 1,680 trips/acre	7% (5:5)	8% (7:3)
RECREATION				
Bowling Center	30 trips/lane; 300 trips/acre	30 trips/lane; 300 trips/acre	7% (7:3)	10% (4:6)
Golf Course	600 trips/course; 40 trips/hole; 8 trips/acre	600 trips/course; 40 trips/hole; 8 trips/acre	6% (8:2)	9% (3:7)
Marina	4 trips/berth; 20 trips/acre	4 trips/berth; 20 trips/acre	3% (3:7)	7% (6:4)
Movie Theater	80 trips/1,000 sq. ft.; 1.8 trips/seat	80 trips/1,000 sq. ft.; 1.8 trips/seat	0.3%	8% (7:3)
Park:				
Beach, Ocean or Bay	600 trips/1,000 ft. shoreline; 60 trips/acre	600 trips/1,000 ft. shoreline; 60 trips/acre	- -	11% (4:6)
Developed	50 trips/acre	50 trips/acre	4%	8%
Undeveloped	5 trips/acre	5 trips/acre	4%	8%
Racquetball/Tennis/Health Club	40 trips/1,000 sq. ft.; 40 trips/court; 300 trips/acre	40 trips/1,000 sq. ft.; 40 trips/court; 300 trips/acre	4% (6:4)	9% (6:4)
San Diego Zoo	115 trips/acre	115 trips/acre	- -	- -
Sea World	80 trips/acre	80 trips/acre	- -	- -
Sport Facility:				
Indoor	30 trips/acre	30 trips/acre	- -	- -
Outdoor	50 trips/acre	50 trips/acre	- -	- -