

## **Appendix B**

---

Technical Appendix for Air Quality and  
Greenhouse Gas Emissions

# **citizenM Hollywood & Vine Project**

Draft EIR

## Technical Appendix for Air Quality and Greenhouse Gas Emissions November 2018

- 1 Air Quality and Greenhouse Gas Emissions Methodology
- 2 Air Quality Worksheets
- 3 Greenhouse Gas (GHG) Worksheets

# **Air Quality and Greenhouse Gas Methodology**

**AIR QUALITY AND GREENHOUSE GAS EMISSIONS METHODOLOGY**

**citizenM Hollywood & Vine Project**

***Prepared by:***

**Eyestone Environmental, LLC**

**November 2018**

---

## TABLE OF CONTENTS

---

|   | <u>Page</u> |
|---|-------------|
| 1. INTRODUCTION .....   | 1           |
| 2. AIR POLLUTANT AND GREENHOUSE GAS EMISSIONS METHODOLOGY ..... | 1           |

# **citizenM Hollywood & Vine Project**

---

## **Air Quality and Greenhouse Gas Emissions Methodology**

### **1. Introduction**

Eyestone Environmental has been retained to conduct a comprehensive criteria air pollutant and greenhouse gas (GHG) emissions assessment for the citizenM Hollywood & Vine Project (the “Project”). Emissions during both construction and operation of the Project were quantified. This assessment describes the methodology used to estimate the air pollutant and GHG emissions from existing and Project conditions and describes the methodology used to quantify air pollutant and GHG emission reductions from project design features and mitigation measures.

### **2. Air Pollutant and Greenhouse Gas Emissions Methodology**

The Project would result in direct emissions of criteria pollutants and direct and indirect GHG emissions generated by different types of emissions sources, including:<sup>1</sup>

- Direct Emissions:
  - Construction: emissions associated with demolition of existing uses, shoring, excavation, grading, and construction-related equipment and vehicular activity;
  - Area source: emissions associated with consumer products, architectural coatings, and landscape equipment;
  - Energy source (building operations): emissions associated with space heating and cooling, and water heating;

---

<sup>1</sup> *Direct sources of emissions include Project-related vehicular trips and onsite combustion of fossil fuels (e.g., natural gas, propane, gasoline, and diesel). Whereas, indirect sources of emissions include offsite emissions associated with purchased electricity and embodied energy (e.g., energy used to convey, treat, and distribute water and wastewater)*

- Mobile source: emissions associated with vehicles accessing the project site; and
- Stationary source: emissions associated with stationary equipment (e.g., emergency generators).
- Indirect Emissions:
  - Energy source (building operations): emissions associated with energy consumption, and lighting;
  - Solid Waste: emissions associated with the decomposition of the waste, which generates methane based on the total amount of degradable organic carbon; and
  - Water/Wastewater: emissions associated with energy used to pump, convey, deliver, and treat water.

## **a. Emission Inventories**

Project-related construction and operation emissions were calculated using SCAQMD’s recommended California Emissions Estimator Model (CalEEMod). CalEEMod is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and GHG emissions associated with both construction and operations from a variety of land use projects. CalEEMod was developed in collaboration with the air districts of California. Data (e.g., emission factors, trip lengths, meteorology, source inventory, etc.) have been provided by the various California air districts to account for local requirements and conditions. The model is considered by the SCAQMD to be an accurate and comprehensive tool for quantifying criteria pollutant and GHG impacts from land use projects throughout California.<sup>2</sup>

CalEEMod utilizes widely accepted models for emission estimates combined with appropriate default data that can be used if site-specific information is not available. These models and default estimates use sources such as the USEPA AP-42 emission factors, CARB’s on-road emission model (EMission FACTor model (EMFAC)) and off-road equipment emission model (Off-road Emissions Inventory Program model (OFFROAD)).

---

<sup>2</sup> See [www.caleemod.com](http://www.caleemod.com).

## (1) Construction

Construction activities would generate emissions from off-road equipment usage, on-road vehicle travel (truck hauling, vendor deliveries, and workers commuting), architectural coating, and paving. Each of these source types is discussed in more detail below. The Project's construction emissions were calculated using the SCAQMD recommended CalEEMod (Version 2016.3.2). Please refer to CalEEMod construction output files for a complete listing of construction details modeled. CalEEMod default values were used for equipment and vehicle emission factors, equipment load factors and vehicle trip lengths. It should be noted that the maximum daily emissions were predicted values for the worst-case day and do not represent the emissions that would occur for every day of Project construction. The maximum daily emissions were compared to the SCAQMD daily regional numeric indicators. Annual emissions were calculated based on the total number of hours each piece of equipment was used and the total number of vehicular trips (i.e., worker, vendor, and haul) over the duration of construction. In accordance with the SCAQMD's guidance, GHG emissions from construction were amortized over the lifetime of the Project. The SCAQMD defines the lifetime of a project as 30 years.<sup>3</sup> Therefore, total construction GHG emissions were divided by 30 to determine an annual construction emissions estimate comparable to operational emissions.

### *(a) Emissions from Construction Equipment*

The emission calculations associated with construction equipment are from off-road equipment engine use based on the equipment list and phase length. Since the majority of the off-road construction equipment used for construction projects are diesel fueled, CalEEMod assumes all of the equipment operates on diesel fuel. Construction equipment emissions vary with engine model years in which newer equipment will emit fewer pollutants. As a conservative assumption, the CalEEMod model uses an emission rate for equipment which represents an average model year for available equipment within the Air Basin. CalEEMod calculates the exhaust emissions based on CARB OFFROAD methodology using the equation presented below.

---

<sup>3</sup> SCAQMD, *Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans*, 2008.



Construction Off-Road Equipment:

$$\text{Emissions Diesel [lbs]} = \left( \sum_i (\text{EF}_i \times \text{Pop}_i \times \text{AvgHP}_i \times \text{Load}_i \times \text{Activity}_i) \right)$$

Where:  $\text{EF}_i$  = Emission factor from OFFROAD (lbs/hr)  
 $\text{Pop}_i$  = Population (quantity of same equipment)  
 $\text{AvgHP}_i$  = Maximum rated average horsepower (hp)  
 $\text{Load}_i$  = Load Factor (dimensionless)  
 $\text{Activity}_i$  = Hours of operation (hours)  
 $i$  = Summation index

Fugitive dust emissions from use of off-road equipment were also calculated using CalEEMod based on the types of equipment used during grading activities and based on the amount of import/export from loading or unloading dirt into haul trucks. These methods have been adapted from USEPA's AP-42 method for Western Coal Mining. As recommended by SCAQMD, the fugitive dust emissions from the grading phase are calculated using the methodology described in USEPA AP-42.  $\text{PM}_{10}$  and  $\text{PM}_{2.5}$  emissions from fugitive dust will be controlled by watering the construction site three times a day consistent with SCAQMD Rule 403 and were estimated to be reduced by 61 percent.

*(b) Emissions from On-Road Trips*

Construction generates on-road vehicle exhaust, evaporative, and dust emissions from personal vehicles for worker commuting, vendor deliveries, and trucks for soil and material hauling. These emissions are based on the number of trips and VMT along with emission factors from EMFAC. The emissions from mobile sources were calculated with the trip rates, trip lengths and emission factors for running from EMFAC as follows:

Construction On-Road Equipment:

$$\text{Emissions pollutant (lbs)} = \text{VMT} * \text{EF running, pollutant}$$

Where: VMT = vehicle miles traveled (miles)

EF running,pollutant = emission factor for running emissions (lbs/VMT)

Evaporative, starting, and idling emissions in CalEEMod were calculated by multiplying the number of trips times the respective emission factor for each pollutant.

*(c) Emissions from Architectural Coating*

VOC off-gassing emissions result from evaporation of solvents contained in surface coatings. CalEEMod calculates the VOC evaporative emissions from application of residential and non-residential surface coatings using the following equation:

Construction Architectural Coating Emissions:

$$\text{Emissions Architectural Coatings (lbs)} = \text{EF}_{\text{AC}} \times F \times A_{\text{paint}}$$

Where:  $\text{EF}_{\text{AC}}$  = Emission Factor (lb/sf)

$A_{\text{paint}}$  = Building Surface Area (sf)

The CalEEMod tool assumes the total surface for painting equals 2.7 times the floor square footage for residential and 2 times that for nonresidential square footage. All of the land use information provided by a metric other than square footage will be converted to square footage using the default conversions or user defined equivalence.

F = fraction of surface area [%].

The default values based on SCAQMD methods used in their coating rules are 75 percent for the interior surfaces and 25 percent for the exterior shell. Parking areas are based on 6-percent coverage.

The emission factor (EF) is based on the VOC content of the surface coatings and is calculated estimated using the equation below:

$$\text{EF}_{\text{AC}} = C_{\text{VOC}}/454(\text{g/lb}) \times 3.785(\text{L/gal})/180(\text{sf})$$

Where: EF = emission factor (lb/sf)

C = VOC content (g/L or gram per liter)

The emission factors for coating categories were calculated using the equation above based on default VOC content from provided by the air districts or CARB's statewide limits in CalEEMod. Architectural coating VOC emission factors are also consistent with SCAQMD Rule 1113 as discussed above.

*(d) Emissions from Paving*

CalEEMod estimates VOC off-gassing emissions associated with asphalt paving of parking lots using the following equation:

$$\text{Emissions}_{\text{SAP}} (\text{lbs}) = \text{EF}_{\text{AP}} \times A_{\text{parking}}$$

Where: EF = emission factor (lb/acre)

A = area of the parking lot (acre)

Note: The Sacramento Metropolitan Air Quality Management District (SMAQMD) default emission factor is 2.62 lb/acre.

**(2) Operation**

Similar to construction, the SCAQMD-recommended CalEEMod was used to calculate potential emissions generated by the Project, including area source, energy sources (electricity and natural gas), mobile source, solid waste generation and disposal, and water usage/wastewater generation.

*(a) Area Source Emissions*

Area source emissions were calculated using the CalEEMod emissions inventory model, which includes landscape maintenance equipment. Pollutant emissions generated by the Project were calculated using CalEEMod defaults, based upon the land uses that will be included in each project.

The combustion of fossil fuels to operate landscape equipment such as lawnmowers and trimmers, results in pollutant emissions. The emissions occur on-site and are considered a direct source of pollutant emissions. The emissions for landscaping equipment are based on the size of the land uses, the pollutant emission factors for fuel combustion. Pollutant emissions from landscaping equipment are generally calculated in CalEEMod as follows:

Landscaping Equipment:

$$\text{Landscaping Equipment Emissions [lbs]} = ( \sum_i (\text{Units} \times \text{EF}_{\text{LE}} \times \text{A}_{\text{LE}})_i )$$

Where: Units = Number of land use units (same land use type) [1,000 sf]

EF<sub>LE</sub> = Emission factor [grams (g)/1,000 sfdays]

*i* = Summation index

Note: For residential land uses, emission factors are specified in units of dwelling units (DU) instead of 1,000 sf.

*(b) Energy Emissions (Electricity and Natural Gas)*

Pollutant emissions are emitted as a result of activities in buildings when electricity and natural gas are used as energy sources. Combustion of any type of fuel emits pollutant emissions directly into the atmosphere; when this occurs in a building, it is a direct emission source associated with that building. Pollutant emissions are also emitted during the generation of electricity from fossil fuels. When electricity is used in a building, the electricity generation typically takes place off-site at the power plant; electricity use in a building generally causes emissions in an indirect manner.

Energy demand emissions were calculated using the CalEEMod emissions inventory model. Energy use in buildings is divided into energy consumed by the built environment and energy consumed by uses that are independent of the construction of the building such as in plug-in appliances. CalEEMod calculates energy use from systems covered by Title 24 Building Energy Efficiency Standards (e.g., heating, ventilation, and air conditioning [HVAC] system, water heating system, and lighting system); energy use from lighting; and energy use from office equipment, appliances, plug-ins, and other sources not covered by Title 24 or lighting.

CalEEMod energy demand is based on the California Energy Commission (CEC) sponsored California Commercial End Use Survey (CEUS) study.<sup>4</sup> The data is specific for climate zones and, therefore, Zone 11 was selected for the Project Site based on the ZIP Code tool. Since these studies are based on older buildings, adjustments have been made to account for changes to the 2016 Title 24 building codes.

---

<sup>4</sup> CEC, *Commercial End-Use Survey, March 2006*.

### Electricity

Because power plants are existing stationary sources permitted by air districts and/or the USEPA, criteria pollutant emissions are generally associated with the power plants themselves, and not individual buildings or electricity users. Additionally, criteria pollutant emissions from power plants are subject to local, state, and federal control measures, which can be considered to be the maximum feasible level of mitigation for stack emissions. In contrast, GHG emissions from power plants are not subject to stationary source permitting requirements to the same degree as criteria pollutants. As such, GHGs emitted by power plants may be indirectly attributed to individual buildings and electricity users, who have the greatest ability to decrease usage by applying mitigation measures to individual electricity “end uses.” CalEEMod therefore calculates GHG emissions (but not criteria pollutant emissions) from regional power plants associated with building electricity use.

Emissions associated with electricity demand are based on the size of the residential and supportive service uses, the electrical demand factors for the land uses, the emission factors for the electricity utility provider, and the GWP values for the GHGs emitted. Annual electricity GHG emissions in units of MTCO<sub>2e</sub> are calculated as follows:

#### Electricity:

$$\text{Annual Emissions [MTCO}_2\text{e]} = ( \sum_i (\text{Units} \times D_E \times EF_E \times \text{GWP})_i ) \div 2,204.62$$

Where: Units = Number of land use units (same land use type) [1,000 sf]  
 $D_E$  = Electrical demand factor [megawatt-hour (MWh)/1,000 sf/yr]  
 $EF_E$  = GHG emission factor [pounds per megawatt-hour (MWh)]  
 GWP = Global warming potential [CO<sub>2</sub> = 1, CH<sub>4</sub> = 21, N<sub>2</sub>O = 310]  
 2,204.62 = Conversion factor [pounds/MT]  
 $i$  = Summation index

Note: For residential land uses, emission factors are specified in units of dwelling units (DU) instead of 1,000 sf.

GHG emissions from electricity use are directly dependent on the electricity utility provider. The Los Angeles Department of Water and Power (LADWP) provides electric service to the Project Site. Thus, GHG intensity factors for LADWP were selected in CalEEMod. Intensity factors for GHGs due to electrical generation to serve the electrical demands of the existing condition were obtained from the LADWP 2016 Power Integrated Resource Plan, which provides a CO<sub>2</sub> intensity of 1,094 pounds of CO<sub>2</sub> per MWh.

Currently, LADWP provides 29 percent of electricity via renewable sources.<sup>5</sup> By 2020, LADWP is expecting to meet the State's Renewables Portfolio Standard of at least 33 percent of electricity via renewable sources and achieve a CO<sub>2</sub> intensity of 840 pounds of CO<sub>2</sub> per MWh. By 2030, at least 50 percent of electricity shall be obtained from renewable sources. As year-by-year data is currently not available, the CO<sub>2</sub> intensity factor for the Project buildout was determined based on straight line extrapolation based on current and Year 2026 data points. Emission factors for CH<sub>4</sub> and N<sub>2</sub>O were obtained from the CalEEMod.

### Natural Gas

The direct source emissions associated with natural gas combustion are based on the size of the residential and supportive service uses and the natural gas combustion factors for the land uses in units of million British thermal units (MMBtu). Natural gas emissions are calculated in CalEEMod as follows:

#### Natural Gas:

$$\text{Natural Gas Emissions (lbs)} = ( \sum_i (\text{Units} \times D_{\text{NG}} \times EF_{\text{NG}})_i )$$

Where: Units = Number of land use units (same land use type) [1,000 sf]  
 $D_{\text{NG}}$  = Natural Gas combustion factor [MMBtu/1,000 sf]  
 $EF_{\text{NG}}$  = Natural Gas combustion factor [pounds/MMBtu]  
 $i$  = Summation index

Note: For residential land uses, emission factors are specified in units of dwelling units (DU) instead of 1,000 sf.

#### *(c) Mobile Source Emissions*

Mobile-source emissions were calculated using the CalEEMod emissions inventory model. CalEEMod calculates the emissions associated with on-road mobile sources associated with residents, employees, visitors, and delivery vehicles visiting the Project Site based on the number of daily trips generated and vehicle miles traveled (VMT). CalEEMod calculates VMT based on the type of land use, trip purpose, trip type percentages for each land use subtype in the project (primary, diverted, and pass-by). The model assumes that diverted trips are assumed to be 25 percent of the primary trip lengths

---

<sup>5</sup> California Energy Commission, *Utility Annual Power Content Labels for 2016*, [www.energy.ca.gov/pcl/labels/](http://www.energy.ca.gov/pcl/labels/).

and pass-by trips are assumed to be 0.1 mile in length and are a result of no diversion from the primary route. The Los Angeles County urban primary trip distance was selected for this analysis. Modeling was also conducted using the Los Angeles County vehicle fleet mix for all vehicle types as provided in EMFAC2014.

Mobile source emissions were generally calculated in CalEEMod as follows:

Mobile:

$$\text{Mobile Emissions [lbs]} = ( \sum_i (\text{Units} \times \text{ADT} \times D_{\text{TRIP}} \times \text{EF}_i) )$$

Where: Units = Number of vehicles (same vehicle model year and class)  
 ADT = Average daily trip rate [trips/day]  
 D<sub>TRIP</sub> = Trip distance [miles/trip]  
 EF = Pollutant emission factor [pounds per mile]  
 i = Summation index

Note: For residential land uses, emission factors are specified in units of dwelling units (DU) instead of 1,000 sf.

Mobile source operational GHG emissions were calculated using CalEEMod and are based on the Project trip-generation estimates provided by Gibson Transportation Consulting, Inc.<sup>6</sup> As discussed in Section IV.I, Transportation/Traffic, of this Draft EIR, to calculate daily trips, the number of hotel rooms, and amount of building area for the restaurant uses were multiplied by the applicable trip-generation rates based on the Institute of Transportation Engineers (ITE)'s *Trip Generation, 10th Edition*.

Please refer to the CalEEMod output files for calculation of this reduction in GHG emissions. In addition, Project Design Features GHG-PDF-2 and GHG-PDF-3 would require installation of electric vehicle charging equipment on five percent of code-required parking spaces, and 20 percent of total code-required parking spaces shall be capable of supporting future electric vehicle supply equipment (EVSE). The Draft EIR conservatively does not include reductions of GHG missions from mobile sources from implementation of Project Design Features GHG-PDF-2 and GHG-PDF-3.

---

<sup>6</sup> Gibson Transportation Consulting, Inc., *Traffic Impact Analysis for the Revised citizenM Hotel Project, Hollywood, May 2018*.

The Project design also includes characteristics that would reduce trips and VMT as compared to a standard project within the air basin as measured by the air quality model (CalEEMod). The Project represents an infill development within an existing urbanized area that would concentrate new hotel and restaurant uses within an HQTAs. The Project Site is located approximately 500 feet from the Metro Red Line Hollywood/Vine Station. In addition, in accordance with Mitigation Measure TR-MM-1, the Project Applicant shall implement a TDM Program that includes strategies to promote non-auto travel and reduce the use of single occupant vehicles trips. Project characteristics that would reduce trips and VMT in comparison to a project without reduction measures within the air basin as measured by CalEEMod were provided in the CalEEMod output files.

*(d) Stationary Source (Emergency Generator Emissions)*

Emissions of GHGs associated with use of emergency generators were calculated using CalEEMod, in which emission factors are based on Table 3.4-1 (Gaseous Emission Factors for Large Stationary Diesel Engines) from EPA's AP-42: Compilation of Air Pollutant Emission Factors. The emissions are based on the horsepower rating of the diesel generator and the number of hours operated per year for testing purposes. Annual emergency generator GHG emissions in units of MTCO<sub>2e</sub> were calculated as follows:

Emergency Generator:

$$\text{Emissions [lbs]} = (\text{Total HP} \times \text{LF} \times \text{HR} \times \text{EF})$$

Where: Total HP = Total horsepower of emergency generators (Hp)

LF = Load Factor (CalEEMod default of 0.73)

HR = Hours Operated per Year

EF = AP-42 Emission Factor of 1.16 lb/hp-hr)

*(e) Solid Waste Emissions*

The generation of municipal solid waste (MSW) from day-to-day operational activities generally consists of product packaging, grass clippings, furniture, clothing, bottles, food scraps, newspapers, plastic, and other items routinely disposed of in trash bins. A portion of the MSW is diverted to waste recycling and reclamation facilities. Waste that is not diverted is usually sent to local landfills for disposal. MSW that is disposed in landfills results in GHG emissions of CO<sub>2</sub> and CH<sub>4</sub> from the decomposition of the waste that occurs over the span of many years.



Emissions of GHGs associated with solid waste disposal were calculated using the CalEEMod emissions inventory model. The emissions are based on the size of the residential and supportive service uses, the waste disposal rate for the land uses, the waste diversion rate, the GHG emission factors for solid waste decomposition, and the GWP values for the GHGs emitted. Annual waste disposal GHG emissions in units of MTCO<sub>2e</sub> were calculated in CalEEMod as follows:

Solid Waste:

$$\text{Annual Emissions [MTCO}_2\text{e]} = ( \sum_i (\text{Units} \times D_{\text{MSW}} \times EF_{\text{MSW}} \times \text{GWP})_i ) \div 1.1023$$

Where: Units = Number of land use units (same land use type) [1,000 sf]

$D_{\text{MSW}}$  = Waste disposal rate [tons/1,000 sf/yr]

$EF_{\text{MSW}}$  = GHG emission factor [tons/ton waste]

GWP = Global warming potential [CO<sub>2</sub> = 1, CH<sub>4</sub> = 21, N<sub>2</sub>O = 310]

1.1023 = Conversion factor [tons/MT]

$i$  = Summation index

Note: For residential land uses, emission factors are specified in units of dwelling units (DU) instead of 1,000 sf.

CalEEMod allows the input of several variables to quantify solid waste emissions. The model requires the amount of waste disposed, which is the product of the waste disposal rate times the land use units. CalEEMod default annual solid waste disposal rates used. The GHG emission factors, particularly for CH<sub>4</sub>, depend on characteristics of the landfill, such as the presence of a landfill gas capture system and subsequent flaring or energy recovery. The default values, as provided in CalEEMod, for landfill gas capture (e.g., no capture, flaring, energy recovery), which are statewide averages, were used in this assessment. The Project includes a 50 percent recycling/diversion rate.

*(f) Water Usage and Wastewater Generation Emissions*

GHG emissions are related to the energy used to convey, treat, and distribute water and wastewater. Thus, these emissions are generally indirect emissions from the production of electricity to power these systems. Three processes are necessary to supply potable water and include: (1) supply and conveyance of the water from the source; (2) treatment of the water to potable standards; and (3) distribution of the water to individual users. After use, energy is used as the wastewater is treated and reused as reclaimed water.

Emissions related to water usage and wastewater generation were calculated using the CalEEMod emissions inventory model. The emissions are based on the size of the residential and supportive service uses, the water demand factors, the electrical intensity factors for water supply, treatment, and distribution and for wastewater treatment, the GHG emission factors for the electricity utility provider, and the GWP values for the GHGs emitted. CalEEMod default annual water demand and wastewater rates were used. GHG emissions due to electricity are calculated in CalEEMod as follows for indoor and outdoor water demand:

Water Supply, Treatment, and Distribution; Wastewater Treatment (electricity):

$$\text{Annual Emissions [MTCO}_2\text{e]} = \left( \sum_i (\text{Units} \times D_w \times (\text{El}_w \div 1,000) \times \text{EF}_w \times \text{GWP})_i \right) \div 2,204.62$$

Where: Units = Number of land use units (same land use type) [1,000 sf]  
 $D_w$  = Water demand factor [million gallons (Mgal)/1,000 sf/yr]  
 $\text{El}_w$  = Electricity intensity factor [kilowatt-hours (kWh)/Mgal]  
 1,000 = Conversion factor [kWh/MWh]  
 $\text{EF}_w$  = GHG emission factor [pounds/MWh]  
 GWP = Global warming potential [ $\text{CO}_2 = 1$ ,  $\text{CH}_4 = 21$ ,  $\text{N}_2\text{O} = 310$ ]  
 2,205 = Conversion factor [pounds/MT]  
 $i$  = Summation index

Note: For residential land uses, emission factors are specified in units of dwelling units (DU) instead of 1,000 sf.

CalEEMod provides options to account for the use of water saving features such as the use of low-flow water fixtures (e.g., low-flow faucets, low-flow toilets). The same electricity GHG emissions factors discussed above were used for water and wastewater energy usage. In addition, the calculation of Project GHG emissions from water/wastewater usage accounts for a 20-percent reduction in water/wastewater emissions consistent with specific mandatory requirements of the Los Angeles Green Building Code, as compared to the Project without sustainability features related to water conservation.

