
APPENDIX B

CRITERIA AIR POLLUTANT AND GHG MODELING RESULTS AND ASSESSMENT



EMC PLANNING GROUP INC.
A LAND USE PLANNING & DESIGN FIRM

301 Lighthouse Avenue Suite C Monterey California 93940
Tel 831-649-1799 Fax 831-649-8399 www.emcplanning.com

To: Teri Wissler Adam Principal in Charge

From: David Craft, Senior Planner

Cc: File

Date: June 28, 2021

Re: **1065 South Winchester Boulevard Mixed Use Project – Criteria Air Pollutant Emissions Assessment Assumptions and Methodology**

PROJECT DESCRIPTION

The project is the demolition of an existing residence, barn, ancillary structures and pavement and construction of a six-story, mixed residential condominium and commercial use on a 0.93-acre project site located at 1065 South Winchester Boulevard in the City of San José. According to the project plans (Carpira Design Group Company 2021) the proposed mixed use consists of 70 condominium units (101,648 square feet) and 20,410 square feet of commercial space). Commercial uses, common residential open space, and 25 parking spaces (13,898 square feet) would be located on the ground level; residential and commercial uses would be located on the second level; residential uses only are proposed on levels three and above. The proposed project includes 79 parking spaces in a single level of underground parking garage on one level (30,214 square feet).

Construction data inputs are derived from information provided by the applicant (Henry Cord, email to Consultant June 20, 2021) and from the project plans (Carpira Design Group Company 2021; Kier and Wright Civil Engineers 2021; Shila Yasmeh Landscape Designer 2021).

MEMORANDUM

The project site is located within the San Francisco Bay Area Air Basin, which is within the jurisdiction of the Bay Area Air Quality Management District (air district). An initial study is being prepared to evaluate the environmental impacts of the proposed project.

SCOPE OF ASSESSMENT

This assessment provides an estimate of the proposed project's construction and operational criteria air pollutants using the California Emissions Estimator Model (CalEEMod) version 2016.3.2 software, a modeling platform recommended by the California Air Resources Board (CARB) and accepted by the air district. Model results are attached to this assessment. Unless otherwise noted, data inputs to the model take into account the type and size of existing and proposed uses utilizing CalEEMod default land uses based on the size metrics provided in the project plans (Carpira Design Group Company 2021; Kier and Wright Civil Engineers 2021; Shila Yasmeh Landscape Designer 2021) and trip generation information provided in the transportation analysis prepared for the proposed project (Hexagon Transportation Consultants 2021).

Emissions Model

The CalEEMod software utilizes emissions models USEPA AP-42 emission factors, CARB vehicle emission models studies and studies commissioned by other California agencies such as the California Energy Commission and CalRecycle. The CalEEMod platform allows calculations of both construction and operational criteria pollutant emissions from land use projects. The model also calculates indirect emissions from processes "downstream" of the proposed project such as criteria air pollutant emissions from energy use and solid waste disposal.

Existing and Proposed Emissions Sources

The size and type of the existing and proposed sources of criteria air pollutants emissions on the project site and their respective CalEEMod land use default categories are presented in [Table 1, Project Characteristics](#).

Table 1 Project Characteristics

Project Components	CalEEMod Land Use ¹	Existing ²	Proposed ²
Commercial	General Office Building	9,762	20,410
Single-family Residence	Single-family use	1 unit	-
Condominiums	Condo/Townhouse High Rise	-	70 units
Parking	Enclosed Parking with Elevator	-	104 spaces
Sidewalks/hardscapes	Other Non-Asphalt Surfaces	-	3,000
Landscaping ³	Other Non-Asphalt Surfaces	-	4,437 ³
Diesel Emergency Engine Generator	-	-	75 Bhp
Natural Gas Boiler	-	-	2.44 MMBTU/Hour

SOURCE: EMC Planning Group 2021, Carpira Design Group 2021.

NOTES:

1. CalEEMod default land use subtype. Descriptions of the model default land use categories and subtypes are found in the User's Guide for CalEEMod Version 2020.4.0 available online at: <http://www.aqmd.gov/caleemod/user's-guide>
2. Expressed in units of square feet unless otherwise noted.
3. See project plans Sheet 002-TS.