# Air Quality Worksheets

- Calculation of Localized Significance Thresholds
- Summary of Emissions
- CalEEMod Output Files
  - Baseline (2016)
  - Baseline (2022)
  - Construction and Operation

# **citizenM Hollywood & Vine Project**

## Draft EIR

November 2018

- Calculation of Localized Significance Thresholds

**Step 1. Determine Allowable Increase using 98th percentile NO2 and Max NO2 data**

**Central LA NO2 Monitoring Data**

| Stn # | City | Design Value | 98th percentile, ppb |      |      |      | Threshold (ppb) | Allowable Increase (ppb) |
|-------|------|--------------|----------------------|------|------|------|-----------------|--------------------------|
|       |      | 2013-2015    | 2012                 | 2013 | 2014 | 2015 |                 |                          |
| 87    | CELA | 65           | 68.9                 | 63   | 69   | 62   | 100             | 35                       |

  

| Stn # | City | Design Value | Max Hourly, ppb |      |      |      | Threshold (ppb) | Allowable Increase (ppb) |
|-------|------|--------------|-----------------|------|------|------|-----------------|--------------------------|
|       |      | 2006-2008    | 2006            | 2007 | 2008 | 2009 |                 |                          |
| 87    | CELA | 120          | 120             | 100  | 110  | 110  | 180             | 60                       |

Max Hourly vs. 98th Percentile Ratio (Allowable Increase) 59%

**Step 2. Use ratio in Step 1 to determine LST lookup value. Extrapolate/Interpolate LST look-up value for project area**

**LST Threshold (SRA 1, 25 meter receptor)**

| Project Size (acres) | NO2 (lbs/day) | 98th Percentile NO2 (lbs/day) | CO (lbs/day) | PM10 (lbs/day) | PM2.5 (lbs/day) | PM10 Ops (lbs/day) | PM2.5 Ops (lbs/day) |
|----------------------|---------------|-------------------------------|--------------|----------------|-----------------|--------------------|---------------------|
| 1                    | 74            | 43                            | 680          | 5              | 3               | 2                  | 1                   |

# **citizenM Hollywood & Vine Project**

## Draft EIR

November 2018

- Summary of Emissions

## AQ Summary

### Construction Regional

|                   | ROG       | NOx        | CO         | SO2        | PM10 Total | PM2.5 Total |
|-------------------|-----------|------------|------------|------------|------------|-------------|
| Year              |           |            |            |            |            |             |
| 2020              | 5         | 90         | 40         | 0          | 9          | 4           |
| 2021              | 39        | 26         | 30         | 0          | 4          | 2           |
| 2022              | 39        | 9          | 13         | 0          | 2          | 1           |
| <b>Maximum</b>    | <b>39</b> | <b>90</b>  | <b>40</b>  | <b>0</b>   | <b>9</b>   | <b>4</b>    |
| <b>Threshold</b>  | <b>75</b> | <b>100</b> | <b>550</b> | <b>150</b> | <b>150</b> | <b>55</b>   |
| <b>Difference</b> | <b>36</b> | <b>10</b>  | <b>510</b> | <b>150</b> | <b>141</b> | <b>51</b>   |

### On-site

|                   | ROG | NOx       | CO         | SO2 | PM10 Total | PM2.5 Total |
|-------------------|-----|-----------|------------|-----|------------|-------------|
| Year              |     |           |            |     |            |             |
| 2020              |     | 37        | 26         |     | 4          | 2.7         |
| 2021              |     | 22        | 23         |     | 1          | 1.0         |
| 2022              |     | 7         | 10         |     | 0          | 0.3         |
| <b>Maximum</b>    |     | <b>37</b> | <b>26</b>  |     | <b>4</b>   | <b>2.7</b>  |
| <b>Threshold</b>  |     | <b>43</b> | <b>680</b> |     | <b>5</b>   | <b>3.0</b>  |
| <b>Difference</b> |     | <b>7</b>  | <b>654</b> |     | <b>1</b>   | <b>0.3</b>  |

### Operation

#### Baseline at Buildout

|              |               |               |               |               |               |               |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Area         | 0.1428        | 0.0000        | 0.0007        | 0.0000        | 0.0000        | 0.0000        |
| Energy       | 0.0443        | 0.4022        | 0.3379        | 0.0024        | 0.0306        | 0.0306        |
| Mobile       | 0.6229        | 2.5603        | 4.4608        | 0.0115        | 0.8253        | 0.2281        |
| Stationary   | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        |
| <b>Total</b> | <b>0.8100</b> | <b>2.9625</b> | <b>4.7994</b> | <b>0.0139</b> | <b>0.8559</b> | <b>0.2587</b> |

#### Project at Buildout

|              |                |                |                |               |               |               |
|--------------|----------------|----------------|----------------|---------------|---------------|---------------|
| Area         | 7.9251         | 0.0003         | 0.0351         | 0.0000        | 0.0001        | 0.0001        |
| Energy       | 0.2623         | 2.3850         | 2.0034         | 0.0143        | 0.1813        | 0.1813        |
| Mobile       | 3.2670         | 13.9569        | 26.8360        | 0.0770        | 5.9374        | 1.6358        |
| Stationary   | 0.0448         | 0.1593         | 0.8285         | 0.0016        | 0.9560        | 0.0064        |
| <b>Total</b> | <b>11.4992</b> | <b>16.5015</b> | <b>29.7030</b> | <b>0.0929</b> | <b>7.0748</b> | <b>1.8236</b> |

#### Net

|                   |           |           |            |            |            |           |
|-------------------|-----------|-----------|------------|------------|------------|-----------|
| Area              | 8         | 0         | 0          | 0          | 0          | 0         |
| Energy            | 0         | 2         | 2          | 0          | 0          | 0         |
| Mobile            | 3         | 11        | 22         | 0          | 5          | 1         |
| Stationary        | 0         | 0         | 1          | 0          | 1          | 0         |
| <b>Total</b>      | <b>11</b> | <b>14</b> | <b>25</b>  | <b>0</b>   | <b>6</b>   | <b>2</b>  |
| <b>Threshold</b>  | <b>55</b> | <b>55</b> | <b>550</b> | <b>150</b> | <b>150</b> | <b>55</b> |
| <b>Difference</b> | <b>44</b> | <b>41</b> | <b>525</b> | <b>150</b> | <b>144</b> | <b>53</b> |

|                        |  |           |            |  |          |          |
|------------------------|--|-----------|------------|--|----------|----------|
| <b>Total Localized</b> |  | <b>2</b>  | <b>3</b>   |  | <b>1</b> | <b>0</b> |
| <b>Thresholds</b>      |  | <b>43</b> | <b>680</b> |  | <b>2</b> | <b>1</b> |
| <b>Difference</b>      |  | <b>41</b> | <b>677</b> |  | <b>1</b> | <b>1</b> |

# **citizenM Hollywood & Vine Project**

## Draft EIR

November 2018

- CalEEMod Output Files
  - Baseline (2016)
  - Baseline (2022)
  - Construction and Operation



citizenM - Existing Uses (2016) - Los Angeles-South Coast County, Winter

**citizenM - Existing Uses (2016)**  
**Los Angeles-South Coast County, Winter**

**1.0 Project Characteristics**

**1.1 Land Usage**

| Land Uses          | Size | Metric   | Lot Acreage | Floor Surface Area | Population |
|--------------------|------|----------|-------------|--------------------|------------|
| Quality Restaurant | 6.39 | 1000sqft | 0.28        | 6,393.00           | 0          |

**1.2 Other Project Characteristics**

|                                 |   |                                 |       |                                  |       |
|---------------------------------|---|---------------------------------|-------|----------------------------------|-------|
| <b>Urbanization</b>             | Urban                                   | <b>Wind Speed (m/s)</b>         | 2.2   | <b>Precipitation Freq (Days)</b> | 33    |
| <b>Climate Zone</b>             | 11                                      | <b>Operational Year</b>         |       | 2016                             |       |
| <b>Utility Company</b>          | Los Angeles Department of Water & Power |                                 |       |                                  |       |
| <b>CO2 Intensity (lb/MW hr)</b> | 1094                                    | <b>CH4 Intensity (lb/MW hr)</b> | 0.029 | <b>N2O Intensity (lb/MW hr)</b>  | 0.006 |

**1.3 User Entered Comments & Non-Default Data**

- Project Characteristics - 2015 RPS
- Land Use - Existing uses
- Energy Use -
- Mobile Land Use Mitigation -
- Waste Mitigation -
- Vehicle Trips - ITE10

| Table Name                | Column Name        | Default Value | New Value |
|---------------------------|--------------------|---------------|-----------|
| tblLandUse                | LotAcreage         | 0.15          | 0.28      |
| tblProjectCharacteristics | CO2IntensityFactor | 1227.89       | 1094      |
| tblVehicleTrips           | ST_TR              | 94.36         | 87.95     |
| tblVehicleTrips           | SU_TR              | 72.16         | 67.26     |
| tblVehicleTrips           | WD_TR              | 89.95         | 83.84     |

**2.0 Emissions Summary**

**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     | lb/day        |               |                |               |               |               |               |                |               |               | lb/day   |                   |                   |               |                    |                   |
| Area         | 0.1428        | 1.0000e-005   | 6.7000e-004    | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 1.4000e-003       | 1.4000e-003       | 0.0000        |                    | 1.5000e-003       |
| Energy       | 0.0443        | 0.4022        | 0.3379         | 2.4100e-003   |               | 0.0306        | 0.0306        |                | 0.0306        | 0.0306        |          | 482.6741          | 482.6741          | 9.2500e-003   | 8.8500e-003        | 485.5424          |
| Mobile       | 1.2683        | 4.4857        | 12.2942        | 0.0244        | 1.7025        | 0.0407        | 1.7432        | 0.4559         | 0.0384        | 0.4943        |          | 2,471.4023        | 2,471.4023        | 0.2026        |                    | 2,476.4676        |
| <b>Total</b> | <b>1.4554</b> | <b>4.8879</b> | <b>12.6328</b> | <b>0.0268</b> | <b>1.7025</b> | <b>0.0713</b> | <b>1.7737</b> | <b>0.4559</b>  | <b>0.0690</b> | <b>0.5249</b> |          | <b>2,954.0778</b> | <b>2,954.0778</b> | <b>0.2119</b> | <b>8.8500e-003</b> | <b>2,962.0116</b> |

**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     | lb/day        |               |               |               |               |               |               |                |               |               | lb/day   |                   |                   |               |                    |                   |
| Area         | 0.1428        | 1.0000e-005   | 6.7000e-004   | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 1.4000e-003       | 1.4000e-003       | 0.0000        |                    | 1.5000e-003       |
| Energy       | 0.0443        | 0.4022        | 0.3379        | 2.4100e-003   |               | 0.0306        | 0.0306        |                | 0.0306        | 0.0306        |          | 482.6741          | 482.6741          | 9.2500e-003   | 8.8500e-003        | 485.5424          |
| Mobile       | 1.0850        | 3.2746        | 8.1243        | 0.0129        | 0.8150        | 0.0227        | 0.8376        | 0.2182         | 0.0214        | 0.2396        |          | 1,306.9387        | 1,306.9387        | 0.1291        |                    | 1,310.1654        |
| <b>Total</b> | <b>1.2720</b> | <b>3.6768</b> | <b>8.4628</b> | <b>0.0153</b> | <b>0.8150</b> | <b>0.0532</b> | <b>0.8682</b> | <b>0.2182</b>  | <b>0.0520</b> | <b>0.2702</b> |          | <b>1,789.6142</b> | <b>1,789.6142</b> | <b>0.1383</b> | <b>8.8500e-003</b> | <b>1,795.7094</b> |

  

|                   | ROG   | NOx   | CO    | SO2   | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4   | N2O  | CO2e  |
|-------------------|-------|-------|-------|-------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|-------|------|-------|
| Percent Reduction | 12.60 | 24.78 | 33.01 | 42.86 | 52.13         | 25.28        | 51.05      | 52.13          | 24.68         | 48.52       | 0.00     | 39.42     | 39.42     | 34.71 | 0.00 | 39.38 |

**4.0 Operational Detail - Mobile**

**4.1 Mitigation Measures Mobile**

- Improve Walkability Design
- Improve Destination Accessibility
- Increase Transit Accessibility

|             | ROG    | NOx    | CO      | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2  | Total CO2  | CH4    | N2O | CO2e       |
|-------------|--------|--------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|------------|------------|--------|-----|------------|
| Category    | lb/day |        |         |        |               |              |            |                |               |             | lb/day   |            |            |        |     |            |
| Mitigated   | 1.0850 | 3.2746 | 8.1243  | 0.0129 | 0.8150        | 0.0227       | 0.8376     | 0.2182         | 0.0214        | 0.2396      |          | 1,306.9387 | 1,306.9387 | 0.1291 |     | 1,310.1654 |
| Unmitigated | 1.2683 | 4.4857 | 12.2942 | 0.0244 | 1.7025        | 0.0407       | 1.7432     | 0.4559         | 0.0384        | 0.4943      |          | 2,471.4023 | 2,471.4023 | 0.2026 |     | 2,476.4676 |

**4.2 Trip Summary Information**

| Land Use           | Average Daily Trip Rate |               |               | Unmitigated    | Mitigated      |
|--------------------|-------------------------|---------------|---------------|----------------|----------------|
|                    | Weekday                 | Saturday      | Sunday        | Annual VMT     | Annual VMT     |
| Quality Restaurant | 535.74                  | 562.00        | 429.79        | 746,487        | 357,334        |
| <b>Total</b>       | <b>535.74</b>           | <b>562.00</b> | <b>429.79</b> | <b>746,487</b> | <b>357,334</b> |

**4.3 Trip Type Information**

| Land Use           | Miles      |            |             | Trip %    |            |             | Trip Purpose % |          |         |
|--------------------|------------|------------|-------------|-----------|------------|-------------|----------------|----------|---------|
|                    | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C- | H-S or C-C | H-O or C-NW | Primary        | Diverted | Pass-by |
| Quality Restaurant | 16.60      | 8.40       | 6.90        | 12.00     | 69.00      | 19.00       | 38             | 18       | 44      |

**4.4 Fleet Mix**

| Land Use           | LDA      | LDT1     | LDT2     | MDV      | LHD1     | LHD2     | MHD      | HHD      | OBUS     | UBUS     | MCY      | SBUS     | MH       |
|--------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Quality Restaurant | 0.546581 | 0.047315 | 0.196959 | 0.128768 | 0.019038 | 0.005774 | 0.017712 | 0.026513 | 0.002264 | 0.002897 | 0.004538 | 0.000646 | 0.000994 |

## 5.0 Energy Detail

Historical Energy Use: Y

### 5.1 Mitigation Measures Energy

|                        | ROG    | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O         | CO2e     |
|------------------------|--------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|-------------|----------|
| Category               | lb/day |        |        |             |               |              |            |                |               |             | lb/day   |           |           |             |             |          |
| NaturalGas Mitigated   | 0.0443 | 0.4022 | 0.3379 | 2.4100e-003 |               | 0.0306       | 0.0306     |                | 0.0306        | 0.0306      |          | 482.6741  | 482.6741  | 9.2500e-003 | 8.8500e-003 | 485.5424 |
| NaturalGas Unmitigated | 0.0443 | 0.4022 | 0.3379 | 2.4100e-003 |               | 0.0306       | 0.0306     |                | 0.0306        | 0.0306      |          | 482.6741  | 482.6741  | 9.2500e-003 | 8.8500e-003 | 485.5424 |

### 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        | lb/day        |               |               |                    |               |               |               |                |               |               | lb/day   |                 |                 |                    |                    |                 |
| Quality Restaurant | 4102.73        | 0.0443        | 0.4022        | 0.3379        | 2.4100e-003        |               | 0.0306        | 0.0306        |                | 0.0306        | 0.0306        |          | 482.6741        | 482.6741        | 9.2500e-003        | 8.8500e-003        | 485.5424        |
| <b>Total</b>       |                | <b>0.0443</b> | <b>0.4022</b> | <b>0.3379</b> | <b>2.4100e-003</b> |               | <b>0.0306</b> | <b>0.0306</b> |                | <b>0.0306</b> | <b>0.0306</b> |          | <b>482.6741</b> | <b>482.6741</b> | <b>9.2500e-003</b> | <b>8.8500e-003</b> | <b>485.5424</b> |

#### 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        | lb/day        |               |               |                    |               |               |               |                |               |               | lb/day   |                 |                 |                    |                    |                 |
| Quality Restaurant | 4.10273        | 0.0443        | 0.4022        | 0.3379        | 2.4100e-003        |               | 0.0306        | 0.0306        |                | 0.0306        | 0.0306        |          | 482.6741        | 482.6741        | 9.2500e-003        | 8.8500e-003        | 485.5424        |
| <b>Total</b>       |                | <b>0.0443</b> | <b>0.4022</b> | <b>0.3379</b> | <b>2.4100e-003</b> |               | <b>0.0306</b> | <b>0.0306</b> |                | <b>0.0306</b> | <b>0.0306</b> |          | <b>482.6741</b> | <b>482.6741</b> | <b>9.2500e-003</b> | <b>8.8500e-003</b> | <b>485.5424</b> |

## 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    | lb/day |             |             |        |  |        |        |  |        |        | lb/day |             |             |        |  |             |
|-------------|--------|-------------|-------------|--------|--|--------|--------|--|--------|--------|--------|-------------|-------------|--------|--|-------------|
| Mitigated   | 0.1428 | 1.0000e-005 | 6.7000e-004 | 0.0000 |  | 0.0000 | 0.0000 |  | 0.0000 | 0.0000 |        | 1.4000e-003 | 1.4000e-003 | 0.0000 |  | 1.5000e-003 |
| Unmitigated | 0.1428 | 1.0000e-005 | 6.7000e-004 | 0.0000 |  | 0.0000 | 0.0000 |  | 0.0000 | 0.0000 |        | 1.4000e-003 | 1.4000e-003 | 0.0000 |  | 1.5000e-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           | lb/day        |                    |                    |               |               |               |               |                |               |               | lb/day   |                    |                    |               |     |                    |
| Architectural Coating | 0.0162        |                    |                    |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          |                    | 0.0000             |               |     | 0.0000             |
| Consumer Products     | 0.1265        |                    |                    |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          |                    | 0.0000             |               |     | 0.0000             |
| Landscaping           | 7.0000e-005   | 1.0000e-005        | 6.7000e-004        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 1.4000e-003        | 1.4000e-003        | 0.0000        |     | 1.5000e-003        |
| <b>Total</b>          | <b>0.1428</b> | <b>1.0000e-005</b> | <b>6.7000e-004</b> | <b>0.0000</b> |               | <b>0.0000</b> | <b>0.0000</b> |                | <b>0.0000</b> | <b>0.0000</b> |          | <b>1.4000e-003</b> | <b>1.4000e-003</b> | <b>0.0000</b> |     | <b>1.5000e-003</b> |

### 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           | lb/day        |                    |                    |               |               |               |               |                |               |               | lb/day   |                    |                    |               |     |                    |
| Architectural Coating | 0.0162        |                    |                    |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          |                    | 0.0000             |               |     | 0.0000             |
| Consumer Products     | 0.1265        |                    |                    |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          |                    | 0.0000             |               |     | 0.0000             |
| Landscaping           | 7.0000e-005   | 1.0000e-005        | 6.7000e-004        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 1.4000e-003        | 1.4000e-003        | 0.0000        |     | 1.5000e-003        |
| <b>Total</b>          | <b>0.1428</b> | <b>1.0000e-005</b> | <b>6.7000e-004</b> | <b>0.0000</b> |               | <b>0.0000</b> | <b>0.0000</b> |                | <b>0.0000</b> | <b>0.0000</b> |          | <b>1.4000e-003</b> | <b>1.4000e-003</b> | <b>0.0000</b> |     | <b>1.5000e-003</b> |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

## 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**

---

citizenM - Existing Uses (2022) - Los Angeles-South Coast County, Winter

**citizenM - Existing Uses (2022)**  
**Los Angeles-South Coast County, Winter**

**1.0 Project Characteristics**

**1.1 Land Usage**

| Land Uses          | Size | Metric   | Lot Acreage | Floor Surface Area | Population |
|--------------------|------|----------|-------------|--------------------|------------|
| Quality Restaurant | 6.39 | 1000sqft | 0.28        | 6,393.00           | 0          |

**1.2 Other Project Characteristics**

|                                 |   |                                 |       |                                  |       |
|---------------------------------|---|---------------------------------|-------|----------------------------------|-------|
| <b>Urbanization</b>             | Urban                                   | <b>Wind Speed (m/s)</b>         | 2.2   | <b>Precipitation Freq (Days)</b> | 33    |
| <b>Climate Zone</b>             | 11                                      |                                 |       | <b>Operational Year</b>          | 2022  |
| <b>Utility Company</b>          | Los Angeles Department of Water & Power |                                 |       |                                  |       |
| <b>CO2 Intensity (lb/MW hr)</b> | 840                                     | <b>CH4 Intensity (lb/MW hr)</b> | 0.029 | <b>N2O Intensity (lb/MW hr)</b>  | 0.006 |

**1.3 User Entered Comments & Non-Default Data**

- Project Characteristics - 2020 RPS
- Land Use - Existing uses
- Energy Use -
- Mobile Land Use Mitigation -
- Waste Mitigation -
- Vehicle Trips - ITE10

| Table Name                | Column Name        | Default Value | New Value |
|---------------------------|--------------------|---------------|-----------|
| tblLandUse                | LotAcreage         | 0.15          | 0.28      |
| tblProjectCharacteristics | CO2IntensityFactor | 1227.89       | 840       |
| tblVehicleTrips           | ST_TR              | 94.36         | 87.95     |
| tblVehicleTrips           | SU_TR              | 72.16         | 67.26     |
| tblVehicleTrips           | WD_TR              | 89.95         | 83.84     |

**2.0 Emissions Summary**

**2.2 Overall Operational**

**Unmitigated Operational**

| Category     | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio-CO2 | NBio-CO2          | Total CO2         | CH4           | N2O                | CO2e              |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------|-------------------|-------------------|---------------|--------------------|-------------------|
|              | lb/day        |               |               |               |               |               |               |                |               |               | lb/day  |                   |                   |               |                    |                   |
| Area         | 0.1428        | 1.0000e-005   | 6.5000e-004   | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |         | 1.4000e-003       | 1.4000e-003       | 0.0000        |                    | 1.4900e-003       |
| Energy       | 0.0443        | 0.4022        | 0.3379        | 2.4100e-003   |               | 0.0306        | 0.0306        |                | 0.0306        | 0.0306        |         | 482.6741          | 482.6741          | 9.2500e-003   | 8.8500e-003        | 485.5424          |
| Mobile       | 0.7208        | 3.2143        | 6.7982        | 0.0213        | 1.7013        | 0.0190        | 1.7203        | 0.4553         | 0.0177        | 0.4730        |         | 2,172.2228        | 2,172.2228        | 0.1300        |                    | 2,175.4720        |
| <b>Total</b> | <b>0.9078</b> | <b>3.6165</b> | <b>7.1367</b> | <b>0.0237</b> | <b>1.7013</b> | <b>0.0495</b> | <b>1.7509</b> | <b>0.4553</b>  | <b>0.0482</b> | <b>0.5036</b> |         | <b>2,654.8984</b> | <b>2,654.8984</b> | <b>0.1392</b> | <b>8.8500e-003</b> | <b>2,661.0159</b> |

**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     | lb/day        |               |               |               |               |               |               |                |               |               | lb/day   |                   |                   |               |             |                    |                   |
| Area         | 0.1428        | 1.0000e-005   | 6.5000e-004   | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 1.4000e-003       | 1.4000e-003       | 0.0000        |             |                    | 1.4900e-003       |
| Energy       | 0.0443        | 0.4022        | 0.3379        | 2.4100e-003   |               | 0.0306        | 0.0306        |                | 0.0306        | 0.0306        |          | 482.6741          | 482.6741          | 9.2500e-003   | 8.8500e-003 |                    | 485.5424          |
| Mobile       | 0.6229        | 2.5603        | 4.4608        | 0.0115        | 0.8144        | 0.0109        | 0.8253        | 0.2180         | 0.0101        | 0.2281        |          | 1,169.9152        | 1,169.9152        | 0.0836        |             |                    | 1,172.0044        |
| <b>Total</b> | <b>0.8100</b> | <b>2.9625</b> | <b>4.7993</b> | <b>0.0139</b> | <b>0.8144</b> | <b>0.0414</b> | <b>0.8559</b> | <b>0.2180</b>  | <b>0.0407</b> | <b>0.2587</b> |          | <b>1,652.5907</b> | <b>1,652.5907</b> | <b>0.0928</b> |             | <b>8.8500e-003</b> | <b>1,657.5483</b> |

|                          | ROG          | NOx          | CO           | SO2          | Fugitive PM10 | Exhaust PM10 | PM10 Total   | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total  | Bio- CO2    | NBio- CO2    | Total CO2    | CH4          | N2O         | CO2e         |
|--------------------------|--------------|--------------|--------------|--------------|---------------|--------------|--------------|----------------|---------------|--------------|-------------|--------------|--------------|--------------|-------------|--------------|
| <b>Percent Reduction</b> | <b>10.78</b> | <b>18.08</b> | <b>32.75</b> | <b>41.57</b> | <b>52.13</b>  | <b>16.33</b> | <b>51.12</b> | <b>52.13</b>   | <b>15.63</b>  | <b>48.63</b> | <b>0.00</b> | <b>37.75</b> | <b>37.75</b> | <b>33.33</b> | <b>0.00</b> | <b>37.71</b> |

**4.2 Trip Summary Information**

| Land Use           | Average Daily Trip Rate |               |               | Unmitigated Annual VMT | Mitigated Annual VMT |
|--------------------|-------------------------|---------------|---------------|------------------------|----------------------|
|                    | Weekday                 | Saturday      | Sunday        |                        |                      |
| Quality Restaurant | 535.74                  | 562.00        | 429.79        | 746,487                | 357,334              |
| <b>Total</b>       | <b>535.74</b>           | <b>562.00</b> | <b>429.79</b> | <b>746,487</b>         | <b>357,334</b>       |

**4.3 Trip Type Information**

| Land Use           | Miles      |            |             | Trip %    |            |             | Trip Purpose % |          |         |
|--------------------|------------|------------|-------------|-----------|------------|-------------|----------------|----------|---------|
|                    | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C- | H-S or C-C | H-O or C-NW | Primary        | Diverted | Pass-by |
| Quality Restaurant | 16.60      | 8.40       | 6.90        | 12.00     | 69.00      | 19.00       | 38             | 18       | 44      |

**4.4 Fleet Mix**

| Land Use           | LDA      | LDT1     | LDT2     | MDV      | LHD1     | LHD2     | MHD      | HHD      | OBUS     | UBUS     | MCY      | SBUS     | MH       |
|--------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Quality Restaurant | 0.546501 | 0.044961 | 0.204016 | 0.120355 | 0.015740 | 0.006196 | 0.020131 | 0.030678 | 0.002515 | 0.002201 | 0.005142 | 0.000687 | 0.000876 |

**5.0 Energy Detail**

Historical Energy Use: Y

**5.1 Mitigation Measures Energy**

|                         | ROG    | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O         | CO2e     |
|-------------------------|--------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|-------------|----------|
| Category                | lb/day |        |        |             |               |              |            |                |               |             | lb/day   |           |           |             |             |          |
| Natural Gas Mitigated   | 0.0443 | 0.4022 | 0.3379 | 2.4100e-003 |               | 0.0306       | 0.0306     |                | 0.0306        | 0.0306      |          | 482.6741  | 482.6741  | 9.2500e-003 | 8.8500e-003 | 485.5424 |
| Natural Gas Unmitigated | 0.0443 | 0.4022 | 0.3379 | 2.4100e-003 |               | 0.0306       | 0.0306     |                | 0.0306        | 0.0306      |          | 482.6741  | 482.6741  | 9.2500e-003 | 8.8500e-003 | 485.5424 |

**5.2 Energy by Land Use - Natural Gas**

**Unmitigated**

|                    | Natural Gas Use | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4                | N2O                | CO2e            |
|--------------------|-----------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-----------------|-----------------|--------------------|--------------------|-----------------|
| Land Use           | kBTU/yr         | lb/day        |               |               |                    |               |               |               |                |               |               | lb/day   |                 |                 |                    |                    |                 |
| Quality Restaurant | 4102.73         | 0.0443        | 0.4022        | 0.3379        | 2.4100e-003        |               | 0.0306        | 0.0306        |                | 0.0306        | 0.0306        |          | 482.6741        | 482.6741        | 9.2500e-003        | 8.8500e-003        | 485.5424        |
| <b>Total</b>       |                 | <b>0.0443</b> | <b>0.4022</b> | <b>0.3379</b> | <b>2.4100e-003</b> |               | <b>0.0306</b> | <b>0.0306</b> |                | <b>0.0306</b> | <b>0.0306</b> |          | <b>482.6741</b> | <b>482.6741</b> | <b>9.2500e-003</b> | <b>8.8500e-003</b> | <b>485.5424</b> |

**Mitigated**

|                    | Natural Gas Use | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4                | N2O                | CO2e            |
|--------------------|-----------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-----------------|-----------------|--------------------|--------------------|-----------------|
| Land Use           | kBTU/yr         | lb/day        |               |               |                    |               |               |               |                |               |               | lb/day   |                 |                 |                    |                    |                 |
| Quality Restaurant | 4.10273         | 0.0443        | 0.4022        | 0.3379        | 2.4100e-003        |               | 0.0306        | 0.0306        |                | 0.0306        | 0.0306        |          | 482.6741        | 482.6741        | 9.2500e-003        | 8.8500e-003        | 485.5424        |
| <b>Total</b>       |                 | <b>0.0443</b> | <b>0.4022</b> | <b>0.3379</b> | <b>2.4100e-003</b> |               | <b>0.0306</b> | <b>0.0306</b> |                | <b>0.0306</b> | <b>0.0306</b> |          | <b>482.6741</b> | <b>482.6741</b> | <b>9.2500e-003</b> | <b>8.8500e-003</b> | <b>485.5424</b> |

**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    | lb/day |             |             |        |               |              |            |                |               |             | lb/day   |             |             |        |     |             |
| Mitigated   | 0.1428 | 1.0000e-005 | 6.5000e-004 | 0.0000 |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      |          | 1.4000e-003 | 1.4000e-003 | 0.0000 |     | 1.4900e-003 |
| Unmitigated | 0.1428 | 1.0000e-005 | 6.5000e-004 | 0.0000 |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      |          | 1.4000e-003 | 1.4000e-003 | 0.0000 |     | 1.4900e-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           | lb/day        |                    |                    |               |               |               |               |                |               |               | lb/day   |                    |                    |               |     |                    |
| Architectural Coating | 0.0162        |                    |                    |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          |                    | 0.0000             |               |     | 0.0000             |
| Consumer Products     | 0.1265        |                    |                    |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          |                    | 0.0000             |               |     | 0.0000             |
| Landscaping           | 6.0000e-005   | 1.0000e-005        | 6.5000e-004        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 1.4000e-003        | 1.4000e-003        | 0.0000        |     | 1.4900e-003        |
| <b>Total</b>          | <b>0.1428</b> | <b>1.0000e-005</b> | <b>6.5000e-004</b> | <b>0.0000</b> |               | <b>0.0000</b> | <b>0.0000</b> |                | <b>0.0000</b> | <b>0.0000</b> |          | <b>1.4000e-003</b> | <b>1.4000e-003</b> | <b>0.0000</b> |     | <b>1.4900e-003</b> |



**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           | lb/day        |                    |                    |               |               |               |               |                |               |               | lb/day   |                    |                    |               |     |                    |
| Architectural Coating | 0.0162        |                    |                    |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          |                    | 0.0000             |               |     | 0.0000             |
| Consumer Products     | 0.1265        |                    |                    |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          |                    | 0.0000             |               |     | 0.0000             |
| Landscaping           | 6.0000e-005   | 1.0000e-005        | 6.5000e-004        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 1.4000e-003        | 1.4000e-003        | 0.0000        |     | 1.4900e-003        |
| <b>Total</b>          | <b>0.1428</b> | <b>1.0000e-005</b> | <b>6.5000e-004</b> | <b>0.0000</b> |               | <b>0.0000</b> | <b>0.0000</b> |                | <b>0.0000</b> | <b>0.0000</b> |          | <b>1.4000e-003</b> | <b>1.4000e-003</b> | <b>0.0000</b> |     | <b>1.4900e-003</b> |

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

**8.0 Waste Detail**

**8.1 Mitigation Measures Waste**

Institute Recycling and Composting Services

**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**

citizenM - Construction and Operation - Los Angeles-South Coast County, Winter

**citizenM - Construction and Operation**  
**Los Angeles-South Coast County, Winter**

**1.0 Project Characteristics**

**1.1 Land Usage**

| Land Uses                           | Size   | Metric   | Lot Acreage | Floor Surface Area | Population |
|-------------------------------------|--------|----------|-------------|--------------------|------------|
| Enclosed Parking with Elevator      | 98.00  | Space    | 0.88        | 39,200.00          | 0          |
| High Turnover (Sit Down Restaurant) | 5.37   | 1000sqft | 0.12        | 5,373.00           | 0          |
| Hotel                               | 240.00 | Room     | 8.00        | 348,480.00         | 0          |

**1.2 Other Project Characteristics**

|                                 |   |                                 |       |                                  |       |
|---------------------------------|---|---------------------------------|-------|----------------------------------|-------|
| <b>Urbanization</b>             | Urban                                   | <b>Wind Speed (m/s)</b>         | 2.2   | <b>Precipitation Freq (Days)</b> | 33    |
| <b>Climate Zone</b>             | 11                                      |                                 |       | <b>Operational Year</b>          | 2022  |
| <b>Utility Company</b>          | Los Angeles Department of Water & Power |                                 |       |                                  |       |
| <b>CO2 Intensity (lb/MW hr)</b> | 840                                     | <b>CH4 Intensity (lb/MW hr)</b> | 0.029 | <b>N2O Intensity (lb/MW hr)</b>  | 0.006 |

**1.3 User Entered Comments & Non-Default Data**

- Project Characteristics - RPS 2020
- Land Use - Project Site
- Construction Phase - Project Construction Assumptions
- Off-road Equipment - Project Construction Assumptions
- Off-road Equipment - Project Construction Assumptions
- Off-road Equipment - Project Construction Assumptions
- Off-road Equipment - Project Construction Assumptions
- Off-road Equipment - Project Construction Assumptions
- Off-road Equipment - Project Construction Assumptions
- Off-road Equipment - Project Construction Assumptions
- Trips and VMT - Project Construction Assumptions
- Demolition - Demo of existing concrete and building
- Grading - Project Site
- Architectural Coating -
- Vehicle Trips - ITE 10
- Area Coating -
- Energy Use - Parking Adjustment
- Construction Off-road Equipment Mitigation -
- Mobile Land Use Mitigation -
- Energy Mitigation -
- Water Mitigation -
- Waste Mitigation -
- Stationary Sources - Emergency Generators and Fire Pumps -
- Stationary Sources - Emergency Generators and Fire Pumps EF - SCAQMD BACT Requirements

| Table Name           | Column Name | Default Value | New Value |
|----------------------|-------------|---------------|-----------|
| tblConstructionPhase | NumDays     | 20.00         | 23.00     |
| tblConstructionPhase | NumDays     | 20.00         | 45.00     |

|                                |                            |             |             |
|--------------------------------|----------------------------|-------------|-------------|
| tblConstructionPhase           | NumDays                    | 10.00       | 88.00       |
| tblConstructionPhase           | NumDays                    | 230.00      | 227.00      |
| tblConstructionPhase           | NumDays                    | 20.00       | 87.00       |
| tblConstructionPhase           | NumDays                    | 20.00       | 87.00       |
| tblEnergyUse                   | LightingElect              | 1.75        | 2.33        |
| tblEnergyUse                   | T24E                       | 3.92        | 0.64        |
| tblGrading                     | AcresOfGrading             | 0.00        | 0.28        |
| tblGrading                     | MaterialExported           | 0.00        | 29,300.00   |
| tblLandUse                     | LandUseSquareFeet          | 5,370.00    | 5,373.00    |
| tblOffRoadEquipment            | HorsePower                 | 168.00      | 97.00       |
| tblOffRoadEquipment            | HorsePower                 | 203.00      | 247.00      |
| tblOffRoadEquipment            | LoadFactor                 | 0.40        | 0.37        |
| tblOffRoadEquipment            | LoadFactor                 | 0.36        | 0.40        |
| tblOffRoadEquipment            | OffRoadEquipmentUnitAmount | 3.00        | 1.00        |
| tblOffRoadEquipment            | OffRoadEquipmentUnitAmount | 1.00        | 2.00        |
| tblOffRoadEquipment            | OffRoadEquipmentUnitAmount | 3.00        | 2.00        |
| tblOffRoadEquipment            | OffRoadEquipmentUnitAmount | 2.00        | 1.00        |
| tblOffRoadEquipment            | OffRoadEquipmentUnitAmount | 4.00        | 1.00        |
| tblOffRoadEquipment            | OffRoadEquipmentUnitAmount | 1.00        | 3.00        |
| tblOffRoadEquipment            | UsageHours                 | 8.00        | 7.00        |
| tblProjectCharacteristics      | CO2IntensityFactor         | 1227.89     | 840         |
| tblStationaryGeneratorsPumpsEF | NOX_EF                     | 2.85        | 0.50        |
| tblStationaryGeneratorsPumpsEF | PM10_EF                    | 0.15        | 3.00        |
| tblStationaryGeneratorsPumpsEF | PM2_5_EF                   | 0.15        | 0.02        |
| tblStationaryGeneratorsPumpsEF | ROG_EF                     | 2.2480e-003 | 3.1000e-004 |
| tblTripsAndVMT                 | HaulingTripLength          | 20.00       | 34.00       |
| tblTripsAndVMT                 | HaulingTripLength          | 20.00       | 34.00       |
| tblTripsAndVMT                 | HaulingTripNumber          | 57.00       | 600.00      |
| tblTripsAndVMT                 | HaulingTripNumber          | 3,663.00    | 6,300.00    |
| tblTripsAndVMT                 | HaulingTripNumber          | 0.00        | 3,400.00    |
| tblTripsAndVMT                 | VendorTripNumber           | 64.00       | 40.00       |
| tblTripsAndVMT                 | VendorTripNumber           | 0.00        | 20.00       |
| tblTripsAndVMT                 | WorkerTripNumber           | 13.00       | 42.00       |
| tblTripsAndVMT                 | WorkerTripNumber           | 25.00       | 50.00       |
| tblTripsAndVMT                 | WorkerTripNumber           | 20.00       | 76.00       |
| tblTripsAndVMT                 | WorkerTripNumber           | 165.00      | 200.00      |
| tblTripsAndVMT                 | WorkerTripNumber           | 8.00        | 100.00      |
| tblTripsAndVMT                 | WorkerTripNumber           | 33.00       | 0.00        |
| tblVehicleTrips                | ST_TR                      | 158.37      | 139.78      |
| tblVehicleTrips                | ST_TR                      | 8.19        | 8.38        |
| tblVehicleTrips                | SU_TR                      | 131.84      | 116.37      |
| tblVehicleTrips                | SU_TR                      | 5.95        | 6.09        |
| tblVehicleTrips                | WD_TR                      | 127.15      | 112.23      |
| tblVehicleTrips                | WD_TR                      | 8.17        | 8.36        |

## 2.0 Emissions Summary

### 2.1 Overall Construction (Maximum Daily Emission)

#### 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           | lb/day         |                |                |               |                |               |                |                |               |               | lb/day        |                    |                    |               |               |                    |
| 2020           | 5.2873         | 89.9163        | 39.9452        | 0.2260        | 10.8204        | 1.6776        | 12.4980        | 4.6102         | 1.5760        | 6.1862        | 0.0000        | 23,852.6311        | 23,852.6311        | 2.4403        | 0.0000        | 23,913.6394        |
| 2021           | 39.1350        | 25.7271        | 30.4122        | 0.0688        | 5.5094         | 1.0896        | 6.0009         | 1.3885         | 1.0578        | 1.8545        | 0.0000        | 6,618.2109         | 6,618.2109         | 0.7244        | 0.0000        | 6,636.3210         |
| 2022           | 39.0186        | 8.8080         | 13.3399        | 0.0299        | 1.2458         | 0.3288        | 1.5746         | 0.3333         | 0.3092        | 0.6425        | 0.0000        | 2,965.4661         | 2,965.4661         | 0.4422        | 0.0000        | 2,976.5207         |
| <b>Maximum</b> | <b>39.1350</b> | <b>89.9163</b> | <b>39.9452</b> | <b>0.2260</b> | <b>10.8204</b> | <b>1.6776</b> | <b>12.4980</b> | <b>4.6102</b>  | <b>1.5760</b> | <b>6.1862</b> | <b>0.0000</b> | <b>23,852.6311</b> | <b>23,852.6311</b> | <b>2.4403</b> | <b>0.0000</b> | <b>23,913.6394</b> |

**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           | lb/day         |                |                |               |               |               |               |                |               |               | lb/day        |                    |                    |               |               |                    |
| 2020           | 5.2873         | 89.9163        | 39.9452        | 0.2260        | 7.0980        | 1.6776        | 8.7756        | 2.5838         | 1.5760        | 4.1597        | 0.0000        | 23,852.6311        | 23,852.6311        | 2.4403        | 0.0000        | 23,913.6394        |
| 2021           | 39.1350        | 25.7271        | 30.4122        | 0.0688        | 5.5094        | 1.0896        | 6.0009        | 1.3885         | 1.0578        | 1.8545        | 0.0000        | 6,618.2109         | 6,618.2109         | 0.7244        | 0.0000        | 6,636.3210         |
| 2022           | 39.0186        | 8.8080         | 13.3399        | 0.0299        | 1.2458        | 0.3288        | 1.5746        | 0.3333         | 0.3092        | 0.6425        | 0.0000        | 2,965.4661         | 2,965.4661         | 0.4422        | 0.0000        | 2,976.5207         |
| <b>Maximum</b> | <b>39.1350</b> | <b>89.9163</b> | <b>39.9452</b> | <b>0.2260</b> | <b>7.0980</b> | <b>1.6776</b> | <b>8.7756</b> | <b>2.5838</b>  | <b>1.5760</b> | <b>4.1597</b> | <b>0.0000</b> | <b>23,852.6311</b> | <b>23,852.6311</b> | <b>2.4403</b> | <b>0.0000</b> | <b>23,913.6394</b> |

|                          | ROG         | NOx         | CO          | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total   | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total  | Bio- CO2    | NBio-CO2    | Total CO2   | CH4         | N2O         | CO2e        |
|--------------------------|-------------|-------------|-------------|-------------|---------------|--------------|--------------|----------------|---------------|--------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>Percent Reduction</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>21.18</b>  | <b>0.00</b>  | <b>18.54</b> | <b>32.00</b>   | <b>0.00</b>   | <b>23.34</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> |

**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     | lb/day         |                |                |               |                |               |                |                |               |               | lb/day   |                    |                    |               |               |                    |
| Area         | 7.9251         | 3.2000e-004    | 0.0351         | 0.0000        |                | 1.3000e-004   | 1.3000e-004    |                | 1.3000e-004   | 1.3000e-004   |          | 0.0752             | 0.0752             | 2.0000e-004   |               | 0.0801             |
| Energy       | 0.2835         | 2.5776         | 2.1652         | 0.0155        |                | 0.1959        | 0.1959         |                | 0.1959        | 0.1959        |          | 3,093.1262         | 3,093.1262         | 0.0593        | 0.0567        | 3,111.5071         |
| Mobile       | 3.9855         | 18.7599        | 44.0005        | 0.1494        | 12.3802        | 0.1298        | 12.5100        | 3.3132         | 0.1210        | 3.4342        |          | 15,217.2353        | 15,217.2353        | 0.8490        |               | 15,238.4595        |
| Stationary   | 0.0448         | 0.1593         | 0.8285         | 1.5600e-003   |                | 0.9560        | 0.9560         |                | 6.3700e-003   | 6.3700e-003   |          | 166.2238           | 166.2238           | 0.0233        |               | 166.8064           |
| <b>Total</b> | <b>12.2390</b> | <b>21.4971</b> | <b>47.0293</b> | <b>0.1664</b> | <b>12.3802</b> | <b>1.2818</b> | <b>13.6620</b> | <b>3.3132</b>  | <b>0.3234</b> | <b>3.6366</b> |          | <b>18,476.6604</b> | <b>18,476.6604</b> | <b>0.9318</b> | <b>0.0567</b> | <b>18,516.8531</b> |

**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 | lb/day |     |    |     |               |              |            |                |               |             | lb/day   |          |           |     |     |      |

|              |                |                |                |               |               |               |               |               |               |               |  |                    |                    |               |               |                    |
|--------------|----------------|----------------|----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|--|--------------------|--------------------|---------------|---------------|--------------------|
| Area         | 7.9251         | 3.2000e-004    | 0.0351         | 0.0000        |               | 1.3000e-004   | 1.3000e-004   |               | 1.3000e-004   | 1.3000e-004   |  | 0.0752             | 0.0752             | 2.0000e-004   |               | 0.0801             |
| Energy       | 0.2623         | 2.3850         | 2.0034         | 0.0143        |               | 0.1813        | 0.1813        |               | 0.1813        | 0.1813        |  | 2,861.9367         | 2,861.9367         | 0.0549        | 0.0525        | 2,878.9437         |
| Mobile       | 3.2670         | 13.9569        | 26.8360        | 0.0770        | 5.8670        | 0.0704        | 5.9374        | 1.5701        | 0.0656        | 1.6358        |  | 7,856.6703         | 7,856.6703         | 0.5082        |               | 7,869.3763         |
| Stationary   | 0.0448         | 0.1593         | 0.8285         | 1.5600e-003   |               | 0.9560        | 0.9560        |               | 6.3700e-003   | 6.3700e-003   |  | 166.2238           | 166.2238           | 0.0233        |               | 166.8064           |
| <b>Total</b> | <b>11.4993</b> | <b>16.5015</b> | <b>29.7029</b> | <b>0.0929</b> | <b>5.8670</b> | <b>1.2078</b> | <b>7.0748</b> | <b>1.5701</b> | <b>0.2534</b> | <b>1.8235</b> |  | <b>10,884.9060</b> | <b>10,884.9060</b> | <b>0.5866</b> | <b>0.0525</b> | <b>10,915.2066</b> |

|                   | ROG  | NOx   | CO    | SO2   | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4   | N2O  | CO2e  |
|-------------------|------|-------|-------|-------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------|-----------|-------|------|-------|
| Percent Reduction | 6.04 | 23.24 | 36.84 | 44.19 | 52.61         | 5.77         | 48.22      | 52.61          | 21.65         | 49.86       | 0.00     | 41.09    | 41.09     | 37.04 | 7.48 | 41.05 |

### 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            | 6/11/2020  | 7/13/2020  | 5             | 23       |                   |
| 2            | Grading               | Grading               | 7/14/2020  | 9/14/2020  | 5             | 45       |                   |
| 3            | Foundation            | Site Preparation      | 9/15/2020  | 1/14/2021  | 5             | 88       |                   |
| 4            | Building Construction | Building Construction | 1/15/2021  | 11/29/2021 | 5             | 227      |                   |
| 5            | Paving                | Paving                | 11/30/2021 | 3/30/2022  | 5             | 87       |                   |
| 6            | Architectural Coating | Architectural Coating | 11/30/2021 | 3/30/2022  | 5             | 87       |                   |

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0.28

Acres of Paving: 0.88

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 530,780; Non-Residential Outdoor: 176,927; Striped Parking Area:

#### OffRoad Equipment

| Phase Name            | Offroad Equipment Type            | Amount | Usage Hours | Horse Power | Load Factor |
|-----------------------|-----------------------------------|--------|-------------|-------------|-------------|
| Demolition            | Air Compressors                   | 1      | 8.00        | 78          | 0.48        |
| Demolition            | Excavators                        | 1      | 8.00        | 158         | 0.38        |
| Demolition            | Rubber Tired Loaders              | 1      | 8.00        | 247         | 0.40        |
| Demolition            | Tractors/Loaders/Backhoes         | 2      | 8.00        | 97          | 0.37        |
| Grading               | Bore/Drill Rigs                   | 1      | 8.00        | 221         | 0.50        |
| Grading               | Cement and Mortar Mixers          | 1      | 8.00        | 9           | 0.56        |
| Grading               | Excavators                        | 2      | 8.00        | 158         | 0.38        |
| Grading               | Forklifts                         | 1      | 8.00        | 89          | 0.20        |
| Grading               | Other Material Handling Equipment | 1      | 8.00        | 97          | 0.37        |
| Grading               | Pumps                             | 1      | 8.00        | 84          | 0.74        |
| Grading               | Rubber Tired Dozers               | 1      | 8.00        | 247         | 0.40        |
| Grading               | Skid Steer Loaders                | 1      | 8.00        | 65          | 0.37        |
| Grading               | Welders                           | 1      | 8.00        | 46          | 0.45        |
| Foundation            | Aerial Lifts                      | 2      | 8.00        | 63          | 0.31        |
| Foundation            | Air Compressors                   | 1      | 8.00        | 78          | 0.48        |
| Foundation            | Cement and Mortar Mixers          | 1      | 8.00        | 9           | 0.56        |
| Foundation            | Cranes                            | 1      | 7.00        | 231         | 0.29        |
| Foundation            | Plate Compactors                  | 2      | 8.00        | 8           | 0.43        |
| Foundation            | Tractors/Loaders/Backhoes         | 1      | 7.00        | 97          | 0.37        |
| Building Construction | Aerial Lifts                      | 3      | 8.00        | 63          | 0.31        |

|                       |                           |   |      |     |      |
|-----------------------|---------------------------|---|------|-----|------|
| Building Construction | Air Compressors           | 2 | 8.00 | 78  | 0.48 |
| Building Construction | Cement and Mortar Mixers  | 2 | 8.00 | 9   | 0.56 |
| Building Construction | Cranes                    | 1 | 7.00 | 231 | 0.29 |
| Building Construction | Forklifts                 | 2 | 8.00 | 89  | 0.20 |
| Building Construction | Plate Compactors          | 1 | 8.00 | 8   | 0.43 |
| Building Construction | Pumps                     | 1 | 8.00 | 84  | 0.74 |
| Building Construction | Welders                   | 3 | 8.00 | 46  | 0.45 |
| Paving                | Pavers                    | 1 | 8.00 | 130 | 0.42 |
| Paving                | Skid Steer Loaders        | 1 | 8.00 | 65  | 0.37 |
| Paving                | Tractors/Loaders/Backhoes | 1 | 8.00 | 97  | 0.37 |
| Architectural Coating | Aerial Lifts              | 1 | 8.00 | 63  | 0.31 |
| 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            | 5                       | 42.00              | 0.00               | 600.00              | 14.70              | 6.90               | 34.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Grading               | 10                      | 50.00              | 0.00               | 6,300.00            | 14.70              | 6.90               | 34.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Foundation            | 8                       | 76.00              | 0.00               | 3,400.00            | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Building Construction | 15                      | 200.00             | 40.00              | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Paving                | 3                       | 100.00             | 20.00              | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Architectural Coating | 2                       | 0.00               | 0.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |

### 3.1 Mitigation Measures Construction

Water Exposed Area

### 3.2 Demolition - 2020

#### Unmitigated Construction On-Site

|               | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio-CO2          | Total CO2         | CH4           | N2O | CO2e              |
|---------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category      | lb/day        |                |                |               |               |               |               |                |               |               | lb/day   |                   |                   |               |     |                   |
| Fugitive Dust |               |                |                |               | 0.5410        | 0.0000        | 0.5410        | 0.0819         | 0.0000        | 0.0819        |          |                   | 0.0000            |               |     | 0.0000            |
| Off-Road      | 1.4926        | 14.8295        | 12.4801        | 0.0238        |               | 0.7289        | 0.7289        |                | 0.6824        | 0.6824        |          | 2,295.0613        | 2,295.0613        | 0.6500        |     | 2,311.3102        |
| <b>Total</b>  | <b>1.4926</b> | <b>14.8295</b> | <b>12.4801</b> | <b>0.0238</b> | <b>0.5410</b> | <b>0.7289</b> | <b>1.2699</b> | <b>0.0819</b>  | <b>0.6824</b> | <b>0.7644</b> |          | <b>2,295.0613</b> | <b>2,295.0613</b> | <b>0.6500</b> |     | <b>2,311.3102</b> |

#### Unmitigated Construction Off-Site

|          | ROG    | NOx     | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2   | Total CO2  | CH4    | N2O | CO2e       |
|----------|--------|---------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|------------|------------|--------|-----|------------|
| Category | lb/day |         |        |             |               |              |            |                |               |             | lb/day   |            |            |        |     |            |
| Hauling  | 0.3620 | 11.2290 | 2.7041 | 0.0327      | 0.7750        | 0.0403       | 0.8153     | 0.2124         | 0.0386        | 0.2510      |          | 3,546.4340 | 3,546.4340 | 0.2338 |     | 3,552.2793 |
| 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     |
| Worker   | 0.2146 | 0.1522  | 1.6843 | 4.6700e-003 | 0.4695        | 3.9200e-003  | 0.4734     | 0.1245         | 3.6200e-003   | 0.1281      |          | 465.1166   | 465.1166   | 0.0147 |     | 465.4831   |

|       |        |         |        |        |        |        |        |        |        |        |  |            |            |        |  |            |
|-------|--------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--|------------|------------|--------|--|------------|
| Total | 0.5767 | 11.3812 | 4.3883 | 0.0374 | 1.2445 | 0.0442 | 1.2887 | 0.3369 | 0.0422 | 0.3791 |  | 4,011.5506 | 4,011.5506 | 0.2485 |  | 4,017.7624 |
|-------|--------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--|------------|------------|--------|--|------------|

**Mitigated Construction On-Site**

|               | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio-CO2          | Total CO2         | CH4           | N2O | CO2e              |
|---------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|-----|-------------------|
| Category      | lb/day        |                |                |               |               |               |               |                |               |               | lb/day        |                   |                   |               |     |                   |
| Fugitive Dust |               |                |                |               | 0.2110        | 0.0000        | 0.2110        | 0.0319         | 0.0000        | 0.0319        |               |                   | 0.0000            |               |     | 0.0000            |
| Off-Road      | 1.4926        | 14.8295        | 12.4801        | 0.0238        |               | 0.7289        | 0.7289        |                | 0.6824        | 0.6824        | 0.0000        | 2,295.0613        | 2,295.0613        | 0.6500        |     | 2,311.3102        |
| <b>Total</b>  | <b>1.4926</b> | <b>14.8295</b> | <b>12.4801</b> | <b>0.0238</b> | <b>0.2110</b> | <b>0.7289</b> | <b>0.9399</b> | <b>0.0319</b>  | <b>0.6824</b> | <b>0.7144</b> | <b>0.0000</b> | <b>2,295.0613</b> | <b>2,295.0613</b> | <b>0.6500</b> |     | <b>2,311.3102</b> |

**Mitigated Construction Off-Site**

|              | ROG           | NOx            | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio-CO2          | Total CO2         | CH4           | N2O | CO2e              |
|--------------|---------------|----------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category     | lb/day        |                |               |               |               |               |               |                |               |               | lb/day   |                   |                   |               |     |                   |
| Hauling      | 0.3620        | 11.2290        | 2.7041        | 0.0327        | 0.7750        | 0.0403        | 0.8153        | 0.2124         | 0.0386        | 0.2510        |          | 3,546.4340        | 3,546.4340        | 0.2338        |     | 3,552.2793        |
| 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            |
| Worker       | 0.2146        | 0.1522         | 1.6843        | 4.6700e-003   | 0.4695        | 3.9200e-003   | 0.4734        | 0.1245         | 3.6200e-003   | 0.1281        |          | 465.1166          | 465.1166          | 0.0147        |     | 465.4831          |
| <b>Total</b> | <b>0.5767</b> | <b>11.3812</b> | <b>4.3883</b> | <b>0.0374</b> | <b>1.2445</b> | <b>0.0442</b> | <b>1.2887</b> | <b>0.3369</b>  | <b>0.0422</b> | <b>0.3791</b> |          | <b>4,011.5506</b> | <b>4,011.5506</b> | <b>0.2485</b> |     | <b>4,017.7624</b> |

**3.3 Grading - 2020**

**Unmitigated Construction On-Site**

|               | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio-CO2          | Total CO2         | CH4           | N2O | CO2e              |
|---------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category      | lb/day        |                |                |               |               |               |               |                |               |               | lb/day   |                   |                   |               |     |                   |
| Fugitive Dust |               |                |                |               | 6.1023        | 0.0000        | 6.1023        | 3.3221         | 0.0000        | 3.3221        |          |                   | 0.0000            |               |     | 0.0000            |
| Off-Road      | 3.0889        | 29.4730        | 23.4284        | 0.0448        |               | 1.4566        | 1.4566        |                | 1.3648        | 1.3648        |          | 4,266.3917        | 4,266.3917        | 1.1681        |     | 4,295.5938        |
| <b>Total</b>  | <b>3.0889</b> | <b>29.4730</b> | <b>23.4284</b> | <b>0.0448</b> | <b>6.1023</b> | <b>1.4566</b> | <b>7.5590</b> | <b>3.3221</b>  | <b>1.3648</b> | <b>4.6869</b> |          | <b>4,266.3917</b> | <b>4,266.3917</b> | <b>1.1681</b> |     | <b>4,295.5938</b> |

**Unmitigated Construction Off-Site**

|          | ROG    | NOx     | CO      | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2    | Total CO2   | CH4    | N2O | CO2e        |
|----------|--------|---------|---------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-------------|-------------|--------|-----|-------------|
| Category | lb/day |         |         |             |               |              |            |                |               |             | lb/day   |             |             |        |     |             |
| Hauling  | 1.9428 | 60.2621 | 14.5118 | 0.1756      | 4.1592        | 0.2163       | 4.3755     | 1.1399         | 0.2069        | 1.3468      |          | 19,032.5292 | 19,032.5292 | 1.2548 |     | 19,063.8991 |
| 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      |
| Worker   | 0.2555 | 0.1812  | 2.0051  | 5.5600e-003 | 0.5589        | 4.6700e-003  | 0.5636     | 0.1482         | 4.3000e-003   | 0.1525      |          | 553.7102    | 553.7102    | 0.0175 |     | 554.1463    |

|       |        |         |         |        |        |        |        |        |        |        |  |             |             |        |  |             |
|-------|--------|---------|---------|--------|--------|--------|--------|--------|--------|--------|--|-------------|-------------|--------|--|-------------|
| Total | 2.1983 | 60.4434 | 16.5168 | 0.1812 | 4.7181 | 0.2209 | 4.9391 | 1.2881 | 0.2112 | 1.4993 |  | 19,586.2394 | 19,586.2394 | 1.2723 |  | 19,618.0456 |
|-------|--------|---------|---------|--------|--------|--------|--------|--------|--------|--------|--|-------------|-------------|--------|--|-------------|

**Mitigated Construction On-Site**

|               | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio-CO2          | Total CO2         | CH4           | N2O | CO2e |                   |
|---------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|-----|------|-------------------|
| Category      | lb/day        |                |                |               |               |               |               |                |               |               | lb/day        |                   |                   |               |     |      |                   |
| Fugitive Dust |               |                |                |               | 2.3799        | 0.0000        | 2.3799        | 1.2956         | 0.0000        | 1.2956        |               |                   | 0.0000            |               |     |      | 0.0000            |
| Off-Road      | 3.0889        | 29.4730        | 23.4284        | 0.0448        |               | 1.4566        | 1.4566        |                | 1.3648        | 1.3648        | 0.0000        | 4,266.3917        | 4,266.3917        | 1.1681        |     |      | 4,295.5938        |
| <b>Total</b>  | <b>3.0889</b> | <b>29.4730</b> | <b>23.4284</b> | <b>0.0448</b> | <b>2.3799</b> | <b>1.4566</b> | <b>3.8365</b> | <b>1.2956</b>  | <b>1.3648</b> | <b>2.6604</b> | <b>0.0000</b> | <b>4,266.3917</b> | <b>4,266.3917</b> | <b>1.1681</b> |     |      | <b>4,295.5938</b> |

**Mitigated Construction Off-Site**

|              | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio-CO2           | Total CO2          | CH4           | N2O | CO2e |                    |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|--------------------|--------------------|---------------|-----|------|--------------------|
| Category     | lb/day        |                |                |               |               |               |               |                |               |               | lb/day   |                    |                    |               |     |      |                    |
| Hauling      | 1.9428        | 60.2621        | 14.5118        | 0.1756        | 4.1592        | 0.2163        | 4.3755        | 1.1399         | 0.2069        | 1.3468        |          | 19,032.5292        | 19,032.5292        | 1.2548        |     |      | 19,063.8991        |
| 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             |
| Worker       | 0.2555        | 0.1812         | 2.0051         | 5.5600e-003   | 0.5589        | 4.6700e-003   | 0.5636        | 0.1482         | 4.3000e-003   | 0.1525        |          | 553.7102           | 553.7102           | 0.0175        |     |      | 554.1465           |
| <b>Total</b> | <b>2.1983</b> | <b>60.4434</b> | <b>16.5168</b> | <b>0.1812</b> | <b>4.7181</b> | <b>0.2209</b> | <b>4.9391</b> | <b>1.2881</b>  | <b>0.2112</b> | <b>1.4993</b> |          | <b>19,586.2394</b> | <b>19,586.2394</b> | <b>1.2723</b> |     |      | <b>19,618.0456</b> |

**3.4 Foundation - 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      | lb/day        |                |               |               |               |               |               |                |               |               | lb/day   |                   |                   |               |     |      |                   |
| Fugitive Dust |               |                |               |               | 0.0000        | 0.0000        | 0.0000        | 0.0000         | 0.0000        | 0.0000        |          |                   | 0.0000            |               |     |      | 0.0000            |
| Off-Road      | 1.1211        | 10.9628        | 9.2055        | 0.0168        |               | 0.5214        | 0.5214        |                | 0.4942        | 0.4942        |          | 1,572.0922        | 1,572.0922        | 0.3899        |     |      | 1,581.8396        |
| <b>Total</b>  | <b>1.1211</b> | <b>10.9628</b> | <b>9.2055</b> | <b>0.0168</b> | <b>0.0000</b> | <b>0.5214</b> | <b>0.5214</b> | <b>0.0000</b>  | <b>0.4942</b> | <b>0.4942</b> |          | <b>1,572.0922</b> | <b>1,572.0922</b> | <b>0.3899</b> |     |      | <b>1,581.8396</b> |

**Unmitigated Construction Off-Site**

|          | ROG    | NOx     | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2   | Total CO2  | CH4    | N2O | CO2e |            |
|----------|--------|---------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|------------|------------|--------|-----|------|------------|
| Category | lb/day |         |        |             |               |              |            |                |               |             | lb/day   |            |            |        |     |      |            |
| Hauling  | 0.3457 | 11.2533 | 2.6163 | 0.0300      | 0.7410        | 0.0360       | 0.7770     | 0.2013         | 0.0344        | 0.2357      |          | 3,249.6816 | 3,249.6816 | 0.2333 |     |      | 3,255.5130 |
| 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     |
| Worker   | 0.3884 | 0.2755  | 3.0477 | 8.4500e-003 | 0.8495        | 7.1000e-003  | 0.8566     | 0.2253         | 6.5400e-003   | 0.2318      |          | 841.6395   | 841.6395   | 0.0265 |     |      | 842.3027   |



|       |        |         |        |        |        |        |        |        |        |        |  |            |            |        |  |            |
|-------|--------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--|------------|------------|--------|--|------------|
| Total | 0.7341 | 11.5288 | 5.6640 | 0.0384 | 1.5905 | 0.0431 | 1.6336 | 0.4265 | 0.0410 | 0.4675 |  | 4,091.3211 | 4,091.3211 | 0.2598 |  | 4,097.8156 |
|-------|--------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--|------------|------------|--------|--|------------|

**Mitigated Construction On-Site**

|               | ROG           | NOx            | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio-CO2          | Total CO2         | CH4           | N2O | CO2e              |
|---------------|---------------|----------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|-----|-------------------|
| Category      | lb/day        |                |               |               |               |               |               |                |               |               | lb/day        |                   |                   |               |     |                   |
| Fugitive Dust |               |                |               |               | 0.0000        | 0.0000        | 0.0000        | 0.0000         | 0.0000        | 0.0000        |               |                   | 0.0000            |               |     | 0.0000            |
| Off-Road      | 1.1211        | 10.9628        | 9.2055        | 0.0168        |               | 0.5214        | 0.5214        |                | 0.4942        | 0.4942        | 0.0000        | 1,572.0922        | 1,572.0922        | 0.3899        |     | 1,581.8396        |
| <b>Total</b>  | <b>1.1211</b> | <b>10.9628</b> | <b>9.2055</b> | <b>0.0168</b> | <b>0.0000</b> | <b>0.5214</b> | <b>0.5214</b> | <b>0.0000</b>  | <b>0.4942</b> | <b>0.4942</b> | <b>0.0000</b> | <b>1,572.0922</b> | <b>1,572.0922</b> | <b>0.3899</b> |     | <b>1,581.8396</b> |

**Mitigated Construction Off-Site**

|              | ROG           | NOx            | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio-CO2          | Total CO2         | CH4           | N2O | CO2e              |
|--------------|---------------|----------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category     | lb/day        |                |               |               |               |               |               |                |               |               | lb/day   |                   |                   |               |     |                   |
| Hauling      | 0.3457        | 11.2533        | 2.6163        | 0.0300        | 0.7410        | 0.0360        | 0.7770        | 0.2013         | 0.0344        | 0.2357        |          | 3,249.6816        | 3,249.6816        | 0.2333        |     | 3,255.5130        |
| 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            |
| Worker       | 0.3884        | 0.2755         | 3.0477        | 8.4500e-003   | 0.8495        | 7.1000e-003   | 0.8566        | 0.2253         | 6.5400e-003   | 0.2318        |          | 841.6395          | 841.6395          | 0.0265        |     | 842.3027          |
| <b>Total</b> | <b>0.7341</b> | <b>11.5288</b> | <b>5.6640</b> | <b>0.0384</b> | <b>1.5905</b> | <b>0.0431</b> | <b>1.6336</b> | <b>0.4265</b>  | <b>0.0410</b> | <b>0.4675</b> |          | <b>4,091.3211</b> | <b>4,091.3211</b> | <b>0.2598</b> |     | <b>4,097.8156</b> |

**3.4 Foundation - 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      | lb/day        |                |               |               |               |               |               |                |               |               | lb/day   |                   |                   |               |     |                   |
| Fugitive Dust |               |                |               |               | 0.0000        | 0.0000        | 0.0000        | 0.0000         | 0.0000        | 0.0000        |          |                   | 0.0000            |               |     | 0.0000            |
| Off-Road      | 1.0310        | 10.0098        | 9.0535        | 0.0168        |               | 0.4523        | 0.4523        |                | 0.4289        | 0.4289        |          | 1,572.1628        | 1,572.1628        | 0.3866        |     | 1,581.8283        |
| <b>Total</b>  | <b>1.0310</b> | <b>10.0098</b> | <b>9.0535</b> | <b>0.0168</b> | <b>0.0000</b> | <b>0.4523</b> | <b>0.4523</b> | <b>0.0000</b>  | <b>0.4289</b> | <b>0.4289</b> |          | <b>1,572.1628</b> | <b>1,572.1628</b> | <b>0.3866</b> |     | <b>1,581.8283</b> |

**Unmitigated Construction Off-Site**

|          | ROG    | NOx     | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2   | Total CO2  | CH4    | N2O | CO2e       |
|----------|--------|---------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|------------|------------|--------|-----|------------|
| Category | lb/day |         |        |             |               |              |            |                |               |             | lb/day   |            |            |        |     |            |
| Hauling  | 0.3299 | 10.4909 | 2.5768 | 0.0296      | 4.6599        | 0.0323       | 4.6922     | 1.1632         | 0.0309        | 1.1941      |          | 3,213.7074 | 3,213.7074 | 0.2298 |     | 3,219.4515 |
| 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     |
| Worker   | 0.3624 | 0.2479  | 2.7987 | 8.1800e-003 | 0.8495        | 6.8600e-003  | 0.8564     | 0.2253         | 6.3200e-003   | 0.2316      |          | 814.9108   | 814.9108   | 0.0240 |     | 815.5103   |

|       |        |         |        |        |        |        |        |        |        |        |  |            |            |        |  |            |
|-------|--------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--|------------|------------|--------|--|------------|
| Total | 0.6923 | 10.7388 | 5.3755 | 0.0378 | 5.5094 | 0.0392 | 5.5486 | 1.3885 | 0.0372 | 1.4257 |  | 4,028.6183 | 4,028.6183 | 0.2537 |  | 4,034.9618 |
|-------|--------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--|------------|------------|--------|--|------------|

**Mitigated Construction On-Site**

|               | ROG           | NOx            | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio-CO2          | Total CO2         | CH4           | N2O | CO2e              |
|---------------|---------------|----------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|-----|-------------------|
| Category      | lb/day        |                |               |               |               |               |               |                |               |               | lb/day        |                   |                   |               |     |                   |
| Fugitive Dust |               |                |               |               | 0.0000        | 0.0000        | 0.0000        | 0.0000         | 0.0000        | 0.0000        |               |                   | 0.0000            |               |     | 0.0000            |
| Off-Road      | 1.0310        | 10.0098        | 9.0535        | 0.0168        |               | 0.4523        | 0.4523        |                | 0.4289        | 0.4289        | 0.0000        | 1,572.1628        | 1,572.1628        | 0.3866        |     | 1,581.8283        |
| <b>Total</b>  | <b>1.0310</b> | <b>10.0098</b> | <b>9.0535</b> | <b>0.0168</b> | <b>0.0000</b> | <b>0.4523</b> | <b>0.4523</b> | <b>0.0000</b>  | <b>0.4289</b> | <b>0.4289</b> | <b>0.0000</b> | <b>1,572.1628</b> | <b>1,572.1628</b> | <b>0.3866</b> |     | <b>1,581.8283</b> |

**Mitigated Construction Off-Site**

|              | ROG           | NOx            | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio-CO2          | Total CO2         | CH4           | N2O | CO2e              |
|--------------|---------------|----------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category     | lb/day        |                |               |               |               |               |               |                |               |               | lb/day   |                   |                   |               |     |                   |
| Hauling      | 0.3299        | 10.4909        | 2.5768        | 0.0296        | 4.6599        | 0.0323        | 4.6922        | 1.1632         | 0.0309        | 1.1941        |          | 3,213.7074        | 3,213.7074        | 0.2298        |     | 3,219.4515        |
| 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            |
| Worker       | 0.3624        | 0.2479         | 2.7987        | 8.1800e-003   | 0.8495        | 6.8600e-003   | 0.8564        | 0.2253         | 6.3200e-003   | 0.2316        |          | 814.9108          | 814.9108          | 0.0240        |     | 815.5103          |
| <b>Total</b> | <b>0.6923</b> | <b>10.7388</b> | <b>5.3755</b> | <b>0.0378</b> | <b>5.5094</b> | <b>0.0392</b> | <b>5.5486</b> | <b>1.3885</b>  | <b>0.0372</b> | <b>1.4257</b> |          | <b>4,028.6183</b> | <b>4,028.6183</b> | <b>0.2537</b> |     | <b>4,034.9618</b> |

**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     | lb/day        |                |                |               |               |               |               |                |               |               | lb/day   |                   |                   |               |     |                   |
| Off-Road     | 2.7621        | 21.1992        | 21.9240        | 0.0372        |               | 1.0633        | 1.0633        |                | 1.0334        | 1.0334        |          | 3,404.3266        | 3,404.3266        | 0.5923        |     | 3,419.1332        |
| <b>Total</b> | <b>2.7621</b> | <b>21.1992</b> | <b>21.9240</b> | <b>0.0372</b> |               | <b>1.0633</b> | <b>1.0633</b> |                | <b>1.0334</b> | <b>1.0334</b> |          | <b>3,404.3266</b> | <b>3,404.3266</b> | <b>0.5923</b> |     | <b>3,419.1332</b> |

**Unmitigated Construction Off-Site**

|          | ROG    | NOx    | CO     | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2   | Total CO2  | CH4    | N2O | CO2e       |
|----------|--------|--------|--------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|------------|------------|--------|-----|------------|
| Category | lb/day |        |        |        |               |              |            |                |               |             | lb/day   |            |            |        |     |            |
| 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     |
| Vendor   | 0.1276 | 3.8756 | 1.1231 | 0.0100 | 0.2561        | 8.2000e-003  | 0.2643     | 0.0737         | 7.8400e-003   | 0.0816      |          | 1,069.3821 | 1,069.3821 | 0.0690 |     | 1,071.1080 |
| Worker   | 0.9536 | 0.6523 | 7.3651 | 0.0215 | 2.2355        | 0.0181       | 2.2536     | 0.5929         | 0.0166        | 0.6095      |          | 2,144.5022 | 2,144.5022 | 0.0631 |     | 2,146.0798 |

|       |        |        |        |        |        |        |        |        |        |        |  |            |            |        |  |            |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--|------------|------------|--------|--|------------|
| Total | 1.0813 | 4.5279 | 8.4882 | 0.0315 | 2.4916 | 0.0263 | 2.5179 | 0.6666 | 0.0245 | 0.6911 |  | 3,213.8843 | 3,213.8843 | 0.1321 |  | 3,217.1878 |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--|------------|------------|--------|--|------------|

**Mitigated Construction On-Site**

|              | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio-CO2          | Total CO2         | CH4           | N2O | CO2e              |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|-----|-------------------|
| Category     | lb/day        |                |                |               |               |               |               |                |               |               | lb/day        |                   |                   |               |     |                   |
| Off-Road     | 2.7621        | 21.1992        | 21.9240        | 0.0372        |               | 1.0633        | 1.0633        |                | 1.0334        | 1.0334        | 0.0000        | 3,404.3266        | 3,404.3266        | 0.5923        |     | 3,419.1332        |
| <b>Total</b> | <b>2.7621</b> | <b>21.1992</b> | <b>21.9240</b> | <b>0.0372</b> |               | <b>1.0633</b> | <b>1.0633</b> |                | <b>1.0334</b> | <b>1.0334</b> | <b>0.0000</b> | <b>3,404.3266</b> | <b>3,404.3266</b> | <b>0.5923</b> |     | <b>3,419.1332</b> |

**Mitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio-CO2          | Total CO2         | CH4           | N2O | CO2e              |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category     | lb/day        |               |               |               |               |               |               |                |               |               | lb/day   |                   |                   |               |     |                   |
| 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            |
| Vendor       | 0.1276        | 3.8756        | 1.1231        | 0.0100        | 0.2561        | 8.2000e-003   | 0.2643        | 0.0737         | 7.8400e-003   | 0.0816        |          | 1,069.3821        | 1,069.3821        | 0.0690        |     | 1,071.1080        |
| Worker       | 0.9536        | 0.6523        | 7.3651        | 0.0215        | 2.2355        | 0.0181        | 2.2536        | 0.5929         | 0.0166        | 0.6095        |          | 2,144.5022        | 2,144.5022        | 0.0631        |     | 2,146.0798        |
| <b>Total</b> | <b>1.0813</b> | <b>4.5279</b> | <b>8.4882</b> | <b>0.0315</b> | <b>2.4916</b> | <b>0.0263</b> | <b>2.5179</b> | <b>0.6666</b>  | <b>0.0245</b> | <b>0.6911</b> |          | <b>3,213.8843</b> | <b>3,213.8843</b> | <b>0.1321</b> |     | <b>3,217.1878</b> |

**3.6 Paving - 2021**

**Unmitigated Construction On-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio-CO2        | Total CO2       | CH4           | N2O | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-----------------|-----------------|---------------|-----|-----------------|
| Category     | lb/day        |               |               |                    |               |               |               |                |               |               | lb/day   |                 |                 |               |     |                 |
| Off-Road     | 0.5090        | 5.4944        | 6.5550        | 9.8800e-003        |               | 0.2780        | 0.2780        |                | 0.2558        | 0.2558        |          | 956.1593        | 956.1593        | 0.3092        |     | 963.8903        |
| Paving       | 0.0000        |               |               |                    |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          |                 | 0.0000          |               |     | 0.0000          |
| <b>Total</b> | <b>0.5090</b> | <b>5.4944</b> | <b>6.5550</b> | <b>9.8800e-003</b> |               | <b>0.2780</b> | <b>0.2780</b> |                | <b>0.2558</b> | <b>0.2558</b> |          | <b>956.1593</b> | <b>956.1593</b> | <b>0.3092</b> |     | <b>963.8903</b> |

**Unmitigated Construction Off-Site**

|          | ROG    | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2   | Total CO2  | CH4    | N2O | CO2e       |
|----------|--------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|------------|------------|--------|-----|------------|
| Category | lb/day |        |        |             |               |              |            |                |               |             | lb/day   |            |            |        |     |            |
| 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     |
| Vendor   | 0.0638 | 1.9378 | 0.5615 | 5.0000e-003 | 0.1280        | 4.1000e-003  | 0.1321     | 0.0369         | 3.9200e-003   | 0.0408      |          | 534.6911   | 534.6911   | 0.0345 |     | 535.5540   |
| Worker   | 0.4768 | 0.3262 | 3.6826 | 0.0108      | 1.1178        | 9.0300e-003  | 1.1268     | 0.2964         | 8.3200e-003   | 0.3048      |          | 1,072.2511 | 1,072.2511 | 0.0316 |     | 1,073.0399 |

|       |        |        |        |        |        |        |        |        |        |        |  |            |            |        |  |            |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--|------------|------------|--------|--|------------|
| Total | 0.5406 | 2.2639 | 4.2441 | 0.0158 | 1.2458 | 0.0131 | 1.2589 | 0.3333 | 0.0122 | 0.3455 |  | 1,606.9421 | 1,606.9421 | 0.0661 |  | 1,608.5939 |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--|------------|------------|--------|--|------------|

**Mitigated Construction On-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio-CO2        | Total CO2       | CH4           | N2O | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|-----|-----------------|
| Category     | lb/day        |               |               |                    |               |               |               |                |               |               | lb/day        |                 |                 |               |     |                 |
| Off-Road     | 0.5090        | 5.4944        | 6.5550        | 9.8800e-003        |               | 0.2780        | 0.2780        |                | 0.2558        | 0.2558        | 0.0000        | 956.1593        | 956.1593        | 0.3092        |     | 963.8903        |
| Paving       | 0.0000        |               |               |                    |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |               |                 | 0.0000          |               |     | 0.0000          |
| <b>Total</b> | <b>0.5090</b> | <b>5.4944</b> | <b>6.5550</b> | <b>9.8800e-003</b> |               | <b>0.2780</b> | <b>0.2780</b> |                | <b>0.2558</b> | <b>0.2558</b> | <b>0.0000</b> | <b>956.1593</b> | <b>956.1593</b> | <b>0.3092</b> |     | <b>963.8903</b> |

**Mitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio-CO2          | Total CO2         | CH4           | N2O | CO2e              |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category     | lb/day        |               |               |               |               |               |               |                |               |               | lb/day   |                   |                   |               |     |                   |
| 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            |
| Vendor       | 0.0638        | 1.9378        | 0.5615        | 5.0000e-003   | 0.1280        | 4.1000e-003   | 0.1321        | 0.0369         | 3.9200e-003   | 0.0408        |          | 534.6911          | 534.6911          | 0.0345        |     | 535.5540          |
| Worker       | 0.4768        | 0.3262        | 3.6826        | 0.0108        | 1.1178        | 9.0300e-003   | 1.1268        | 0.2964         | 8.3200e-003   | 0.3048        |          | 1,072.2511        | 1,072.2511        | 0.0316        |     | 1,073.0399        |
| <b>Total</b> | <b>0.5406</b> | <b>2.2639</b> | <b>4.2441</b> | <b>0.0158</b> | <b>1.2458</b> | <b>0.0131</b> | <b>1.2589</b> | <b>0.3333</b>  | <b>0.0122</b> | <b>0.3455</b> |          | <b>1,606.9421</b> | <b>1,606.9421</b> | <b>0.0661</b> |     | <b>1,608.5939</b> |

**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     | lb/day        |               |               |                    |               |               |               |                |               |               | lb/day   |                 |                 |               |     |                 |
| Off-Road     | 0.4412        | 4.7031        | 6.5091        | 9.8800e-003        |               | 0.2244        | 0.2244        |                | 0.2064        | 0.2064        |          | 956.8881        | 956.8881        | 0.3095        |     | 964.6251        |
| Paving       | 0.0000        |               |               |                    |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          |                 | 0.0000          |               |     | 0.0000          |
| <b>Total</b> | <b>0.4412</b> | <b>4.7031</b> | <b>6.5091</b> | <b>9.8800e-003</b> |               | <b>0.2244</b> | <b>0.2244</b> |                | <b>0.2064</b> | <b>0.2064</b> |          | <b>956.8881</b> | <b>956.8881</b> | <b>0.3095</b> |     | <b>964.6251</b> |

**Unmitigated Construction Off-Site**

|          | ROG    | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2   | Total CO2  | CH4    | N2O | CO2e       |
|----------|--------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|------------|------------|--------|-----|------------|
| Category | lb/day |        |        |             |               |              |            |                |               |             | lb/day   |            |            |        |     |            |
| 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     |
| Vendor   | 0.0599 | 1.8416 | 0.5315 | 4.9600e-003 | 0.1281        | 3.5800e-003  | 0.1316     | 0.0369         | 3.4300e-003   | 0.0403      |          | 529.9406   | 529.9406   | 0.0333 |     | 530.7732   |
| Worker   | 0.4478 | 0.2945 | 3.3918 | 0.0104      | 1.1178        | 8.7500e-003  | 1.1265     | 0.2964         | 8.0600e-003   | 0.3045      |          | 1,034.5695 | 1,034.5695 | 0.0285 |     | 1,035.2816 |

|       |        |        |        |        |        |        |        |        |        |        |  |            |            |        |  |            |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--|------------|------------|--------|--|------------|
| Total | 0.5078 | 2.1361 | 3.9233 | 0.0153 | 1.2458 | 0.0123 | 1.2581 | 0.3333 | 0.0115 | 0.3448 |  | 1,564.5100 | 1,564.5100 | 0.0618 |  | 1,566.0548 |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--|------------|------------|--------|--|------------|

**Mitigated Construction On-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio-CO2        | Total CO2       | CH4           | N2O | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|-----|-----------------|
| Category     | lb/day        |               |               |                    |               |               |               |                |               |               | lb/day        |                 |                 |               |     |                 |
| Off-Road     | 0.4412        | 4.7031        | 6.5091        | 9.8800e-003        |               | 0.2244        | 0.2244        |                | 0.2064        | 0.2064        | 0.0000        | 956.8881        | 956.8881        | 0.3095        |     | 964.6251        |
| Paving       | 0.0000        |               |               |                    |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |               |                 | 0.0000          |               |     | 0.0000          |
| <b>Total</b> | <b>0.4412</b> | <b>4.7031</b> | <b>6.5091</b> | <b>9.8800e-003</b> |               | <b>0.2244</b> | <b>0.2244</b> |                | <b>0.2064</b> | <b>0.2064</b> | <b>0.0000</b> | <b>956.8881</b> | <b>956.8881</b> | <b>0.3095</b> |     | <b>964.6251</b> |

**Mitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio-CO2          | Total CO2         | CH4           | N2O | CO2e              |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category     | lb/day        |               |               |               |               |               |               |                |               |               | lb/day   |                   |                   |               |     |                   |
| 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            |
| Vendor       | 0.0599        | 1.8416        | 0.5315        | 4.9600e-003   | 0.1281        | 3.5800e-003   | 0.1316        | 0.0369         | 3.4300e-003   | 0.0403        |          | 529.9406          | 529.9406          | 0.0333        |     | 530.7732          |
| Worker       | 0.4478        | 0.2945        | 3.3918        | 0.0104        | 1.1178        | 8.7500e-003   | 1.1265        | 0.2964         | 8.0600e-003   | 0.3045        |          | 1,034.5695        | 1,034.5695        | 0.0285        |     | 1,035.2816        |
| <b>Total</b> | <b>0.5078</b> | <b>2.1361</b> | <b>3.9233</b> | <b>0.0153</b> | <b>1.2458</b> | <b>0.0123</b> | <b>1.2581</b> | <b>0.3333</b>  | <b>0.0115</b> | <b>0.3448</b> |          | <b>1,564.5100</b> | <b>1,564.5100</b> | <b>0.0618</b> |     | <b>1,566.0548</b> |

**3.7 Architectural Coating - 2021**

**Unmitigated Construction On-Site**

|                 | ROG            | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio-CO2        | Total CO2       | CH4           | N2O | CO2e            |
|-----------------|----------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-----------------|-----------------|---------------|-----|-----------------|
| Category        | lb/day         |               |               |                    |               |               |               |                |               |               | lb/day   |                 |                 |               |     |                 |
| Archit. Coating | 37.8290        |               |               |                    |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          |                 | 0.0000          |               |     | 0.0000          |
| Off-Road        | 0.2564         | 2.1275        | 2.9116        | 4.6500e-003        |               | 0.1056        | 0.1056        |                | 0.1046        | 0.1046        |          | 444.0679        | 444.0679        | 0.0719        |     | 445.8656        |
| <b>Total</b>    | <b>38.0854</b> | <b>2.1275</b> | <b>2.9116</b> | <b>4.6500e-003</b> |               | <b>0.1056</b> | <b>0.1056</b> |                | <b>0.1046</b> | <b>0.1046</b> |          | <b>444.0679</b> | <b>444.0679</b> | <b>0.0719</b> |     | <b>445.8656</b> |

**Unmitigated Construction Off-Site**

|          | ROG    | NOx    | CO     | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4    | N2O | CO2e   |
|----------|--------|--------|--------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------|-----------|--------|-----|--------|
| Category | lb/day |        |        |        |               |              |            |                |               |             | lb/day   |          |           |        |     |        |
| 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 |
| 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 |
| Worker   | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      |          | 0.0000   | 0.0000    | 0.0000 |     | 0.0000 |

|       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Total | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|

**Mitigated Construction On-Site**

|                 | ROG            | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio-CO2        | Total CO2       | CH4           | N2O | CO2e            |
|-----------------|----------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|-----|-----------------|
| Category        | lb/day         |               |               |                    |               |               |               |                |               |               | lb/day        |                 |                 |               |     |                 |
| Archit. Coating | 37.8290        |               |               |                    |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |               |                 | 0.0000          |               |     | 0.0000          |
| Off-Road        | 0.2564         | 2.1275        | 2.9116        | 4.6500e-003        |               | 0.1056        | 0.1056        |                | 0.1046        | 0.1046        | 0.0000        | 444.0679        | 444.0679        | 0.0719        |     | 445.8656        |
| <b>Total</b>    | <b>38.0854</b> | <b>2.1275</b> | <b>2.9116</b> | <b>4.6500e-003</b> |               | <b>0.1056</b> | <b>0.1056</b> |                | <b>0.1046</b> | <b>0.1046</b> | <b>0.0000</b> | <b>444.0679</b> | <b>444.0679</b> | <b>0.0719</b> |     | <b>445.8656</b> |

**Mitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio-CO2      | Total CO2     | CH4           | N2O | CO2e          |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|---------------|---------------|---------------|-----|---------------|
| Category     | lb/day        |               |               |               |               |               |               |                |               |               | lb/day   |               |               |               |     |               |
| 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        |
| 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        |
| Worker       | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000         | 0.0000        | 0.0000        |          | 0.0000        | 0.0000        | 0.0000        |     | 0.0000        |
| <b>Total</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b>  | <b>0.0000</b> | <b>0.0000</b> |          | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |     | <b>0.0000</b> |

**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        | lb/day         |               |               |                    |               |               |               |                |               |               | lb/day   |                 |                 |               |     |                 |
| Archit. Coating | 37.8290        |               |               |                    |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          |                 | 0.0000          |               |     | 0.0000          |
| Off-Road        | 0.2406         | 1.9688        | 2.9076        | 4.6500e-003        |               | 0.0921        | 0.0921        |                | 0.0913        | 0.0913        |          | 444.0679        | 444.0679        | 0.0709        |     | 445.8409        |
| <b>Total</b>    | <b>38.0696</b> | <b>1.9688</b> | <b>2.9076</b> | <b>4.6500e-003</b> |               | <b>0.0921</b> | <b>0.0921</b> |                | <b>0.0913</b> | <b>0.0913</b> |          | <b>444.0679</b> | <b>444.0679</b> | <b>0.0709</b> |     | <b>445.8409</b> |

**Unmitigated Construction Off-Site**

|          | ROG    | NOx    | CO     | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4    | N2O | CO2e   |
|----------|--------|--------|--------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------|-----------|--------|-----|--------|
| Category | lb/day |        |        |        |               |              |            |                |               |             | lb/day   |          |           |        |     |        |
| 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 |
| 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 |
| Worker   | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      |          | 0.0000   | 0.0000    | 0.0000 |     | 0.0000 |

|       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Total | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|

**Mitigated Construction On-Site**

|                 | ROG            | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio-CO2        | Total CO2       | CH4           | N2O | CO2e            |
|-----------------|----------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|-----|-----------------|
| Category        | lb/day         |               |               |                    |               |               |               |                |               |               | lb/day        |                 |                 |               |     |                 |
| Archit. Coating | 37.8290        |               |               |                    |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |               |                 | 0.0000          |               |     | 0.0000          |
| Off-Road        | 0.2406         | 1.9688        | 2.9076        | 4.6500e-003        |               | 0.0921        | 0.0921        |                | 0.0913        | 0.0913        | 0.0000        | 444.0679        | 444.0679        | 0.0709        |     | 445.8409        |
| <b>Total</b>    | <b>38.0696</b> | <b>1.9688</b> | <b>2.9076</b> | <b>4.6500e-003</b> |               | <b>0.0921</b> | <b>0.0921</b> |                | <b>0.0913</b> | <b>0.0913</b> | <b>0.0000</b> | <b>444.0679</b> | <b>444.0679</b> | <b>0.0709</b> |     | <b>445.8409</b> |

**Mitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio-CO2      | Total CO2     | CH4           | N2O | CO2e          |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|---------------|---------------|---------------|-----|---------------|
| Category     | lb/day        |               |               |               |               |               |               |                |               |               | lb/day   |               |               |               |     |               |
| 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        |
| 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        |
| Worker       | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000         | 0.0000        | 0.0000        |          | 0.0000        | 0.0000        | 0.0000        |     | 0.0000        |
| <b>Total</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b>  | <b>0.0000</b> | <b>0.0000</b> |          | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |     | <b>0.0000</b> |

**4.0 Operational Detail - Mobile**

**4.1 Mitigation Measures Mobile**

- Improve Walkability Design
- Improve Destination Accessibility
- Increase Transit Accessibility
- Improve Pedestrian Network

|             | ROG    | NOx     | CO      | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2    | Total CO2   | CH4    | N2O | CO2e        |
|-------------|--------|---------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|-------------|-------------|--------|-----|-------------|
| Category    | lb/day |         |         |        |               |              |            |                |               |             | lb/day   |             |             |        |     |             |
| Mitigated   | 3.2670 | 13.9569 | 26.8360 | 0.0770 | 5.8670        | 0.0704       | 5.9374     | 1.5701         | 0.0656        | 1.6358      |          | 7,856.6703  | 7,856.6703  | 0.5082 |     | 7,869.3763  |
| Unmitigated | 3.9855 | 18.7599 | 44.0005 | 0.1494 | 12.3802       | 0.1298       | 12.5100    | 3.3132         | 0.1210        | 3.4342      |          | 15,217.2353 | 15,217.2353 | 0.8490 |     | 15,238.4595 |

**4.2 Trip Summary Information**

| Land Use | Average Daily Trip Rate |          |        | Unmitigated Annual VMT | Mitigated Annual VMT |
|----------|-------------------------|----------|--------|------------------------|----------------------|
|          | Weekday                 | Saturday | Sunday |                        |                      |
|          |                         |          |        |                        |                      |

|                                     |                 |                 |                 |                  |                  |
|-------------------------------------|-----------------|-----------------|-----------------|------------------|------------------|
| Enclosed Parking with Elevator      | 0.00            | 0.00            | 0.00            |                  |                  |
| High Turnover (Sit Down Restaurant) | 602.68          | 750.62          | 624.91          | 854,475          | 404,937          |
| Hotel                               | 2,006.40        | 2,011.20        | 1461.60         | 4,603,538        | 2,181,620        |
| <b>Total</b>                        | <b>2,609.08</b> | <b>2,761.82</b> | <b>2,086.51</b> | <b>5,458,013</b> | <b>2,586,556</b> |

### 4.3 Trip Type Information

| Land Use                            | Miles      |            |             | Trip %    |            |             | Trip Purpose % |          |         |
|-------------------------------------|------------|------------|-------------|-----------|------------|-------------|----------------|----------|---------|
|                                     | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C- | H-S or C-C | H-O or C-NW | Primary        | Diverted | Pass-by |
| Enclosed Parking with Elevator      | 16.60      | 8.40       | 6.90        | 0.00      | 0.00       | 0.00        | 0              | 0        | 0       |
| High Turnover (Sit Down Restaurant) | 16.60      | 8.40       | 6.90        | 8.50      | 72.50      | 19.00       | 37             | 20       | 43      |
| Hotel                               | 16.60      | 8.40       | 6.90        | 19.40     | 61.60      | 19.00       | 58             | 38       | 4       |

### 4.4 Fleet Mix

| Land Use                            | LDA      | LDT1     | LDT2     | MDV      | LHD1     | LHD2     | MHD      | HHD      | OBUS     | UBUS     | MCY      | SBUS     | MH       |
|-------------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Enclosed Parking with Elevator      | 0.546501 | 0.044961 | 0.204016 | 0.120355 | 0.015740 | 0.006196 | 0.020131 | 0.030678 | 0.002515 | 0.002201 | 0.005142 | 0.000687 | 0.000876 |
| High Turnover (Sit Down Restaurant) | 0.546501 | 0.044961 | 0.204016 | 0.120355 | 0.015740 | 0.006196 | 0.020131 | 0.030678 | 0.002515 | 0.002201 | 0.005142 | 0.000687 | 0.000876 |
| Hotel                               | 0.546501 | 0.044961 | 0.204016 | 0.120355 | 0.015740 | 0.006196 | 0.020131 | 0.030678 | 0.002515 | 0.002201 | 0.005142 | 0.000687 | 0.000876 |

### 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

| Category                | ROG    | NOx    | CO     | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2  | Total CO2  | CH4    | N2O    | CO2e       |
|-------------------------|--------|--------|--------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|------------|------------|--------|--------|------------|
|                         | lb/day |        |        |        |               |              |            |                |               |             | lb/day   |            |            |        |        |            |
| Natural Gas Mitigated   | 0.2623 | 2.3850 | 2.0034 | 0.0143 |               | 0.1813       | 0.1813     |                | 0.1813        | 0.1813      |          | 2,861.9367 | 2,861.9367 | 0.0549 | 0.0525 | 2,878.9437 |
| Natural Gas Unmitigated | 0.2835 | 2.5776 | 2.1652 | 0.0155 |               | 0.1959       | 0.1959     |                | 0.1959        | 0.1959      |          | 3,093.1262 | 3,093.1262 | 0.0593 | 0.0567 | 3,111.5071 |

### 5.2 Energy by Land Use - Natural Gas

#### Unmitigated

| Land Use                            | Natural Gas Use<br>kBTU/yr | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O           | CO2e              |
|-------------------------------------|----------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|---------------|-------------------|
| Enclosed Parking with Elevator      | 0                          | 0.0000        | 0.0000        | 0.0000        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 0.0000            | 0.0000            | 0.0000        | 0.0000        | 0.0000            |
| High Turnover (Sit Down Restaurant) | 3396.91                    | 0.0366        | 0.3330        | 0.2798        | 2.0000e-003   |               | 0.0253        | 0.0253        |                | 0.0253        | 0.0253        |          | 399.6369          | 399.6369          | 7.6600e-003   | 7.3300e-003   | 402.0117          |
| Hotel                               | 22894.7                    | 0.2469        | 2.2446        | 1.8854        | 0.0135        |               | 0.1706        | 0.1706        |                | 0.1706        | 0.1706        |          | 2,693.4893        | 2,693.4893        | 0.0516        | 0.0494        | 2,709.4953        |
| <b>Total</b>                        |                            | <b>0.2835</b> | <b>2.5776</b> | <b>2.1652</b> | <b>0.0155</b> |               | <b>0.1959</b> | <b>0.1959</b> |                | <b>0.1959</b> | <b>0.1959</b> |          | <b>3,093.1262</b> | <b>3,093.1262</b> | <b>0.0593</b> | <b>0.0567</b> | <b>3,111.5071</b> |

#### Mitigated



|                                     | Natural Gas Use | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O           | CO2e              |
|-------------------------------------|-----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|---------------|-------------------|
| Land Use                            | kBTU/yr         | lb/day        |               |               |               |               |               |               |                |               |               | lb/day   |                   |                   |               |               |                   |
| Enclosed Parking with Elevator      | 0               | 0.0000        | 0.0000        | 0.0000        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 0.0000            | 0.0000            | 0.0000        | 0.0000        | 0.0000            |
| High Turnover (Sit Down Restaurant) | 3.33364         | 0.0360        | 0.3268        | 0.2745        | 1.9600e-003   |               | 0.0248        | 0.0248        |                | 0.0248        | 0.0248        |          | 392.1935          | 392.1935          | 7.5200e-003   | 7.1900e-003   | 394.5241          |
| Hotel                               | 20.9928         | 0.2264        | 2.0581        | 1.7288        | 0.0124        |               | 0.1564        | 0.1564        |                | 0.1564        | 0.1564        |          | 2,469.7432        | 2,469.7432        | 0.0473        | 0.0453        | 2,484.4196        |
| <b>Total</b>                        |                 | <b>0.2623</b> | <b>2.3850</b> | <b>2.0034</b> | <b>0.0143</b> |               | <b>0.1813</b> | <b>0.1813</b> |                | <b>0.1813</b> | <b>0.1813</b> |          | <b>2,861.9367</b> | <b>2,861.9367</b> | <b>0.0549</b> | <b>0.0525</b> | <b>2,878.9438</b> |

## 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    | lb/day |             |        |        |               |              |             |                |               |             | lb/day   |           |           |             |     |        |
| Mitigated   | 7.9251 | 3.2000e-004 | 0.0351 | 0.0000 |               | 1.3000e-004  | 1.3000e-004 |                | 1.3000e-004   | 1.3000e-004 |          | 0.0752    | 0.0752    | 2.0000e-004 |     | 0.0801 |
| Unmitigated | 7.9251 | 3.2000e-004 | 0.0351 | 0.0000 |               | 1.3000e-004  | 1.3000e-004 |                | 1.3000e-004   | 1.3000e-004 |          | 0.0752    | 0.0752    | 2.0000e-004 |     | 0.0801 |

### 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           | lb/day        |                    |               |               |               |                    |                    |                |                    |                    | lb/day   |               |               |                    |     |               |
| Architectural Coating | 0.9017        |                    |               |               |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             |          |               | 0.0000        |                    |     | 0.0000        |
| Consumer Products     | 7.0202        |                    |               |               |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             |          |               | 0.0000        |                    |     | 0.0000        |
| Landscaping           | 3.2700e-003   | 3.2000e-004        | 0.0351        | 0.0000        |               | 1.3000e-004        | 1.3000e-004        |                | 1.3000e-004        | 1.3000e-004        |          | 0.0752        | 0.0752        | 2.0000e-004        |     | 0.0801        |
| <b>Total</b>          | <b>7.9251</b> | <b>3.2000e-004</b> | <b>0.0351</b> | <b>0.0000</b> |               | <b>1.3000e-004</b> | <b>1.3000e-004</b> |                | <b>1.3000e-004</b> | <b>1.3000e-004</b> |          | <b>0.0752</b> | <b>0.0752</b> | <b>2.0000e-004</b> |     | <b>0.0801</b> |

#### 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           | lb/day      |             |        |        |               |              |             |                |               |             | lb/day   |           |           |             |     |        |
| Architectural Coating | 0.9017      |             |        |        |               | 0.0000       | 0.0000      |                | 0.0000        | 0.0000      |          |           | 0.0000    |             |     | 0.0000 |
| Consumer Products     | 7.0202      |             |        |        |               | 0.0000       | 0.0000      |                | 0.0000        | 0.0000      |          |           | 0.0000    |             |     | 0.0000 |
| Landscaping           | 3.2700e-003 | 3.2000e-004 | 0.0351 | 0.0000 |               | 1.3000e-004  | 1.3000e-004 |                | 1.3000e-004   | 1.3000e-004 |          | 0.0752    | 0.0752    | 2.0000e-004 |     | 0.0801 |

|       |        |             |        |        |  |             |             |  |             |             |  |        |        |             |  |        |
|-------|--------|-------------|--------|--------|--|-------------|-------------|--|-------------|-------------|--|--------|--------|-------------|--|--------|
| Total | 7.9251 | 3.2000e-004 | 0.0351 | 0.0000 |  | 1.3000e-004 | 1.3000e-004 |  | 1.3000e-004 | 1.3000e-004 |  | 0.0752 | 0.0752 | 2.0000e-004 |  | 0.0801 |
|-------|--------|-------------|--------|--------|--|-------------|-------------|--|-------------|-------------|--|--------|--------|-------------|--|--------|

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

Apply Water Conservation Strategy

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

## 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 |
|---------------------|--------|-----------|------------|-------------|-------------|-----------|
| Emergency Generator | 1      | 0.33      | 12         | 600         | 0.73        | Diesel    |

### Boilers

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

### User Defined Equipment

| Equipment Type | Number |
|----------------|--------|
|----------------|--------|

## 10.1 Stationary Sources

### Unmitigated/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            |
|---|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|--------------------|--------------------|----------|-----------------|-----------------|---------------|-----|-----------------|
| Equipment Type                              | lb/day        |               |               |                    |               |               |               |                |                    |                    | lb/day   |                 |                 |               |     |                 |
| Emergency Generator - Diesel (200 - 750 HP) | 0.0448        | 0.1593        | 0.8285        | 1.5600e-003        |               | 0.9560        | 0.9560        |                | 6.3700e-003        | 6.3700e-003        |          | 166.2238        | 166.2238        | 0.0233        |     | 166.8064        |
| <b>Total</b>                                | <b>0.0448</b> | <b>0.1593</b> | <b>0.8285</b> | <b>1.5600e-003</b> |               | <b>0.9560</b> | <b>0.9560</b> |                | <b>6.3700e-003</b> | <b>6.3700e-003</b> |          | <b>166.2238</b> | <b>166.2238</b> | <b>0.0233</b> |     | <b>166.8064</b> |

## 11.0 Vegetation

# Greenhouse Gas Worksheets

- Summary of Emissions
- CalEEMod Output Files
  - GHG Baseline (2016)
  - GHG Baseline (2022)
  - GHG Construction and Operation

# **citizenM Hollywood & Vine Project**

## Draft EIR

November 2018

- Summary of Emissions

## GHG Summary

### Annual Construction

| Year             | MTCO <sub>2</sub> e |
|------------------|---------------------|
| 2020             | 760                 |
| 2021             | 748                 |
| 2022             | 86                  |
| <b>Total</b>     | <b>1,593</b>        |
| <b>Amortized</b> | <b>53</b>           |

### Annual Operation

|                      | Baseline | Baseline at Buildout | Project w/o PDFs | Project with PDFs | Net of Project with PDFs less Baseline at Buildout | Percent reduction of incorporation of PDFs | Percent of total per emission source |
|----------------------|----------|----------------------|------------------|-------------------|--|--|--------------------------------------|
| Area                 | 0        | 0                    | 0                | 0                 | 0  | 0%   | 0%                                   |
| Energy               | 234      | 198                  | 1,663            | 1,503             | 1,305  | 10%  | 52%                                  |
| Mobile               | 206      | 184                  | 2,392            | 1,238             | 1,054  | 48%  | 42%                                  |
| Stationary           | 0        | 0                    | 3                | 3                 | 3  | 0%   | 0%                                   |
| Waste                | 1        | 1                    | 98               | 49                | 48   | 50%  | 2%                                   |
| Water                | 16       | 13                   | 52               | 42                | 29   | 20%  | 1%                                   |
| Operational Total    | 457      | 397                  | 4,208            | 2,836             | 2,439  | 33%  | -                                    |
| Construction Total - | -        | -                    | 53               | 53                | 53   | -  | 2%                                   |
| <b>TOTAL</b>         |          |                      | <b>4,261</b>     | <b>2,889</b>      | <b>2,492</b>                                       |  | <b>100%</b>                          |

# **citizenM Hollywood & Vine Project**

## Draft EIR

November 2018

- CalEEMod Output Files
  - GHG Baseline (2016)
  - GHG Baseline (2022)
  - GHG Construction and Operation

citizenM - Existing Uses (2016) - Los Angeles-South Coast County, Annual

**citizenM - Existing Uses (2016)**  
**Los Angeles-South Coast County, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

| Land Uses          | Size | Metric   | Lot Acreage | Floor Surface Area | Population |
|--------------------|------|----------|-------------|--------------------|------------|
| Quality Restaurant | 6.39 | 1000sqft | 0.28        | 6,393.00           | 0          |

**1.2 Other Project Characteristics**

|                                 |   |                                 |       |                                  |       |
|---------------------------------|---|---------------------------------|-------|----------------------------------|-------|
| <b>Urbanization</b>             | Urban                                   | <b>Wind Speed (m/s)</b>         | 2.2   | <b>Precipitation Freq (Days)</b> | 33    |
| <b>Climate Zone</b>             | 11                                      | <b>Operational Year</b>         | 2016  |                                  |       |
| <b>Utility Company</b>          | Los Angeles Department of Water & Power |                                 |       |                                  |       |
| <b>CO2 Intensity (lb/MW hr)</b> | 1094                                    | <b>CH4 Intensity (lb/MW hr)</b> | 0.029 | <b>N2O Intensity (lb/MW hr)</b>  | 0.006 |

**1.3 User Entered Comments & Non-Default Data**

- Project Characteristics - 2015 RPS
- Land Use - Existing uses
- Energy Use -
- Mobile Land Use Mitigation -
- Waste Mitigation -
- Vehicle Trips - ITE10

| Table Name                | Column Name        | Default Value | New Value |
|---------------------------|--------------------|---------------|-----------|
| tblLandUse                | LotAcreage         | 0.15          | 0.28      |
| tblProjectCharacteristics | CO2IntensityFactor | 1227.89       | 1094      |
| tblVehicleTrips           | ST_TR              | 94.36         | 87.95     |
| tblVehicleTrips           | SU_TR              | 72.16         | 67.26     |
| tblVehicleTrips           | WD_TR              | 89.95         | 83.84     |

**2.0 Emissions Summary**

**2.2 Overall Operational**

**Unmitigated Operational**

| Category | ROG         | NOx    | CO          | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio-CO2 | NBio-CO2    | Total CO2   | CH4         | N2O         | CO2e        |
|----------|-------------|--------|-------------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|---------|-------------|-------------|-------------|-------------|-------------|
|          | tons/yr     |        |             |             |               |              |             |                |               |             | MT/yr   |             |             |             |             |             |
| Area     | 0.0261      | 0.0000 | 8.0000e-005 | 0.0000      |               | 0.0000       | 0.0000      |                | 0.0000        | 0.0000      | 0.0000  | 1.6000e-004 | 1.6000e-004 | 0.0000      | 0.0000      | 1.7000e-004 |
| Energy   | 8.0700e-003 | 0.0734 | 0.0617      | 4.4000e-004 |               | 5.5800e-003  | 5.5800e-003 |                | 5.5800e-003   | 5.5800e-003 | 0.0000  | 233.1305    | 233.1305    | 5.5900e-003 | 2.3100e-003 | 233.9573    |
| Mobile   | 0.2070      | 0.7756 | 2.0941      | 4.2100e-003 | 0.2835        | 6.8400e-003  | 0.2904      | 0.0761         | 6.4600e-003   | 0.0825      | 0.0000  | 386.7223    | 386.7223    | 0.0310      | 0.0000      | 387.4960    |
| Waste    |             |        |             |             |               | 0.0000       | 0.0000      |                | 0.0000        | 0.0000      | 1.1834  | 0.0000      | 1.1834      | 0.0699      | 0.0000      | 2.9319      |
| Water    |             |        |             |             |               | 0.0000       | 0.0000      |                | 0.0000        | 0.0000      | 0.6153  | 13.2150     | 13.8303     | 0.0636      | 1.5600e-003 | 15.8854     |

|       |        |        |        |             |        |        |        |        |        |        |        |          |          |        |             |          |
|-------|--------|--------|--------|-------------|--------|--------|--------|--------|--------|--------|--------|----------|----------|--------|-------------|----------|
| Total | 0.2411 | 0.8490 | 2.1558 | 4.6500e-003 | 0.2835 | 0.0124 | 0.2959 | 0.0761 | 0.0120 | 0.0881 | 1.7988 | 633.0679 | 634.8667 | 0.1700 | 3.8700e-003 | 640.2708 |
|-------|--------|--------|--------|-------------|--------|--------|--------|--------|--------|--------|--------|----------|----------|--------|-------------|----------|

**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         | 0.0261        | 0.0000        | 8.0000e-005   | 0.0000             |               | 0.0000             | 0.0000        |                | 0.0000             | 0.0000        | 0.0000        | 1.6000e-004     | 1.6000e-004     | 0.0000        | 0.0000             | 1.7000e-004     |
| Energy       | 8.0700e-003   | 0.0734        | 0.0617        | 4.4000e-004        |               | 5.5800e-003        | 5.5800e-003   |                | 5.5800e-003        | 5.5800e-003   | 0.0000        | 233.1305        | 233.1305        | 5.5900e-003   | 2.3100e-003        | 233.9573        |
| Mobile       | 0.1756        | 0.5657        | 1.3681        | 2.2300e-003        | 0.1357        | 3.7800e-003        | 0.1395        | 0.0364         | 3.5700e-003        | 0.0400        | 0.0000        | 205.1563        | 205.1563        | 0.0195        | 0.0000             | 205.6448        |
| Waste        |               |               |               |                    |               | 0.0000             | 0.0000        |                | 0.0000             | 0.0000        | 0.5917        | 0.0000          | 0.5917          | 0.0350        | 0.0000             | 1.4660          |
| Water        |               |               |               |                    |               | 0.0000             | 0.0000        |                | 0.0000             | 0.0000        | 0.6153        | 13.2150         | 13.8303         | 0.0636        | 1.5600e-003        | 15.8854         |
| <b>Total</b> | <b>0.2097</b> | <b>0.6391</b> | <b>1.4299</b> | <b>2.6700e-003</b> | <b>0.1357</b> | <b>9.3600e-003</b> | <b>0.1451</b> | <b>0.0364</b>  | <b>9.1500e-003</b> | <b>0.0456</b> | <b>1.2071</b> | <b>451.5019</b> | <b>452.7089</b> | <b>0.1237</b> | <b>3.8700e-003</b> | <b>456.9536</b> |

|                   | ROG   | NOx   | CO    | SO2   | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4   | N2O  | CO2e  |
|-------------------|-------|-------|-------|-------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|-------|------|-------|
| Percent Reduction | 13.00 | 24.73 | 33.67 | 42.58 | 52.13         | 24.64        | 50.98      | 52.14          | 24.00         | 48.29       | 32.90    | 28.68     | 28.69     | 27.28 | 0.00 | 28.63 |

**4.0 Operational Detail - Mobile**

**4.1 Mitigation Measures Mobile**

- Improve Walkability Design
- Improve Destination Accessibility
- Increase Transit Accessibility

|             | ROG     | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 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   | 0.1756  | 0.5657 | 1.3681 | 2.2300e-003 | 0.1357        | 3.7800e-003  | 0.1395     | 0.0364         | 3.5700e-003   | 0.0400      | 0.0000   | 205.1563  | 205.1563  | 0.0195 | 0.0000 | 205.6448 |
| Unmitigated | 0.2070  | 0.7756 | 2.0941 | 4.2100e-003 | 0.2835        | 6.8400e-003  | 0.2904     | 0.0761         | 6.4600e-003   | 0.0825      | 0.0000   | 386.7223  | 386.7223  | 0.0310 | 0.0000 | 387.4960 |

**4.2 Trip Summary Information**

| Land Use           | Average Daily Trip Rate |               |               | Unmitigated Annual VMT | Mitigated Annual VMT |
|--------------------|-------------------------|---------------|---------------|------------------------|----------------------|
|                    | Weekday                 | Saturday      | Sunday        |                        |                      |
| Quality Restaurant | 535.74                  | 562.00        | 429.79        | 746,487                | 357,334              |
| <b>Total</b>       | <b>535.74</b>           | <b>562.00</b> | <b>429.79</b> | <b>746,487</b>         | <b>357,334</b>       |

**4.3 Trip Type Information**

| Land Use           | Miles      |            |             | Trip %    |            |             | Trip Purpose % |          |         |
|--------------------|------------|------------|-------------|-----------|------------|-------------|----------------|----------|---------|
|                    | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C- | H-S or C-C | H-O or C-NW | Primary        | Diverted | Pass-by |
| Quality Restaurant | 16.60      | 8.40       | 6.90        | 12.00     | 69.00      | 19.00       | 38             | 18       | 44      |

**4.4 Fleet Mix**

| Land Use           | LDA      | LDT1     | LDT2     | MDV      | LHD1     | LHD2     | MHD      | HHD      | OBUS     | UBUS     | MCY      | SBUS     | MH       |
|--------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Quality Restaurant | 0.546581 | 0.047315 | 0.196959 | 0.128768 | 0.019038 | 0.005774 | 0.017712 | 0.026513 | 0.002264 | 0.002897 | 0.004538 | 0.000646 | 0.000994 |



## 5.0 Energy Detail

Historical Energy Use: Y

### 5.1 Mitigation Measures Energy

|                         | ROG         | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O         | CO2e     |
|-------------------------|-------------|--------|--------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|-------------|----------|
| Category                | tons/yr     |        |        |             |               |              |             |                |               |             | MT/yr    |           |           |             |             |          |
| Electricity Mitigated   |             |        |        |             |               | 0.0000       | 0.0000      |                | 0.0000        | 0.0000      | 0.0000   | 153.2184  | 153.2184  | 4.0600e-003 | 8.4000e-004 | 153.5703 |
| Electricity Unmitigated |             |        |        |             |               | 0.0000       | 0.0000      |                | 0.0000        | 0.0000      | 0.0000   | 153.2184  | 153.2184  | 4.0600e-003 | 8.4000e-004 | 153.5703 |
| NaturalGas Mitigated    | 8.0700e-003 | 0.0734 | 0.0617 | 4.4000e-004 |               | 5.5800e-003  | 5.5800e-003 |                | 5.5800e-003   | 5.5800e-003 | 0.0000   | 79.9121   | 79.9121   | 1.5300e-003 | 1.4700e-003 | 80.3870  |
| NaturalGas Unmitigated  | 8.0700e-003 | 0.0734 | 0.0617 | 4.4000e-004 |               | 5.5800e-003  | 5.5800e-003 |                | 5.5800e-003   | 5.5800e-003 | 0.0000   | 79.9121   | 79.9121   | 1.5300e-003 | 1.4700e-003 | 80.3870  |

### 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         |                |                |                    |                    |                |
| Quality Restaurant | 1.4975e+006    | 8.0700e-003        | 0.0734        | 0.0617        | 4.4000e-004        |               | 5.5800e-003        | 5.5800e-003        |                | 5.5800e-003        | 5.5800e-003        | 0.0000        | 79.9121        | 79.9121        | 1.5300e-003        | 1.4700e-003        | 80.3870        |
| <b>Total</b>       |                | <b>8.0700e-003</b> | <b>0.0734</b> | <b>0.0617</b> | <b>4.4000e-004</b> |               | <b>5.5800e-003</b> | <b>5.5800e-003</b> |                | <b>5.5800e-003</b> | <b>5.5800e-003</b> | <b>0.0000</b> | <b>79.9121</b> | <b>79.9121</b> | <b>1.5300e-003</b> | <b>1.4700e-003</b> | <b>80.3870</b> |

#### 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         |                |                |                    |                    |                |
| Quality Restaurant | 1.4975e+006    | 8.0700e-003        | 0.0734        | 0.0617        | 4.4000e-004        |               | 5.5800e-003        | 5.5800e-003        |                | 5.5800e-003        | 5.5800e-003        | 0.0000        | 79.9121        | 79.9121        | 1.5300e-003        | 1.4700e-003        | 80.3870        |
| <b>Total</b>       |                | <b>8.0700e-003</b> | <b>0.0734</b> | <b>0.0617</b> | <b>4.4000e-004</b> |               | <b>5.5800e-003</b> | <b>5.5800e-003</b> |                | <b>5.5800e-003</b> | <b>5.5800e-003</b> | <b>0.0000</b> | <b>79.9121</b> | <b>79.9121</b> | <b>1.5300e-003</b> | <b>1.4700e-003</b> | <b>80.3870</b> |

### 5.3 Energy by Land Use - Electricity

#### Unmitigated

|          | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|----------|-----------------|-----------|-----|-----|------|
| Land Use | kWh/yr          | MT/yr     |     |     |      |
|          |                 |           |     |     |      |

|                    |        |                 |                    |                    |                 |
|--------------------|--------|-----------------|--------------------|--------------------|-----------------|
| Quality Restaurant | 308765 | 153.2184        | 4.0600e-003        | 8.4000e-004        | 153.5703        |
| <b>Total</b>       |        | <b>153.2184</b> | <b>4.0600e-003</b> | <b>8.4000e-004</b> | <b>153.5703</b> |

**Mitigated**

|                    | Electricity Use | Total CO2       | CH4                | N2O                | CO2e            |
|--------------------|-----------------|-----------------|--------------------|--------------------|-----------------|
| Land Use           | kWh/yr          | MT/yr           |                    |                    |                 |
| Quality Restaurant | 308765          | 153.2184        | 4.0600e-003        | 8.4000e-004        | 153.5703        |
| <b>Total</b>       |                 | <b>153.2184</b> | <b>4.0600e-003</b> | <b>8.4000e-004</b> | <b>153.5703</b> |

**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   | 0.0261  | 0.0000 | 8.0000e-005 | 0.0000 |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      | 0.0000   | 1.6000e-004 | 1.6000e-004 | 0.0000 | 0.0000 | 1.7000e-004 |
| Unmitigated | 0.0261  | 0.0000 | 8.0000e-005 | 0.0000 |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      | 0.0000   | 1.6000e-004 | 1.6000e-004 | 0.0000 | 0.0000 | 1.7000e-004 |

**6.2 Area by SubCategory**

**Unmitigated**

|                       | ROG           | NOx           | CO                 | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio-CO2           | Total CO2          | CH4           | N2O           | CO2e               |
|-----------------------|---------------|---------------|--------------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|--------------------|--------------------|---------------|---------------|--------------------|
| SubCategory           | tons/yr       |               |                    |               |               |               |               |                |               |               | MT/yr         |                    |                    |               |               |                    |
| Architectural Coating | 2.9600e-003   |               |                    |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             |
| Consumer Products     | 0.0231        |               |                    |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             |
| Landscaping           | 1.0000e-005   | 0.0000        | 8.0000e-005        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        | 1.6000e-004        | 1.6000e-004        | 0.0000        | 0.0000        | 1.7000e-004        |
| <b>Total</b>          | <b>0.0261</b> | <b>0.0000</b> | <b>8.0000e-005</b> | <b>0.0000</b> |               | <b>0.0000</b> | <b>0.0000</b> |                | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>1.6000e-004</b> | <b>1.6000e-004</b> | <b>0.0000</b> | <b>0.0000</b> | <b>1.7000e-004</b> |

**Mitigated**

|                       | ROG           | NOx           | CO                 | SO2           | Fugitive PM10 | Exhaust PM10 | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio-CO2           | Total CO2          | CH4           | N2O           | CO2e               |        |
|-----------------------|---------------|---------------|--------------------|---------------|---------------|--------------|---------------|----------------|---------------|---------------|---------------|--------------------|--------------------|---------------|---------------|--------------------|--------|
| SubCategory           | tons/yr       |               |                    |               |               |              |               |                |               |               | MT/yr         |                    |                    |               |               |                    |        |
| Architectural Coating | 2.9600e-003   |               |                    |               |               |              | 0.0000        | 0.0000         |               | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             | 0.0000 |
| Consumer Products     | 0.0231        |               |                    |               |               |              | 0.0000        | 0.0000         |               | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             | 0.0000 |
| Landscaping           | 1.0000e-005   | 0.0000        | 8.0000e-005        | 0.0000        |               |              | 0.0000        | 0.0000         |               | 0.0000        | 0.0000        | 1.6000e-004        | 1.6000e-004        | 0.0000        | 0.0000        | 1.7000e-004        |        |
| <b>Total</b>          | <b>0.0261</b> | <b>0.0000</b> | <b>8.0000e-005</b> | <b>0.0000</b> |               |              | <b>0.0000</b> | <b>0.0000</b>  |               | <b>0.0000</b> | <b>0.0000</b> | <b>1.6000e-004</b> | <b>1.6000e-004</b> | <b>0.0000</b> | <b>0.0000</b> | <b>1.7000e-004</b> |        |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

|             | Total CO2 | CH4    | N2O         | CO2e    |
|-------------|-----------|--------|-------------|---------|
| Category    | MT/yr     |        |             |         |
| Mitigated   | 13.8303   | 0.0636 | 1.5600e-003 | 15.8854 |
| Unmitigated | 13.8303   | 0.0636 | 1.5600e-003 | 15.8854 |

### 7.2 Water by Land Use

#### Unmitigated

|                    | Indoor/Outdoor Use | Total CO2      | CH4           | N2O                | CO2e           |
|--------------------|--------------------|----------------|---------------|--------------------|----------------|
| Land Use           | Mgal               | MT/yr          |               |                    |                |
| Quality Restaurant | 1.93958 / 0.123803 | 13.8303        | 0.0636        | 1.5600e-003        | 15.8854        |
| <b>Total</b>       |                    | <b>13.8303</b> | <b>0.0636</b> | <b>1.5600e-003</b> | <b>15.8854</b> |

#### Mitigated

|                    | Indoor/Outdoor Use | Total CO2      | CH4           | N2O                | CO2e           |
|--------------------|--------------------|----------------|---------------|--------------------|----------------|
| Land Use           | Mgal               | MT/yr          |               |                    |                |
| Quality Restaurant | 1.93958 / 0.123803 | 13.8303        | 0.0636        | 1.5600e-003        | 15.8854        |
| <b>Total</b>       |                    | <b>13.8303</b> | <b>0.0636</b> | <b>1.5600e-003</b> | <b>15.8854</b> |

## 8.0 Waste Detail

## 8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

### Category/Year

|             | Total CO2 | CH4    | N2O    | CO2e   |
|-------------|-----------|--------|--------|--------|
|             | MT/yr     |        |        |        |
| Mitigated   | 0.5917    | 0.0350 | 0.0000 | 1.4660 |
| Unmitigated | 1.1834    | 0.0699 | 0.0000 | 2.9319 |

## 8.2 Waste by Land Use

### Unmitigated

|                    | Waste Disposed | Total CO2     | CH4           | N2O           | CO2e          |
|--------------------|----------------|---------------|---------------|---------------|---------------|
| Land Use           | tons           | MT/yr         |               |               |               |
| Quality Restaurant | 5.83           | 1.1834        | 0.0699        | 0.0000        | 2.9319        |
| <b>Total</b>       |                | <b>1.1834</b> | <b>0.0699</b> | <b>0.0000</b> | <b>2.9319</b> |

### Mitigated

|                    | Waste Disposed | Total CO2     | CH4           | N2O           | CO2e          |
|--------------------|----------------|---------------|---------------|---------------|---------------|
| Land Use           | tons           | MT/yr         |               |               |               |
| Quality Restaurant | 2.915          | 0.5917        | 0.0350        | 0.0000        | 1.4660        |
| <b>Total</b>       |                | <b>0.5917</b> | <b>0.0350</b> | <b>0.0000</b> | <b>1.4660</b> |

## 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

---

citizenM - Existing Uses (2022) - Los Angeles-South Coast County, Annual

**citizenM - Existing Uses (2022)**  
**Los Angeles-South Coast County, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

| Land Uses          | Size | Metric   | Lot Acreage | Floor Surface Area | Population |
|--------------------|------|----------|-------------|--------------------|------------|
| Quality Restaurant | 6.39 | 1000sqft | 0.28        | 6,393.00           | 0          |

**1.2 Other Project Characteristics**

|                                 |   |                                 |       |                                  |       |
|---------------------------------|---|---------------------------------|-------|----------------------------------|-------|
| <b>Urbanization</b>             | Urban                                   | <b>Wind Speed (m/s)</b>         | 2.2   | <b>Precipitation Freq (Days)</b> | 33    |
| <b>Climate Zone</b>             | 11                                      | <b>Operational Year</b>         | 2022  |                                  |       |
| <b>Utility Company</b>          | Los Angeles Department of Water & Power |                                 |       |                                  |       |
| <b>CO2 Intensity (lb/MW hr)</b> | 840                                     | <b>CH4 Intensity (lb/MW hr)</b> | 0.029 | <b>N2O Intensity (lb/MW hr)</b>  | 0.006 |

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics - 2020 RPS

Land Use - Existing uses

Energy Use -

Mobile Land Use Mitigation -

Waste Mitigation -

Vehicle Trips - ITE10

| Table Name                | Column Name        | Default Value | New Value |
|---------------------------|--------------------|---------------|-----------|
| tblLandUse                | LotAcreage         | 0.15          | 0.28      |
| tblProjectCharacteristics | CO2IntensityFactor | 1227.89       | 840       |
| tblVehicleTrips           | ST_TR              | 94.36         | 87.95     |
| tblVehicleTrips           | SU_TR              | 72.16         | 67.26     |
| tblVehicleTrips           | WD_TR              | 89.95         | 83.84     |

**2.0 Emissions Summary**

**2.2 Overall Operational**

**Unmitigated Operational**

| Category | ROG         | NOx    | CO          | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2    | Total CO2   | CH4         | N2O         | CO2e        |
|----------|-------------|--------|-------------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-------------|-------------|-------------|-------------|-------------|
|          | tons/yr     |        |             |             |               |              |             |                |               |             | MT/yr    |             |             |             |             |             |
| Area     | 0.0261      | 0.0000 | 8.0000e-005 | 0.0000      |               | 0.0000       | 0.0000      |                | 0.0000        | 0.0000      | 0.0000   | 1.6000e-004 | 1.6000e-004 | 0.0000      | 0.0000      | 1.7000e-004 |
| Energy   | 8.0700e-003 | 0.0734 | 0.0617      | 4.4000e-004 |               | 5.5800e-003  | 5.5800e-003 |                | 5.5800e-003   | 5.5800e-003 | 0.0000   | 197.5569    | 197.5569    | 5.5900e-003 | 2.3100e-003 | 198.3838    |
| Mobile   | 0.1183      | 0.5554 | 1.1582      | 3.6800e-003 | 0.2833        | 3.2000e-003  | 0.2865      | 0.0760         | 2.9800e-003   | 0.0789      | 0.0000   | 340.3140    | 340.3140    | 0.0198      | 0.0000      | 340.8080    |
| Waste    |             |        |             |             |               | 0.0000       | 0.0000      |                | 0.0000        | 0.0000      | 1.1834   | 0.0000      | 1.1834      | 0.0699      | 0.0000      | 2.9319      |

|              |               |               |               |                    |               |                    |               |               |                    |               |               |                 |                 |               |                    |                 |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|---------------|--------------------|---------------|---------------|-----------------|-----------------|---------------|--------------------|-----------------|
| Water        |               |               |               |                    |               | 0.0000             | 0.0000        |               | 0.0000             | 0.0000        | 0.6153        | 10.1468         | 10.7621         | 0.0636        | 1.5600e-003        | 12.8172         |
| <b>Total</b> | <b>0.1524</b> | <b>0.6288</b> | <b>1.2199</b> | <b>4.1200e-003</b> | <b>0.2833</b> | <b>8.7800e-003</b> | <b>0.2921</b> | <b>0.0760</b> | <b>8.5600e-003</b> | <b>0.0845</b> | <b>1.7988</b> | <b>548.0179</b> | <b>549.8166</b> | <b>0.1588</b> | <b>3.8700e-003</b> | <b>554.9411</b> |

### 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         | 0.0261        | 0.0000        | 8.0000e-005   | 0.0000             |               | 0.0000             | 0.0000        |                | 0.0000             | 0.0000        | 0.0000        | 1.6000e-004     | 1.6000e-004     | 0.0000        | 0.0000             | 1.7000e-004     |
| Energy       | 8.0700e-003   | 0.0734        | 0.0617        | 4.4000e-004        |               | 5.5800e-003        | 5.5800e-003   |                | 5.5800e-003        | 5.5800e-003   | 0.0000        | 197.5569        | 197.5569        | 5.5900e-003   | 2.3100e-003        | 198.3838        |
| Mobile       | 0.1015        | 0.4420        | 0.7505        | 1.9900e-003        | 0.1356        | 1.8200e-003        | 0.1375        | 0.0364         | 1.7000e-003        | 0.0381        | 0.0000        | 184.1227        | 184.1227        | 0.0126        | 0.0000             | 184.4370        |
| Waste        |               |               |               |                    |               | 0.0000             | 0.0000        |                | 0.0000             | 0.0000        | 0.5917        | 0.0000          | 0.5917          | 0.0350        | 0.0000             | 1.4660          |
| Water        |               |               |               |                    |               | 0.0000             | 0.0000        |                | 0.0000             | 0.0000        | 0.6153        | 10.1468         | 10.7621         | 0.0636        | 1.5600e-003        | 12.8172         |
| <b>Total</b> | <b>0.1357</b> | <b>0.5155</b> | <b>0.8123</b> | <b>2.4300e-003</b> | <b>0.1356</b> | <b>7.4000e-003</b> | <b>0.1430</b> | <b>0.0364</b>  | <b>7.2800e-003</b> | <b>0.0436</b> | <b>1.2071</b> | <b>391.8266</b> | <b>393.0336</b> | <b>0.1167</b> | <b>3.8700e-003</b> | <b>397.1041</b> |

|                          | ROG          | NOx          | CO           | SO2          | Fugitive PM10 | Exhaust PM10 | PM10 Total   | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total  | Bio- CO2     | NBio- CO2    | Total CO2    | CH4          | N2O         | CO2e         |
|--------------------------|--------------|--------------|--------------|--------------|---------------|--------------|--------------|----------------|---------------|--------------|--------------|--------------|--------------|--------------|-------------|--------------|
| <b>Percent Reduction</b> | <b>10.99</b> | <b>18.03</b> | <b>33.42</b> | <b>41.02</b> | <b>52.13</b>  | <b>15.72</b> | <b>51.03</b> | <b>52.14</b>   | <b>14.95</b>  | <b>48.37</b> | <b>32.90</b> | <b>28.50</b> | <b>28.52</b> | <b>26.54</b> | <b>0.00</b> | <b>28.44</b> |

## 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

- Improve Walkability Design
- Improve Destination Accessibility
- Increase Transit Accessibility

|             | ROG     | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 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   | 0.1015  | 0.4420 | 0.7505 | 1.9900e-003 | 0.1356        | 1.8200e-003  | 0.1375     | 0.0364         | 1.7000e-003   | 0.0381      | 0.0000   | 184.1227  | 184.1227  | 0.0126 | 0.0000 | 184.4370 |
| Unmitigated | 0.1183  | 0.5554 | 1.1582 | 3.6800e-003 | 0.2833        | 3.2000e-003  | 0.2865     | 0.0760         | 2.9800e-003   | 0.0789      | 0.0000   | 340.3140  | 340.3140  | 0.0198 | 0.0000 | 340.8080 |

### 4.2 Trip Summary Information

| Land Use           | Average Daily Trip Rate |               |               | Unmitigated    | Mitigated      |
|--------------------|-------------------------|---------------|---------------|----------------|----------------|
|                    | Weekday                 | Saturday      | Sunday        | Annual VMT     | Annual VMT     |
| Quality Restaurant | 535.74                  | 562.00        | 429.79        | 746,487        | 357,334        |
| <b>Total</b>       | <b>535.74</b>           | <b>562.00</b> | <b>429.79</b> | <b>746,487</b> | <b>357,334</b> |

### 4.3 Trip Type Information

| Land Use           | Miles      |            |             | Trip %    |            |             | Trip Purpose % |          |         |
|--------------------|------------|------------|-------------|-----------|------------|-------------|----------------|----------|---------|
|                    | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C- | H-S or C-C | H-O or C-NW | Primary        | Diverted | Pass-by |
| Quality Restaurant | 16.60      | 8.40       | 6.90        | 12.00     | 69.00      | 19.00       | 38             | 18       | 44      |

### 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|----------|-----|------|------|-----|------|------|-----|-----|------|------|-----|------|----|
|----------|-----|------|------|-----|------|------|-----|-----|------|------|-----|------|----|

|                    |          |          |          |          |          |          |          |          |          |          |          |          |          |
|--------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Quality Restaurant | 0.546501 | 0.044961 | 0.204016 | 0.120355 | 0.015740 | 0.006196 | 0.020131 | 0.030678 | 0.002515 | 0.002201 | 0.005142 | 0.000687 | 0.000876 |
|--------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|

## 5.0 Energy Detail

Historical Energy Use: Y

### 5.1 Mitigation Measures Energy

|                         | ROG         | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O         | CO2e     |
|-------------------------|-------------|--------|--------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|-------------|----------|
| Category                | tons/yr     |        |        |             |               |              |             |                |               |             | MT/yr    |           |           |             |             |          |
| Electricity Mitigated   |             |        |        |             |               | 0.0000       | 0.0000      |                | 0.0000        | 0.0000      | 0.0000   | 117.6448  | 117.6448  | 4.0600e-003 | 8.4000e-004 | 117.9968 |
| Electricity Unmitigated |             |        |        |             |               | 0.0000       | 0.0000      |                | 0.0000        | 0.0000      | 0.0000   | 117.6448  | 117.6448  | 4.0600e-003 | 8.4000e-004 | 117.9968 |
| NaturalGas Mitigated    | 8.0700e-003 | 0.0734 | 0.0617 | 4.4000e-004 |               | 5.5800e-003  | 5.5800e-003 |                | 5.5800e-003   | 5.5800e-003 | 0.0000   | 79.9121   | 79.9121   | 1.5300e-003 | 1.4700e-003 | 80.3870  |
| NaturalGas Unmitigated  | 8.0700e-003 | 0.0734 | 0.0617 | 4.4000e-004 |               | 5.5800e-003  | 5.5800e-003 |                | 5.5800e-003   | 5.5800e-003 | 0.0000   | 79.9121   | 79.9121   | 1.5300e-003 | 1.4700e-003 | 80.3870  |

### 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         |                |                |                    |                    |                |
| Quality Restaurant | 1.4975e+006    | 8.0700e-003        | 0.0734        | 0.0617        | 4.4000e-004        |               | 5.5800e-003        | 5.5800e-003        |                | 5.5800e-003        | 5.5800e-003        | 0.0000        | 79.9121        | 79.9121        | 1.5300e-003        | 1.4700e-003        | 80.3870        |
| <b>Total</b>       |                | <b>8.0700e-003</b> | <b>0.0734</b> | <b>0.0617</b> | <b>4.4000e-004</b> |               | <b>5.5800e-003</b> | <b>5.5800e-003</b> |                | <b>5.5800e-003</b> | <b>5.5800e-003</b> | <b>0.0000</b> | <b>79.9121</b> | <b>79.9121</b> | <b>1.5300e-003</b> | <b>1.4700e-003</b> | <b>80.3870</b> |

#### 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         |                |                |                    |                    |                |
| Quality Restaurant | 1.4975e+006    | 8.0700e-003        | 0.0734        | 0.0617        | 4.4000e-004        |               | 5.5800e-003        | 5.5800e-003        |                | 5.5800e-003        | 5.5800e-003        | 0.0000        | 79.9121        | 79.9121        | 1.5300e-003        | 1.4700e-003        | 80.3870        |
| <b>Total</b>       |                | <b>8.0700e-003</b> | <b>0.0734</b> | <b>0.0617</b> | <b>4.4000e-004</b> |               | <b>5.5800e-003</b> | <b>5.5800e-003</b> |                | <b>5.5800e-003</b> | <b>5.5800e-003</b> | <b>0.0000</b> | <b>79.9121</b> | <b>79.9121</b> | <b>1.5300e-003</b> | <b>1.4700e-003</b> | <b>80.3870</b> |

### 5.3 Energy by Land Use - Electricity

#### Unmitigated

| Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|-----------------|-----------|-----|-----|------|
|-----------------|-----------|-----|-----|------|



| Land Use           | kWh/yr | M1/yr           |                    |                    |                 |
|--------------------|--------|-----------------|--------------------|--------------------|-----------------|
| Quality Restaurant | 308765 | 117.6448        | 4.0600e-003        | 8.4000e-004        | 117.9968        |
| <b>Total</b>       |        | <b>117.6448</b> | <b>4.0600e-003</b> | <b>8.4000e-004</b> | <b>117.9968</b> |

**Mitigated**

|                    | Electricity Use | Total CO2       | CH4                | N2O                | CO2e            |
|--------------------|-----------------|-----------------|--------------------|--------------------|-----------------|
| Land Use           | kWh/yr          | M1/yr           |                    |                    |                 |
| Quality Restaurant | 308765          | 117.6448        | 4.0600e-003        | 8.4000e-004        | 117.9968        |
| <b>Total</b>       |                 | <b>117.6448</b> | <b>4.0600e-003</b> | <b>8.4000e-004</b> | <b>117.9968</b> |

**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 |        |             |        |               |              |            |                |               |             | M1/yr    |             |             |        |        |             |
| Mitigated   | 0.0261  | 0.0000 | 8.0000e-005 | 0.0000 |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      | 0.0000   | 1.6000e-004 | 1.6000e-004 | 0.0000 | 0.0000 | 1.7000e-004 |
| Unmitigated | 0.0261  | 0.0000 | 8.0000e-005 | 0.0000 |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      | 0.0000   | 1.6000e-004 | 1.6000e-004 | 0.0000 | 0.0000 | 1.7000e-004 |

**6.2 Area by SubCategory**

**Unmitigated**

|                       | ROG           | NOx           | CO                 | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio-CO2           | Total CO2          | CH4           | N2O           | CO2e               |
|-----------------------|---------------|---------------|--------------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|--------------------|--------------------|---------------|---------------|--------------------|
| SubCategory           | tons/yr       |               |                    |               |               |               |               |                |               |               | MT/yr         |                    |                    |               |               |                    |
| Architectural Coating | 2.9600e-003   |               |                    |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             |
| Consumer Products     | 0.0231        |               |                    |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             |
| Landscaping           | 1.0000e-005   | 0.0000        | 8.0000e-005        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        | 1.6000e-004        | 1.6000e-004        | 0.0000        | 0.0000        | 1.7000e-004        |
| <b>Total</b>          | <b>0.0261</b> | <b>0.0000</b> | <b>8.0000e-005</b> | <b>0.0000</b> |               | <b>0.0000</b> | <b>0.0000</b> |                | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>1.6000e-004</b> | <b>1.6000e-004</b> | <b>0.0000</b> | <b>0.0000</b> | <b>1.7000e-004</b> |

**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       |               |                    |               |               |              |               |                |               |               | M1/yr         |                    |                    |               |               |                    |        |
| Architectural Coating | 2.9600e-003   |               |                    |               |               |              | 0.0000        | 0.0000         | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             | 0.0000 |
| Consumer Products     | 0.0231        |               |                    |               |               |              | 0.0000        | 0.0000         | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             | 0.0000 |
| Landscaping           | 1.0000e-005   | 0.0000        | 8.0000e-005        | 0.0000        |               |              | 0.0000        | 0.0000         | 0.0000        | 0.0000        | 0.0000        | 1.6000e-004        | 1.6000e-004        | 0.0000        | 0.0000        | 1.7000e-004        |        |
| <b>Total</b>          | <b>0.0261</b> | <b>0.0000</b> | <b>8.0000e-005</b> | <b>0.0000</b> |               |              | <b>0.0000</b> | <b>0.0000</b>  | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>1.6000e-004</b> | <b>1.6000e-004</b> | <b>0.0000</b> | <b>0.0000</b> | <b>1.7000e-004</b> |        |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

|             | Total CO2 | CH4    | N2O         | CO2e    |
|-------------|-----------|--------|-------------|---------|
| Category    | MT/yr     |        |             |         |
| Mitigated   | 10.7621   | 0.0636 | 1.5600e-003 | 12.8172 |
| Unmitigated | 10.7621   | 0.0636 | 1.5600e-003 | 12.8172 |

### 7.2 Water by Land Use

#### Unmitigated

|                    | Indoor/Outdoor Use | Total CO2      | CH4           | N2O                | CO2e           |
|--------------------|--------------------|----------------|---------------|--------------------|----------------|
| Land Use           | Mgal               | MT/yr          |               |                    |                |
| Quality Restaurant | 1.93958 / 0.123803 | 10.7621        | 0.0636        | 1.5600e-003        | 12.8172        |
| <b>Total</b>       |                    | <b>10.7621</b> | <b>0.0636</b> | <b>1.5600e-003</b> | <b>12.8172</b> |

#### Mitigated

|                    | Indoor/Outdoor Use | Total CO2      | CH4           | N2O                | CO2e           |
|--------------------|--------------------|----------------|---------------|--------------------|----------------|
| Land Use           | Mgal               | M1/yr          |               |                    |                |
| Quality Restaurant | 1.93958 / 0.123803 | 10.7621        | 0.0636        | 1.5600e-003        | 12.8172        |
| <b>Total</b>       |                    | <b>10.7621</b> | <b>0.0636</b> | <b>1.5600e-003</b> | <b>12.8172</b> |

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

#### Category/Year

|             | Total CO2 | CH4    | N2O    | CO2e   |
|-------------|-----------|--------|--------|--------|
|             | MT/yr     |        |        |        |
| Mitigated   | 0.5917    | 0.0350 | 0.0000 | 1.4660 |
| Unmitigated | 1.1834    | 0.0699 | 0.0000 | 2.9319 |

### 8.2 Waste by Land Use

#### Unmitigated

|                    | Waste Disposed | Total CO2     | CH4           | N2O           | CO2e          |
|--------------------|----------------|---------------|---------------|---------------|---------------|
| Land Use           | tons           | MT/yr         |               |               |               |
| Quality Restaurant | 5.83           | 1.1834        | 0.0699        | 0.0000        | 2.9319        |
| <b>Total</b>       |                | <b>1.1834</b> | <b>0.0699</b> | <b>0.0000</b> | <b>2.9319</b> |

#### Mitigated

|                    | Waste Disposed | Total CO2     | CH4           | N2O           | CO2e          |
|--------------------|----------------|---------------|---------------|---------------|---------------|
| Land Use           | tons           | MT/yr         |               |               |               |
| Quality Restaurant | 2.915          | 0.5917        | 0.0350        | 0.0000        | 1.4660        |
| <b>Total</b>       |                | <b>0.5917</b> | <b>0.0350</b> | <b>0.0000</b> | <b>1.4660</b> |

## 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**

---

citizenM - Construction and Operation - Los Angeles-South Coast County, Annual

**citizenM - Construction and Operation**  
**Los Angeles-South Coast County, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

| Land Uses                           | Size   | Metric   | Lot Acreage | Floor Surface Area | Population |
|-------------------------------------|--------|----------|-------------|--------------------|------------|
| Enclosed Parking with Elevator      | 98.00  | Space    | 0.88        | 39,200.00          | 0          |
| High Turnover (Sit Down Restaurant) | 5.37   | 1000sqft | 0.12        | 5,373.00           | 0          |
| Hotel                               | 240.00 | Room     | 8.00        | 348,480.00         | 0          |

**1.2 Other Project Characteristics**

|                                 |   |                                 |       |                                  |       |
|---------------------------------|---|---------------------------------|-------|----------------------------------|-------|
| <b>Urbanization</b>             | Urban                                   | <b>Wind Speed (m/s)</b>         | 2.2   | <b>Precipitation Freq (Days)</b> | 33    |
| <b>Climate Zone</b>             | 11                                      |                                 |       | <b>Operational Year</b>          | 2022  |
| <b>Utility Company</b>          | Los Angeles Department of Water & Power |                                 |       |                                  |       |
| <b>CO2 Intensity (lb/MW hr)</b> | 840                                     | <b>CH4 Intensity (lb/MW hr)</b> | 0.029 | <b>N2O Intensity (lb/MW hr)</b>  | 0.006 |

**1.3 User Entered Comments & Non-Default Data**

- Project Characteristics - RPS 2020
- Land Use - Project Site
- Construction Phase - Project Construction Assumptions
- Off-road Equipment - Project Construction Assumptions
- Off-road Equipment - Project Construction Assumptions
- Off-road Equipment - Project Construction Assumptions
- Off-road Equipment - Project Construction Assumptions
- Off-road Equipment - Project Construction Assumptions
- Off-road Equipment - Project Construction Assumptions
- Off-road Equipment - Project Construction Assumptions
- Trips and VMT - Project Construction Assumptions
- Demolition - Demo of existing concrete and building
- Grading - Project Site
- Architectural Coating -
- Vehicle Trips - ITE 10
- Area Coating -
- Energy Use - Parking Adjustment
- Construction Off-road Equipment Mitigation -
- Mobile Land Use Mitigation -
- Energy Mitigation -
- Water Mitigation -
- Waste Mitigation -
- Stationary Sources - Emergency Generators and Fire Pumps -
- Stationary Sources - Emergency Generators and Fire Pumps EF - SCAQMD BACT Requirements

| Table Name           | Column Name | Default Value | New Value |
|----------------------|-------------|---------------|-----------|
| tblConstructionPhase | NumDays     | 20.00         | 23.00     |
| tblConstructionPhase | NumDays     | 20.00         | 45.00     |

|                                |                            |             |             |
|--------------------------------|----------------------------|-------------|-------------|
| tblConstructionPhase           | NumDays                    | 10.00       | 88.00       |
| tblConstructionPhase           | NumDays                    | 230.00      | 227.00      |
| tblConstructionPhase           | NumDays                    | 20.00       | 87.00       |
| tblConstructionPhase           | NumDays                    | 20.00       | 87.00       |
| tblEnergyUse                   | LightingElect              | 1.75        | 2.33        |
| tblEnergyUse                   | T24E                       | 3.92        | 0.64        |
| tblGrading                     | AcresOfGrading             | 0.00        | 0.28        |
| tblGrading                     | MaterialExported           | 0.00        | 29,300.00   |
| tblLandUse                     | LandUseSquareFeet          | 5,370.00    | 5,373.00    |
| tblOffRoadEquipment            | HorsePower                 | 168.00      | 97.00       |
| tblOffRoadEquipment            | HorsePower                 | 203.00      | 247.00      |
| tblOffRoadEquipment            | LoadFactor                 | 0.40        | 0.37        |
| tblOffRoadEquipment            | LoadFactor                 | 0.36        | 0.40        |
| tblOffRoadEquipment            | OffRoadEquipmentUnitAmount | 3.00        | 1.00        |
| tblOffRoadEquipment            | OffRoadEquipmentUnitAmount | 1.00        | 2.00        |
| tblOffRoadEquipment            | OffRoadEquipmentUnitAmount | 3.00        | 2.00        |
| tblOffRoadEquipment            | OffRoadEquipmentUnitAmount | 2.00        | 1.00        |
| tblOffRoadEquipment            | OffRoadEquipmentUnitAmount | 4.00        | 1.00        |
| tblOffRoadEquipment            | OffRoadEquipmentUnitAmount | 1.00        | 3.00        |
| tblOffRoadEquipment            | UsageHours                 | 8.00        | 7.00        |
| tblProjectCharacteristics      | CO2IntensityFactor         | 1227.89     | 840         |
| tblStationaryGeneratorsPumpsEF | NOX_EF                     | 2.85        | 0.50        |
| tblStationaryGeneratorsPumpsEF | PM10_EF                    | 0.15        | 3.00        |
| tblStationaryGeneratorsPumpsEF | PM2_5_EF                   | 0.15        | 0.02        |
| tblStationaryGeneratorsPumpsEF | ROG_EF                     | 2.2480e-003 | 3.1000e-004 |
| tblTripsAndVMT                 | HaulingTripLength          | 20.00       | 34.00       |
| tblTripsAndVMT                 | HaulingTripLength          | 20.00       | 34.00       |
| tblTripsAndVMT                 | HaulingTripNumber          | 57.00       | 600.00      |
| tblTripsAndVMT                 | HaulingTripNumber          | 3,663.00    | 6,300.00    |
| tblTripsAndVMT                 | HaulingTripNumber          | 0.00        | 3,400.00    |
| tblTripsAndVMT                 | VendorTripNumber           | 64.00       | 40.00       |
| tblTripsAndVMT                 | VendorTripNumber           | 0.00        | 20.00       |
| tblTripsAndVMT                 | WorkerTripNumber           | 13.00       | 42.00       |
| tblTripsAndVMT                 | WorkerTripNumber           | 25.00       | 50.00       |
| tblTripsAndVMT                 | WorkerTripNumber           | 20.00       | 76.00       |
| tblTripsAndVMT                 | WorkerTripNumber           | 165.00      | 200.00      |
| tblTripsAndVMT                 | WorkerTripNumber           | 8.00        | 100.00      |
| tblTripsAndVMT                 | WorkerTripNumber           | 33.00       | 0.00        |
| tblVehicleTrips                | ST_TR                      | 158.37      | 139.78      |
| tblVehicleTrips                | ST_TR                      | 8.19        | 8.38        |
| tblVehicleTrips                | SU_TR                      | 131.84      | 116.37      |
| tblVehicleTrips                | SU_TR                      | 5.95        | 6.09        |
| tblVehicleTrips                | WD_TR                      | 127.15      | 112.23      |
| tblVehicleTrips                | WD_TR                      | 8.17        | 8.36        |

## 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       |               |               |                    |               |               |               |                |               |               | M1/yr         |                 |                 |               |               |                 |
| 2020           | 0.2123        | 3.2388        | 1.6665        | 7.9900e-003        | 0.3228        | 0.0686        | 0.3914        | 0.1244         | 0.0646        | 0.1890        | 0.0000        | 757.6470        | 757.6470        | 0.0817        | 0.0000        | 759.6884        |
| 2021           | 0.9027        | 3.1542        | 3.7058        | 8.5000e-003        | 0.3190        | 0.1309        | 0.4498        | 0.0851         | 0.1269        | 0.2119        | 0.0000        | 745.5631        | 745.5631        | 0.0822        | 0.0000        | 747.6181        |
| 2022           | 1.2276        | 0.2788        | 0.4223        | 9.5000e-004        | 0.0385        | 0.0104        | 0.0488        | 0.0103         | 9.7400e-003   | 0.0201        | 0.0000        | 85.4829         | 85.4829         | 0.0126        | 0.0000        | 85.7984         |
| <b>Maximum</b> | <b>1.2276</b> | <b>3.2388</b> | <b>3.7058</b> | <b>8.5000e-003</b> | <b>0.3228</b> | <b>0.1309</b> | <b>0.4498</b> | <b>0.1244</b>  | <b>0.1269</b> | <b>0.2119</b> | <b>0.0000</b> | <b>757.6470</b> | <b>757.6470</b> | <b>0.0822</b> | <b>0.0000</b> | <b>759.6884</b> |

**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       |               |               |                    |               |               |               |                |               |               | M1/yr         |                 |                 |               |               |                 |
| 2020           | 0.2123        | 3.2388        | 1.6665        | 7.9900e-003        | 0.2352        | 0.0686        | 0.3038        | 0.0782         | 0.0646        | 0.1428        | 0.0000        | 757.6468        | 757.6468        | 0.0817        | 0.0000        | 759.6882        |
| 2021           | 0.9027        | 3.1542        | 3.7058        | 8.5000e-003        | 0.3190        | 0.1309        | 0.4498        | 0.0851         | 0.1269        | 0.2119        | 0.0000        | 745.5626        | 745.5626        | 0.0822        | 0.0000        | 747.6176        |
| 2022           | 1.2276        | 0.2788        | 0.4223        | 9.5000e-004        | 0.0385        | 0.0104        | 0.0488        | 0.0103         | 9.7400e-003   | 0.0201        | 0.0000        | 85.4829         | 85.4829         | 0.0126        | 0.0000        | 85.7983         |
| <b>Maximum</b> | <b>1.2276</b> | <b>3.2388</b> | <b>3.7058</b> | <b>8.5000e-003</b> | <b>0.3190</b> | <b>0.1309</b> | <b>0.4498</b> | <b>0.0851</b>  | <b>0.1269</b> | <b>0.2119</b> | <b>0.0000</b> | <b>757.6468</b> | <b>757.6468</b> | <b>0.0822</b> | <b>0.0000</b> | <b>759.6882</b> |

|                          | ROG         | NOx         | CO          | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total  | Bio- CO2    | NBio- CO2   | Total CO2   | CH4         | N2O         | CO2e        |
|--------------------------|-------------|-------------|-------------|-------------|---------------|--------------|-------------|----------------|---------------|--------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>Percent Reduction</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>12.87</b>  | <b>0.00</b>  | <b>9.84</b> | <b>21.01</b>   | <b>0.00</b>   | <b>10.97</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> |

| Quarter | Start Date | End Date       | Maximum Unmitigated ROG + NOX (tons/quarter) | Maximum Mitigated ROG + NOX (tons/quarter) |
|---------|------------|----------------|--|--|
| 1       | 6-11-2020  | 9-10-2020      | 2.3082                                       | 2.3082                                     |
| 2       | 9-11-2020  | 12-10-2020     | 0.8894                                       | 0.8894                                     |
| 3       | 12-11-2020 | 3-10-2021      | 0.8758                                       | 0.8758                                     |
| 4       | 3-11-2021  | 6-10-2021      | 0.9676                                       | 0.9676                                     |
| 5       | 6-11-2021  | 9-10-2021      | 0.9664                                       | 0.9664                                     |
| 6       | 9-11-2021  | 12-10-2021     | 1.0363                                       | 1.0363                                     |
| 7       | 12-11-2021 | 3-10-2022      | 1.5462                                       | 1.5462                                     |
| 8       | 3-11-2022  | 6-10-2022      | 0.3416                                       | 0.3416                                     |
|         |            | <b>Highest</b> | <b>2.3082</b>                                | <b>2.3082</b>                              |

**2.2 Overall Operational**

**Unmitigated Operational**

|          | ROG     | NOx         | CO          | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2   | Total CO2   | CH4         | N2O    | CO2e        |
|----------|---------|-------------|-------------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-------------|-------------|-------------|--------|-------------|
| Category | tons/yr |             |             |             |               |              |             |                |               |             | MT/yr    |             |             |             |        |             |
| Area     | 1.4462  | 4.0000e-005 | 4.3900e-003 | 0.0000      |               | 2.0000e-005  | 2.0000e-005 |                | 2.0000e-005   | 2.0000e-005 | 0.0000   | 8.5200e-003 | 8.5200e-003 | 2.0000e-005 | 0.0000 | 9.0800e-003 |
| Energy   | 0.0518  | 0.4704      | 0.3952      | 2.8200e-003 |               | 0.0358       | 0.0358      |                | 0.0358        | 0.0358      | 0.0000   | 1,656.1126  | 1,656.1126  | 0.0493      | 0.0176 | 1,662.5783  |
| Mobile   | 0.6549  | 3.2373      | 7.5517      | 0.0259      | 2.0716        | 0.0220       | 2.0935      | 0.5553         | 0.0205        | 0.5758      | 0.0000   | 2,389.0648  | 2,389.0648  | 0.1299      | 0.0000 | 2,392.3130  |

|              |               |               |               |               |               |               |               |               |               |               |                |                   |                   |               |               |                   |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|-------------------|-------------------|---------------|---------------|-------------------|
| Stationary   | 8.1000e-004   | 2.9000e-003   | 0.0151        | 3.0000e-005   |               | 0.0174        | 0.0174        |               | 1.2000e-004   | 1.2000e-004   | 0.0000         | 2.7417            | 2.7417            | 3.8000e-004   | 0.0000        | 2.7514            |
| Waste        |               |               |               |               |               | 0.0000        | 0.0000        |               | 0.0000        | 0.0000        | 39.6441        | 0.0000            | 39.6441           | 2.3429        | 0.0000        | 98.2187           |
| Water        |               |               |               |               |               | 0.0000        | 0.0000        |               | 0.0000        | 0.0000        | 2.4486         | 41.5947           | 44.0432           | 0.2529        | 6.2400e-003   | 52.2246           |
| <b>Total</b> | <b>2.1536</b> | <b>3.7106</b> | <b>7.9663</b> | <b>0.0287</b> | <b>2.0716</b> | <b>0.0751</b> | <b>2.1467</b> | <b>0.5553</b> | <b>0.0564</b> | <b>0.6117</b> | <b>42.0927</b> | <b>4,089.5223</b> | <b>4,131.6150</b> | <b>2.7755</b> | <b>0.0238</b> | <b>4,208.0929</b> |

**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       |               |               |               |               |               |               |                |               |               | M1/yr          |                   |                   |               |               |                   |
| Area         | 1.4482        | 4.0000e-005   | 4.3900e-003   | 0.0000        |               | 2.0000e-005   | 2.0000e-005   |                | 2.0000e-005   | 2.0000e-005   | 0.0000         | 8.5200e-003       | 8.5200e-003       | 2.0000e-005   | 0.0000        | 9.0800e-003       |
| Energy       | 0.0479        | 0.4353        | 0.3656        | 2.6100e-003   |               | 0.0331        | 0.0331        |                | 0.0331        | 0.0331        | 0.0000         | 1,497.5986        | 1,497.5986        | 0.0444        | 0.0160        | 1,503.4770        |
| Mobile       | 0.5313        | 2.4009        | 4.5436        | 0.0134        | 0.9817        | 0.0119        | 0.9936        | 0.2632         | 0.0111        | 0.2742        | 0.0000         | 1,236.5707        | 1,236.5707        | 0.0769        | 0.0000        | 1,238.4929        |
| Stationary   | 8.1000e-004   | 2.9000e-003   | 0.0151        | 3.0000e-005   |               | 0.0174        | 0.0174        |                | 1.2000e-004   | 1.2000e-004   | 0.0000         | 2.7417            | 2.7417            | 3.8000e-004   | 0.0000        | 2.7514            |
| Waste        |               |               |               |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 19.8221        | 0.0000            | 19.8221           | 1.1715        | 0.0000        | 49.1083           |
| Water        |               |               |               |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 1.9589         | 33.2757           | 35.2346           | 0.2023        | 4.9900e-003   | 41.7796           |
| <b>Total</b> | <b>2.0261</b> | <b>2.8391</b> | <b>4.9286</b> | <b>0.0160</b> | <b>0.9817</b> | <b>0.0624</b> | <b>1.0441</b> | <b>0.2632</b>  | <b>0.0443</b> | <b>0.3074</b> | <b>21.7809</b> | <b>2,770.1953</b> | <b>2,791.9762</b> | <b>1.4955</b> | <b>0.0210</b> | <b>2,835.6184</b> |

|                          | ROG         | NOx          | CO           | SO2          | Fugitive PM10 | Exhaust PM10 | PM10 Total   | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total  | Bio- CO2     | NBio- CO2    | Total CO2    | CH4          | N2O          | CO2e         |
|--------------------------|-------------|--------------|--------------|--------------|---------------|--------------|--------------|----------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| <b>Percent Reduction</b> | <b>5.92</b> | <b>23.49</b> | <b>38.13</b> | <b>44.29</b> | <b>52.61</b>  | <b>17.02</b> | <b>51.36</b> | <b>52.61</b>   | <b>21.48</b>  | <b>49.74</b> | <b>48.25</b> | <b>32.26</b> | <b>32.42</b> | <b>46.12</b> | <b>11.81</b> | <b>32.62</b> |

**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            | 6/11/2020  | 7/13/2020  | 5             | 23       |                   |
| 2            | Grading               | Grading               | 7/14/2020  | 9/14/2020  | 5             | 45       |                   |
| 3            | Foundation            | Site Preparation      | 9/15/2020  | 1/14/2021  | 5             | 88       |                   |
| 4            | Building Construction | Building Construction | 1/15/2021  | 11/29/2021 | 5             | 227      |                   |
| 5            | Paving                | Paving                | 11/30/2021 | 3/30/2022  | 5             | 87       |                   |
| 6            | Architectural Coating | Architectural Coating | 11/30/2021 | 3/30/2022  | 5             | 87       |                   |

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 0.28**

**Acres of Paving: 0.88**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 530,780; Non-Residential Outdoor: 176,927; Striped Parking Area:**

**OffRoad Equipment**

| Phase Name | Offroad Equipment Type    | Amount | Usage Hours | Horse Power | Load Factor |
|------------|---------------------------|--------|-------------|-------------|-------------|
| Demolition | Air Compressors           | 1      | 8.00        | 78          | 0.48        |
| Demolition | Excavators                | 1      | 8.00        | 158         | 0.38        |
| Demolition | Rubber Tired Loaders      | 1      | 8.00        | 247         | 0.40        |
| Demolition | Tractors/Loaders/Backhoes | 2      | 8.00        | 97          | 0.37        |
| Grading    | Bore/Drill Rigs           | 1      | 8.00        | 221         | 0.50        |











|              |                    |               |               |                    |               |                    |                    |               |                    |                    |               |               |               |                    |               |               |
|--------------|--------------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|---------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Off-Road     | 5.1500e-003        | 0.0501        | 0.0453        | 8.0000e-005        |               | 2.2600e-003        | 2.2600e-003        |               | 2.1400e-003        | 2.1400e-003        | 0.0000        | 7.1312        | 7.1312        | 1.7500e-003        | 0.0000        | 7.1751        |
| <b>Total</b> | <b>5.1500e-003</b> | <b>0.0501</b> | <b>0.0453</b> | <b>8.0000e-005</b> | <b>0.0000</b> | <b>2.2600e-003</b> | <b>2.2600e-003</b> | <b>0.0000</b> | <b>2.1400e-003</b> | <b>2.1400e-003</b> | <b>0.0000</b> | <b>7.1312</b> | <b>7.1312</b> | <b>1.7500e-003</b> | <b>0.0000</b> | <b>7.1751</b> |

**Unmitigated Construction Off-Site**

|              | ROG                | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2      | Total CO2      | CH4                | N2O           | CO2e           |
|--------------|--------------------|---------------|---------------|--------------------|---------------|--------------------|---------------|--------------------|--------------------|--------------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category     | tons/yr            |               |               |                    |               |                    |               |                    |                    |                    | MT/yr         |                |                |                    |               |                |
| Hauling      | 1.6300e-003        | 0.0535        | 0.0125        | 1.5000e-004        | 0.0228        | 1.6000e-004        | 0.0230        | 5.6900e-003        | 1.5000e-004        | 5.8400e-003        | 0.0000        | 14.7262        | 14.7262        | 1.0200e-003        | 0.0000        | 14.7517        |
| 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       | 1.6400e-003        | 1.2700e-003   | 0.0144        | 4.0000e-005        | 4.1600e-003   | 3.0000e-005        | 4.2000e-003   | 1.1100e-003        | 3.0000e-005        | 1.1400e-003        | 0.0000        | 3.7579         | 3.7579         | 1.1000e-004        | 0.0000        | 3.7607         |
| <b>Total</b> | <b>3.2700e-003</b> | <b>0.0548</b> | <b>0.0268</b> | <b>1.9000e-004</b> | <b>0.0270</b> | <b>1.9000e-004</b> | <b>0.0272</b> | <b>6.8000e-003</b> | <b>1.8000e-004</b> | <b>6.9800e-003</b> | <b>0.0000</b> | <b>18.4841</b> | <b>18.4841</b> | <b>1.1300e-003</b> | <b>0.0000</b> | <b>18.5124</b> |

**Mitigated Construction On-Site**

|               | ROG                | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total         | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O           | CO2e          |
|---------------|--------------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category      | tons/yr            |               |               |                    |               |                    |                    |                |                    |                    | MT/yr         |               |               |                    |               |               |
| Fugitive Dust |                    |               |               |                    | 0.0000        | 0.0000             | 0.0000             | 0.0000         | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Off-Road      | 5.1500e-003        | 0.0501        | 0.0453        | 8.0000e-005        |               | 2.2600e-003        | 2.2600e-003        |                | 2.1400e-003        | 2.1400e-003        | 0.0000        | 7.1312        | 7.1312        | 1.7500e-003        | 0.0000        | 7.1750        |
| <b>Total</b>  | <b>5.1500e-003</b> | <b>0.0501</b> | <b>0.0453</b> | <b>8.0000e-005</b> | <b>0.0000</b> | <b>2.2600e-003</b> | <b>2.2600e-003</b> | <b>0.0000</b>  | <b>2.1400e-003</b> | <b>2.1400e-003</b> | <b>0.0000</b> | <b>7.1312</b> | <b>7.1312</b> | <b>1.7500e-003</b> | <b>0.0000</b> | <b>7.1750</b> |

**Mitigated Construction Off-Site**

|              | ROG                | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2      | Total CO2      | CH4                | N2O           | CO2e           |
|--------------|--------------------|---------------|---------------|--------------------|---------------|--------------------|---------------|--------------------|--------------------|--------------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category     | tons/yr            |               |               |                    |               |                    |               |                    |                    |                    | MT/yr         |                |                |                    |               |                |
| Hauling      | 1.6300e-003        | 0.0535        | 0.0125        | 1.5000e-004        | 0.0228        | 1.6000e-004        | 0.0230        | 5.6900e-003        | 1.5000e-004        | 5.8400e-003        | 0.0000        | 14.7262        | 14.7262        | 1.0200e-003        | 0.0000        | 14.7517        |
| 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       | 1.6400e-003        | 1.2700e-003   | 0.0144        | 4.0000e-005        | 4.1600e-003   | 3.0000e-005        | 4.2000e-003   | 1.1100e-003        | 3.0000e-005        | 1.1400e-003        | 0.0000        | 3.7579         | 3.7579         | 1.1000e-004        | 0.0000        | 3.7607         |
| <b>Total</b> | <b>3.2700e-003</b> | <b>0.0548</b> | <b>0.0268</b> | <b>1.9000e-004</b> | <b>0.0270</b> | <b>1.9000e-004</b> | <b>0.0272</b> | <b>6.8000e-003</b> | <b>1.8000e-004</b> | <b>6.9800e-003</b> | <b>0.0000</b> | <b>18.4841</b> | <b>18.4841</b> | <b>1.1300e-003</b> | <b>0.0000</b> | <b>18.5124</b> |

**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 | 0.3135  | 2.4061 | 2.4884 | 4.2200e-003 |               | 0.1207       | 0.1207     |                | 0.1173        | 0.1173      | 0.0000   | 350.5281  | 350.5281  | 0.0610 | 0.0000 | 352.0527 |

|       |        |        |        |             |  |        |        |  |        |        |        |          |          |        |        |          |
|-------|--------|--------|--------|-------------|--|--------|--------|--|--------|--------|--------|----------|----------|--------|--------|----------|
| Total | 0.3135 | 2.4061 | 2.4884 | 4.2200e-003 |  | 0.1207 | 0.1207 |  | 0.1173 | 0.1173 | 0.0000 | 350.5281 | 350.5281 | 0.0610 | 0.0000 | 352.0527 |
|-------|--------|--------|--------|-------------|--|--------|--------|--|--------|--------|--------|----------|----------|--------|--------|----------|

**Unmitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2      | NBio- 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       | 0.0141        | 0.4481        | 0.1215        | 1.1500e-003        | 0.0286        | 9.1000e-004        | 0.0295        | 8.2500e-003    | 8.7000e-004        | 9.1300e-003   | 0.0000        | 111.9094        | 111.9094        | 6.8600e-003   | 0.0000        | 112.0811        |
| Worker       | 0.0977        | 0.0760        | 0.8584        | 2.4800e-003        | 0.2488        | 2.0500e-003        | 0.2508        | 0.0661         | 1.8900e-003        | 0.0680        | 0.0000        | 224.4842        | 224.4842        | 6.6100e-003   | 0.0000        | 224.6493        |
| <b>Total</b> | <b>0.1118</b> | <b>0.5241</b> | <b>0.9799</b> | <b>3.6300e-003</b> | <b>0.2774</b> | <b>2.9600e-003</b> | <b>0.2803</b> | <b>0.0743</b>  | <b>2.7600e-003</b> | <b>0.0771</b> | <b>0.0000</b> | <b>336.3936</b> | <b>336.3936</b> | <b>0.0135</b> | <b>0.0000</b> | <b>336.7304</b> |

**Mitigated Construction On-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Category     | tons/yr       |               |               |                    |               |               |               |                |               |               | MT/yr         |                 |                 |               |               |                 |
| Off-Road     | 0.3135        | 2.4061        | 2.4884        | 4.2200e-003        |               | 0.1207        | 0.1207        |                | 0.1173        | 0.1173        | 0.0000        | 350.5277        | 350.5277        | 0.0610        | 0.0000        | 352.0522        |
| <b>Total</b> | <b>0.3135</b> | <b>2.4061</b> | <b>2.4884</b> | <b>4.2200e-003</b> |               | <b>0.1207</b> | <b>0.1207</b> |                | <b>0.1173</b> | <b>0.1173</b> | <b>0.0000</b> | <b>350.5277</b> | <b>350.5277</b> | <b>0.0610</b> | <b>0.0000</b> | <b>352.0522</b> |

**Mitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2      | NBio- 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       | 0.0141        | 0.4481        | 0.1215        | 1.1500e-003        | 0.0286        | 9.1000e-004        | 0.0295        | 8.2500e-003    | 8.7000e-004        | 9.1300e-003   | 0.0000        | 111.9094        | 111.9094        | 6.8600e-003   | 0.0000        | 112.0811        |
| Worker       | 0.0977        | 0.0760        | 0.8584        | 2.4800e-003        | 0.2488        | 2.0500e-003        | 0.2508        | 0.0661         | 1.8900e-003        | 0.0680        | 0.0000        | 224.4842        | 224.4842        | 6.6100e-003   | 0.0000        | 224.6493        |
| <b>Total</b> | <b>0.1118</b> | <b>0.5241</b> | <b>0.9799</b> | <b>3.6300e-003</b> | <b>0.2774</b> | <b>2.9600e-003</b> | <b>0.2803</b> | <b>0.0743</b>  | <b>2.7600e-003</b> | <b>0.0771</b> | <b>0.0000</b> | <b>336.3936</b> | <b>336.3936</b> | <b>0.0135</b> | <b>0.0000</b> | <b>336.7304</b> |

**3.6 Paving - 2021**

**Unmitigated Construction On-Site**

|          | ROG         | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O    | CO2e    |
|----------|-------------|--------|--------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|--------|---------|
| Category | tons/yr     |        |        |             |               |              |             |                |               |             | MT/yr    |           |           |             |        |         |
| Off-Road | 6.1100e-003 | 0.0659 | 0.0787 | 1.2000e-004 |               | 3.3400e-003  | 3.3400e-003 |                | 3.0700e-003   | 3.0700e-003 | 0.0000   | 10.4090   | 10.4090   | 3.3700e-003 | 0.0000 | 10.4931 |

|              |                    |               |               |                    |  |                    |                    |  |                    |                    |               |                |                |                    |               |                |
|--------------|--------------------|---------------|---------------|--------------------|--|--------------------|--------------------|--|--------------------|--------------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Paving       | 0.0000             |               |               |                    |  | 0.0000             | 0.0000             |  | 0.0000             | 0.0000             | 0.0000        | 0.0000         | 0.0000         | 0.0000             | 0.0000        | 0.0000         |
| <b>Total</b> | <b>6.1100e-003</b> | <b>0.0659</b> | <b>0.0787</b> | <b>1.2000e-004</b> |  | <b>3.3400e-003</b> | <b>3.3400e-003</b> |  | <b>3.0700e-003</b> | <b>3.0700e-003</b> | <b>0.0000</b> | <b>10.4090</b> | <b>10.4090</b> | <b>3.3700e-003</b> | <b>0.0000</b> | <b>10.4931</b> |

**Unmitigated Construction Off-Site**

|              | ROG                | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2      | Total CO2      | CH4                | N2O           | CO2e           |
|--------------|--------------------|---------------|---------------|--------------------|---------------|--------------------|---------------|--------------------|--------------------|--------------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category     | tons/yr            |               |               |                    |               |                    |               |                    |                    |                    | MT/yr         |                |                |                    |               |                |
| Hauling      | 0.0000             | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000         | 0.0000         | 0.0000             | 0.0000        | 0.0000         |
| Vendor       | 7.5000e-004        | 0.0237        | 6.4200e-003   | 6.0000e-005        | 1.5100e-003   | 5.0000e-005        | 1.5600e-003   | 4.4000e-004        | 5.0000e-005        | 4.8000e-004        | 0.0000        | 5.9159         | 5.9159         | 3.6000e-004        | 0.0000        | 5.9250         |
| Worker       | 5.1600e-003        | 4.0200e-003   | 0.0454        | 1.3000e-004        | 0.0132        | 1.1000e-004        | 0.0133        | 3.4900e-003        | 1.0000e-004        | 3.5900e-003        | 0.0000        | 11.8670        | 11.8670        | 3.5000e-004        | 0.0000        | 11.8757        |
| <b>Total</b> | <b>5.9100e-003</b> | <b>0.0277</b> | <b>0.0518</b> | <b>1.9000e-004</b> | <b>0.0147</b> | <b>1.6000e-004</b> | <b>0.0148</b> | <b>3.9300e-003</b> | <b>1.5000e-004</b> | <b>4.0700e-003</b> | <b>0.0000</b> | <b>17.7829</b> | <b>17.7829</b> | <b>7.1000e-004</b> | <b>0.0000</b> | <b>17.8007</b> |

**Mitigated Construction On-Site**

|              | ROG                | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total         | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2      | Total CO2      | CH4                | N2O           | CO2e           |
|--------------|--------------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category     | tons/yr            |               |               |                    |               |                    |                    |                |                    |                    | MT/yr         |                |                |                    |               |                |
| Off-Road     | 6.1100e-003        | 0.0659        | 0.0787        | 1.2000e-004        |               | 3.3400e-003        | 3.3400e-003        |                | 3.0700e-003        | 3.0700e-003        | 0.0000        | 10.4090        | 10.4090        | 3.3700e-003        | 0.0000        | 10.4931        |
| Paving       | 0.0000             |               |               |                    |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             | 0.0000        | 0.0000         | 0.0000         | 0.0000             | 0.0000        | 0.0000         |
| <b>Total</b> | <b>6.1100e-003</b> | <b>0.0659</b> | <b>0.0787</b> | <b>1.2000e-004</b> |               | <b>3.3400e-003</b> | <b>3.3400e-003</b> |                | <b>3.0700e-003</b> | <b>3.0700e-003</b> | <b>0.0000</b> | <b>10.4090</b> | <b>10.4090</b> | <b>3.3700e-003</b> | <b>0.0000</b> | <b>10.4931</b> |

**Mitigated Construction Off-Site**

|              | ROG                | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2      | Total CO2      | CH4                | N2O           | CO2e           |
|--------------|--------------------|---------------|---------------|--------------------|---------------|--------------------|---------------|--------------------|--------------------|--------------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category     | tons/yr            |               |               |                    |               |                    |               |                    |                    |                    | MT/yr         |                |                |                    |               |                |
| Hauling      | 0.0000             | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000         | 0.0000         | 0.0000             | 0.0000        | 0.0000         |
| Vendor       | 7.5000e-004        | 0.0237        | 6.4200e-003   | 6.0000e-005        | 1.5100e-003   | 5.0000e-005        | 1.5600e-003   | 4.4000e-004        | 5.0000e-005        | 4.8000e-004        | 0.0000        | 5.9159         | 5.9159         | 3.6000e-004        | 0.0000        | 5.9250         |
| Worker       | 5.1600e-003        | 4.0200e-003   | 0.0454        | 1.3000e-004        | 0.0132        | 1.1000e-004        | 0.0133        | 3.4900e-003        | 1.0000e-004        | 3.5900e-003        | 0.0000        | 11.8670        | 11.8670        | 3.5000e-004        | 0.0000        | 11.8757        |
| <b>Total</b> | <b>5.9100e-003</b> | <b>0.0277</b> | <b>0.0518</b> | <b>1.9000e-004</b> | <b>0.0147</b> | <b>1.6000e-004</b> | <b>0.0148</b> | <b>3.9300e-003</b> | <b>1.5000e-004</b> | <b>4.0700e-003</b> | <b>0.0000</b> | <b>17.7829</b> | <b>17.7829</b> | <b>7.1000e-004</b> | <b>0.0000</b> | <b>17.8007</b> |

**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 | 0.0139  | 0.1482 | 0.2050 | 3.1000e-004 |               | 7.0700e-003  | 7.0700e-003 |                | 6.5000e-003   | 6.5000e-003 | 0.0000   | 27.3443   | 27.3443   | 8.8400e-003 | 0.0000 | 27.5654 |







|              |               |               |               |                    |  |                    |                    |  |                    |                    |               |                |                |                    |               |                |
|--------------|---------------|---------------|---------------|--------------------|--|--------------------|--------------------|--|--------------------|--------------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Off-Road     | 7.5800e-003   | 0.0620        | 0.0916        | 1.5000e-004        |  | 2.9000e-003        | 2.9000e-003        |  | 2.8800e-003        | 2.8800e-003        | 0.0000        | 12.6898        | 12.6898        | 2.0300e-003        | 0.0000        | 12.7405        |
| <b>Total</b> | <b>1.1992</b> | <b>0.0620</b> | <b>0.0916</b> | <b>1.5000e-004</b> |  | <b>2.9000e-003</b> | <b>2.9000e-003</b> |  | <b>2.8800e-003</b> | <b>2.8800e-003</b> | <b>0.0000</b> | <b>12.6898</b> | <b>12.6898</b> | <b>2.0300e-003</b> | <b>0.0000</b> | <b>12.7405</b> |

**Unmitigated Construction Off-Site**

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

**Mitigated Construction On-Site**

|                 | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 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 | 1.1916        |               |               |                    |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             | 0.0000        | 0.0000         | 0.0000         | 0.0000             | 0.0000        | 0.0000         |
| Off-Road        | 7.5800e-003   | 0.0620        | 0.0916        | 1.5000e-004        |               | 2.9000e-003        | 2.9000e-003        |                | 2.8800e-003        | 2.8800e-003        | 0.0000        | 12.6898        | 12.6898        | 2.0300e-003        | 0.0000        | 12.7405        |
| <b>Total</b>    | <b>1.1992</b> | <b>0.0620</b> | <b>0.0916</b> | <b>1.5000e-004</b> |               | <b>2.9000e-003</b> | <b>2.9000e-003</b> |                | <b>2.8800e-003</b> | <b>2.8800e-003</b> | <b>0.0000</b> | <b>12.6898</b> | <b>12.6898</b> | <b>2.0300e-003</b> | <b>0.0000</b> | <b>12.7405</b> |

**Mitigated Construction Off-Site**

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

**4.0 Operational Detail - Mobile**

**4.1 Mitigation Measures Mobile**

- Improve Walkability Design
- Improve Destination Accessibility
- Increase Transit Accessibility
- Improve Pedestrian Network

|             | ROG     | NOx    | CO     | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2  | Total CO2  | CH4    | N2O    | CO2e       |
|-------------|---------|--------|--------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|------------|------------|--------|--------|------------|
| Category    | tons/yr |        |        |        |               |              |            |                |               |             | MT/yr    |            |            |        |        |            |
| Mitigated   | 0.5313  | 2.4009 | 4.5436 | 0.0134 | 0.9817        | 0.0119       | 0.9936     | 0.2632         | 0.0111        | 0.2742      | 0.0000   | 1,236.5707 | 1,236.5707 | 0.0769 | 0.0000 | 1,238.4929 |
| Unmitigated | 0.6549  | 3.2373 | 7.5517 | 0.0259 | 2.0716        | 0.0220       | 2.0935     | 0.5553         | 0.0205        | 0.5758      | 0.0000   | 2,389.0648 | 2,389.0648 | 0.1299 | 0.0000 | 2,392.3130 |

#### 4.2 Trip Summary Information

| Land Use                            | Average Daily Trip Rate |                 |                 | Unmitigated      | Mitigated        |
|-------------------------------------|-------------------------|-----------------|-----------------|------------------|------------------|
|                                     | Weekday                 | Saturday        | Sunday          | Annual VMT       | Annual VMT       |
| Enclosed Parking with Elevator      | 0.00                    | 0.00            | 0.00            |                  |                  |
| High Turnover (Sit Down Restaurant) | 602.68                  | 750.62          | 624.91          | 854,475          | 404,937          |
| Hotel                               | 2,006.40                | 2,011.20        | 1461.60         | 4,603,538        | 2,181,620        |
| <b>Total</b>                        | <b>2,609.08</b>         | <b>2,761.82</b> | <b>2,086.51</b> | <b>5,458,013</b> | <b>2,586,556</b> |

#### 4.3 Trip Type Information

| Land Use                            | Miles      |            |             | Trip %    |            |             | Trip Purpose % |          |         |
|-------------------------------------|------------|------------|-------------|-----------|------------|-------------|----------------|----------|---------|
|                                     | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C- | H-S or C-C | H-O or C-NW | Primary        | Diverted | Pass-by |
| Enclosed Parking with Elevator      | 16.60      | 8.40       | 6.90        | 0.00      | 0.00       | 0.00        | 0              | 0        | 0       |
| High Turnover (Sit Down Restaurant) | 16.60      | 8.40       | 6.90        | 8.50      | 72.50      | 19.00       | 37             | 20       | 43      |
| Hotel                               | 16.60      | 8.40       | 6.90        | 19.40     | 61.60      | 19.00       | 58             | 38       | 4       |

#### 4.4 Fleet Mix

| Land Use                            | LDA      | LDT1     | LDT2     | MDV      | LHD1     | LHD2     | MHD      | HHD      | OBUS     | UBUS     | MCY      | SBUS     | MH       |
|-------------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Enclosed Parking with Elevator      | 0.546501 | 0.044961 | 0.204016 | 0.120355 | 0.015740 | 0.006196 | 0.020131 | 0.030678 | 0.002515 | 0.002201 | 0.005142 | 0.000687 | 0.000876 |
| High Turnover (Sit Down Restaurant) | 0.546501 | 0.044961 | 0.204016 | 0.120355 | 0.015740 | 0.006196 | 0.020131 | 0.030678 | 0.002515 | 0.002201 | 0.005142 | 0.000687 | 0.000876 |
| Hotel                               | 0.546501 | 0.044961 | 0.204016 | 0.120355 | 0.015740 | 0.006196 | 0.020131 | 0.030678 | 0.002515 | 0.002201 | 0.005142 | 0.000687 | 0.000876 |

#### 5.0 Energy Detail

Historical Energy Use: N

#### 5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

|                         | ROG     | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2  | Total CO2  | CH4         | N2O         | CO2e       |
|-------------------------|---------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|------------|------------|-------------|-------------|------------|
| Category                | tons/yr |        |        |             |               |              |            |                |               |             | MT/yr    |            |            |             |             |            |
| Electricity Mitigated   |         |        |        |             |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      | 0.0000   | 1,023.7728 | 1,023.7728 | 0.0353      | 7.3100e-003 | 1,026.8356 |
| Electricity Unmitigated |         |        |        |             |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      | 0.0000   | 1,144.0109 | 1,144.0109 | 0.0395      | 8.1700e-003 | 1,147.4334 |
| Natural Gas Mitigated   | 0.0479  | 0.4353 | 0.3656 | 2.6100e-003 |               | 0.0331       | 0.0331     |                | 0.0331        | 0.0331      | 0.0000   | 473.8257   | 473.8257   | 9.0800e-003 | 8.6900e-003 | 476.6414   |
| Natural Gas Unmitigated | 0.0518  | 0.4704 | 0.3952 | 2.8200e-003 |               | 0.0358       | 0.0358     |                | 0.0358        | 0.0358      | 0.0000   | 512.1017   | 512.1017   | 9.8200e-003 | 9.3900e-003 | 515.1449   |

## 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         |                 |                 |                    |                    |                 |
| Enclosed Parking with Elevator      | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000             |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        | 0.0000          | 0.0000          | 0.0000             | 0.0000             | 0.0000          |
| High Turnover (Sit Down Restaurant) | 1.23987e+006   | 6.6900e-003   | 0.0608        | 0.0511        | 3.6000e-004        |               | 4.6200e-003   | 4.6200e-003   |                | 4.6200e-003   | 4.6200e-003   | 0.0000        | 66.1644         | 66.1644         | 1.2700e-003        | 1.2100e-003        | 66.5576         |
| Hotel                               | 8.35655e+006   | 0.0451        | 0.4096        | 0.3441        | 2.4600e-003        |               | 0.0311        | 0.0311        |                | 0.0311        | 0.0311        | 0.0000        | 445.9374        | 445.9374        | 8.5500e-003        | 8.1800e-003        | 448.5873        |
| <b>Total</b>                        |                | <b>0.0518</b> | <b>0.4704</b> | <b>0.3951</b> | <b>2.8200e-003</b> |               | <b>0.0358</b> | <b>0.0358</b> |                | <b>0.0358</b> | <b>0.0358</b> | <b>0.0000</b> | <b>512.1017</b> | <b>512.1017</b> | <b>9.8200e-003</b> | <b>9.3900e-003</b> | <b>515.1449</b> |

### 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         |                 |                 |                    |                    |                 |
| Enclosed Parking with Elevator      | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000             |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        | 0.0000          | 0.0000          | 0.0000             | 0.0000             | 0.0000          |
| High Turnover (Sit Down Restaurant) | 1.21678e+006   | 6.5600e-003   | 0.0597        | 0.0501        | 3.6000e-004        |               | 4.5300e-003   | 4.5300e-003   |                | 4.5300e-003   | 4.5300e-003   | 0.0000        | 64.9320         | 64.9320         | 1.2400e-003        | 1.1900e-003        | 65.3179         |
| Hotel                               | 7.66238e+006   | 0.0413        | 0.3756        | 0.3155        | 2.2500e-003        |               | 0.0286        | 0.0286        |                | 0.0286        | 0.0286        | 0.0000        | 408.8937        | 408.8937        | 7.8400e-003        | 7.5000e-003        | 411.3235        |
| <b>Total</b>                        |                | <b>0.0479</b> | <b>0.4353</b> | <b>0.3656</b> | <b>2.6100e-003</b> |               | <b>0.0331</b> | <b>0.0331</b> |                | <b>0.0331</b> | <b>0.0331</b> | <b>0.0000</b> | <b>473.8257</b> | <b>473.8257</b> | <b>9.0800e-003</b> | <b>8.6900e-003</b> | <b>476.6414</b> |

## 5.3 Energy by Land Use - Electricity

### Unmitigated

|                                     | Electricity Use | Total CO2         | CH4           | N2O                | CO2e              |
|-------------------------------------|-----------------|-------------------|---------------|--------------------|-------------------|
| Land Use                            | kWh/yr          | MT/yr             |               |                    |                   |
| Enclosed Parking with Elevator      | 123872          | 47.1974           | 1.6300e-003   | 3.4000e-004        | 47.3386           |
| High Turnover (Sit Down Restaurant) | 237164          | 90.3637           | 3.1200e-003   | 6.5000e-004        | 90.6341           |
| Hotel                               | 2.64148e+006    | 1,006.4497        | 0.0348        | 7.1900e-003        | 1,009.4607        |
| <b>Total</b>                        |                 | <b>1,144.0109</b> | <b>0.0395</b> | <b>8.1800e-003</b> | <b>1,147.4334</b> |

### Mitigated

|                                     | Electricity Use | Total CO2 | CH4         | N2O         | CO2e     |
|-------------------------------------|-----------------|-----------|-------------|-------------|----------|
| Land Use                            | kWh/yr          | MT/yr     |             |             |          |
| Enclosed Parking with Elevator      | 98529.2         | 37.5414   | 1.3000e-003 | 2.7000e-004 | 37.6537  |
| High Turnover (Sit Down Restaurant) | 222235          | 84.6756   | 2.9200e-003 | 6.0000e-004 | 84.9289  |
| Hotel                               | 2.36618e+006    | 901.5559  | 0.0311      | 6.4400e-003 | 904.2531 |

|       |  |            |        |             |            |
|-------|--|------------|--------|-------------|------------|
| Total |  | 1,023.7728 | 0.0354 | 7.3100e-003 | 1,026.8356 |
|-------|--|------------|--------|-------------|------------|

## 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   | 1.4462  | 4.0000e-005 | 4.3900e-003 | 0.0000 |               | 2.0000e-005  | 2.0000e-005 |                | 2.0000e-005   | 2.0000e-005 | 0.0000   | 8.5200e-003 | 8.5200e-003 | 2.0000e-005 | 0.0000 | 9.0800e-003 |
| Unmitigated | 1.4462  | 4.0000e-005 | 4.3900e-003 | 0.0000 |               | 2.0000e-005  | 2.0000e-005 |                | 2.0000e-005   | 2.0000e-005 | 0.0000   | 8.5200e-003 | 8.5200e-003 | 2.0000e-005 | 0.0000 | 9.0800e-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 | 0.1646        |                    |                    |               |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000             |
| Consumer Products     | 1.2812        |                    |                    |               |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000             |
| Landscaping           | 4.1000e-004   | 4.0000e-005        | 4.3900e-003        | 0.0000        |               | 2.0000e-005        | 2.0000e-005        |                | 2.0000e-005        | 2.0000e-005        | 0.0000        | 8.5200e-003        | 8.5200e-003        | 2.0000e-005        | 0.0000        | 9.0800e-003        |
| <b>Total</b>          | <b>1.4462</b> | <b>4.0000e-005</b> | <b>4.3900e-003</b> | <b>0.0000</b> |               | <b>2.0000e-005</b> | <b>2.0000e-005</b> |                | <b>2.0000e-005</b> | <b>2.0000e-005</b> | <b>0.0000</b> | <b>8.5200e-003</b> | <b>8.5200e-003</b> | <b>2.0000e-005</b> | <b>0.0000</b> | <b>9.0800e-003</b> |

#### 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 | 0.1646        |                    |                    |               |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000             |
| Consumer Products     | 1.2812        |                    |                    |               |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000             |
| Landscaping           | 4.1000e-004   | 4.0000e-005        | 4.3900e-003        | 0.0000        |               | 2.0000e-005        | 2.0000e-005        |                | 2.0000e-005        | 2.0000e-005        | 0.0000        | 8.5200e-003        | 8.5200e-003        | 2.0000e-005        | 0.0000        | 9.0800e-003        |
| <b>Total</b>          | <b>1.4462</b> | <b>4.0000e-005</b> | <b>4.3900e-003</b> | <b>0.0000</b> |               | <b>2.0000e-005</b> | <b>2.0000e-005</b> |                | <b>2.0000e-005</b> | <b>2.0000e-005</b> | <b>0.0000</b> | <b>8.5200e-003</b> | <b>8.5200e-003</b> | <b>2.0000e-005</b> | <b>0.0000</b> | <b>9.0800e-003</b> |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

Apply Water Conservation Strategy

|             | Total CO2 | CH4    | N2O         | CO2e    |
|-------------|-----------|--------|-------------|---------|
| Category    | MT/yr     |        |             |         |
| Mitigated   | 35.2346   | 0.2023 | 4.9900e-003 | 41.7796 |
| Unmitigated | 44.0432   | 0.2529 | 6.2400e-003 | 52.2246 |

## 7.2 Water by Land Use

### Unmitigated

|                                     | Indoor/Outdoor Use | Total CO2      | CH4           | N2O                | CO2e           |
|-------------------------------------|--------------------|----------------|---------------|--------------------|----------------|
| Land Use                            | Mgal               | MT/yr          |               |                    |                |
| Enclosed Parking with Elevator      | 0 / 0              | 0.0000         | 0.0000        | 0.0000             | 0.0000         |
| High Turnover (Sit Down Restaurant) | 1.62998 / 0.104041 | 9.0442         | 0.0534        | 1.3200e-003        | 10.7713        |
| Hotel                               | 6.08802 / 0.676447 | 34.9990        | 0.1995        | 4.9200e-003        | 41.4533        |
| <b>Total</b>                        |                    | <b>44.0432</b> | <b>0.2529</b> | <b>6.2400e-003</b> | <b>52.2245</b> |

### Mitigated

|                                     | Indoor/Outdoor Use  | Total CO2      | CH4           | N2O                | CO2e           |
|-------------------------------------|---------------------|----------------|---------------|--------------------|----------------|
| Land Use                            | Mgal                | MT/yr          |               |                    |                |
| Enclosed Parking with Elevator      | 0 / 0               | 0.0000         | 0.0000        | 0.0000             | 0.0000         |
| High Turnover (Sit Down Restaurant) | 1.30398 / 0.0832328 | 7.2354         | 0.0427        | 1.0500e-003        | 8.6170         |
| Hotel                               | 4.87042 / 0.541158  | 27.9992        | 0.1596        | 3.9400e-003        | 33.1626        |
| <b>Total</b>                        |                     | <b>35.2346</b> | <b>0.2024</b> | <b>4.9900e-003</b> | <b>41.7796</b> |

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

#### Category/Year

|  | Total CO2 | CH4 | N2O | CO2e |
|--|-----------|-----|-----|------|
|  | MT/yr     |     |     |      |

|             |         |        |        |         |
|-------------|---------|--------|--------|---------|
| Mitigated   | 19.8221 | 1.1715 | 0.0000 | 49.1083 |
| Unmitigated | 39.6441 | 2.3429 | 0.0000 | 98.2167 |

## 8.2 Waste by Land Use

### Unmitigated

| Land Use                            | Waste Disposed<br>tons | Total CO2<br>M1/yr | CH4<br>M1/yr  | N2O<br>M1/yr  | CO2e<br>M1/yr  |
|-------------------------------------|------------------------|--------------------|---------------|---------------|----------------|
| Enclosed Parking with Elevator      | 0                      | 0.0000             | 0.0000        | 0.0000        | 0.0000         |
| High Turnover (Sit Down Restaurant) | 63.9                   | 12.9711            | 0.7666        | 0.0000        | 32.1354        |
| Hotel                               | 131.4                  | 26.6730            | 1.5763        | 0.0000        | 66.0813        |
| <b>Total</b>                        |                        | <b>39.6441</b>     | <b>2.3429</b> | <b>0.0000</b> | <b>98.2167</b> |

### Mitigated

| Land Use                            | Waste Disposed<br>tons | Total CO2<br>M1/yr | CH4<br>M1/yr  | N2O<br>M1/yr  | CO2e<br>M1/yr  |
|-------------------------------------|------------------------|--------------------|---------------|---------------|----------------|
| Enclosed Parking with Elevator      | 0                      | 0.0000             | 0.0000        | 0.0000        | 0.0000         |
| High Turnover (Sit Down Restaurant) | 31.95                  | 6.4856             | 0.3833        | 0.0000        | 16.0677        |
| Hotel                               | 65.7                   | 13.3365            | 0.7882        | 0.0000        | 33.0406        |
| <b>Total</b>                        |                        | <b>19.8221</b>     | <b>1.1715</b> | <b>0.0000</b> | <b>49.1083</b> |

## 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 |
|---------------------|--------|-----------|------------|-------------|-------------|-----------|
| Emergency Generator |        | 0.33      | 12         | 600         | 0.73        | Diesel    |

### Boilers

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

### User Defined Equipment

| Equipment Type | Number |
|----------------|--------|
|----------------|--------|

## 10.1 Stationary Sources

### Unmitigated/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          |
|---|--------------------|--------------------|---------------|--------------------|---------------|---------------|---------------|----------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Equipment Type                              | tons/yr            |                    |               |                    |               |               |               |                |                    |                    | MT/yr         |               |               |                    |               |               |
| Emergency Generator - Diesel (600 - 750 HP) | 8.1000e-004        | 2.9000e-003        | 0.0151        | 3.0000e-005        |               | 0.0174        | 0.0174        |                | 1.2000e-004        | 1.2000e-004        | 0.0000        | 2.7417        | 2.7417        | 3.8000e-004        | 0.0000        | 2.7514        |
| <b>Total</b>                                | <b>8.1000e-004</b> | <b>2.9000e-003</b> | <b>0.0151</b> | <b>3.0000e-005</b> |               | <b>0.0174</b> | <b>0.0174</b> |                | <b>1.2000e-004</b> | <b>1.2000e-004</b> | <b>0.0000</b> | <b>2.7417</b> | <b>2.7417</b> | <b>3.8000e-004</b> | <b>0.0000</b> | <b>2.7514</b> |

## 11.0 Vegetation

---