METHODOLOGY

Unless otherwise noted, the calculated emissions estimates are based primarily on model default emissions factors for construction and operations of the project. Construction emissions estimates and existing and proposed operational criteria air pollutant emissions estimates are based on the size metrics presented in Table 1.

Modeling Scenarios

Two modeling scenarios were conducted for the proposed project: Baseline (Existing) Emissions and Proposed Project Emissions.

MEMORANDUM

Baseline (Existing) Emissions Scenario

This scenario consists of unmitigated criteria pollutant emissions volumes that are generated by the existing single-family residential dwelling unit on the project site (refer to Table 1). Adjustments are made to the model to account for low carbon intensity efficiencies that are explained in greater detail under the Operational Data Inputs discussion.

Proposed Project Emissions Scenario

This scenario estimates unmitigated emissions anticipated through compliance with state regulations. This scenario includes model adjustments to account for mandatory compliance with State requirements for Model Water Efficient Landscape Ordinance (MWELO) and the current Title 24 Building Energy Efficiency Standards (BEES). These model adjustments are explained in greater detail under the Operational Data Inputs discussion.

Assumptions

Unless otherwise noted, data inputs for the model scenarios are based on the following primary assumptions:

1. Operational emissions generated by the existing residential building and out building at the project site are estimated using the CalEEMod default land use subtype “Single Family Housing”, which is defined as all single family detached homes on individual lots typical of a suburban subdivision;
2. Construction of the proposed project is expected to begin in January 15, 2023;
3. Buildout is expected by August 15, 2024;
4. For modeling purposes operational emissions are estimated in 2025;
5. Construction and operational emissions for proposed conditions were estimated as follows:
 - a. Emissions generated by the proposed residential units are assumed to be similar to emissions that would be generated by the CalEEMod default land use subtype “Condo/Townhouse”, which are defined as Ownership units that have at least one other owned unit within the same building structure. The model default trip generation rate for “Condo/Townhouse” has been modified based

on information provided in the transportation analysis prepared for the proposed project (Hexagon Transportation Consultants 2021);

- b. Emissions generated by the proposed office spaces are assumed to be similar to emissions that would be generated by the CalEEMod default land use subtype "General Office Building". The model default trip generation rate for "General Office Building" has been modified based on information provided in the transportation analysis prepared for the proposed project (Hexagon Transportation Consultants 2021);
- c. Emissions generated by the proposed underground parking garage are assumed to be similar to emissions that would be generated by the CalEEMod default land use subtype "Enclosed Parking with Elevator", which is defined as an enclosed parking structure that may be above or below the ground, is not covered in asphalt, includes an elevator, and will require lighting and ventilation;
- d. The proposed project includes an emergency generator and a boiler room. Operational emissions associated with these features were also estimated using information provided by the applicant (Henry Cord, email communication with consultant, June 21, 2021); and
- e. Emissions generated by construction and curing of the proposed sidewalks and landscaping are assumed to be similar to emissions that would be generated by the CalEEMod default land use subtype "Other Non-Asphalt Surfaces".

Operational Emissions Data Input

The following adjustments were made to the model inputs:

- Each air district (or county) assigns trip lengths for urban and rural settings, which are incorporated into the CalEEMod defaults. Based on the site's location, the model defaults were set to "urban."
- The model's default CO₂ intensity factor was adjusted to 203 pounds/megawatt hour to reflect Pacific Gas & Electric (PG&E) energy intensity during 2019, the most current data

year. The intensity factor has been falling, in significant part due to the increasing percentage of Pacific Gas & Electric's energy portfolio obtained from renewable energy.

- As noted previously, the model default trip generation rates for the proposed residential condominiums and office spaces are adjusted based on information provided in the transportation analysis prepared for the proposed project (Hexagon Transportation Consultants 2021).
- The Title 24 building energy efficiency defaults in CalEEMod Version 2016.3.2 are the 2016 Title 24 standards. Title 24 standards are updated every three years. The 2019 Title 24 standards were recently adopted and became effective on January 1, 2020 (California Energy Commission 2018). Projects that buildout after January 1, 2020 will be required to comply with the 2019 Title 24 standards. An adjustment of 30 percent was made to the energy mitigation screen under the proposed project scenario to account for reductions in energy demand from increased building energy efficiencies above the 2016 Title 24 standards due to compliance with the 2019 Title 24 standards (California Energy Commission 2021).

Construction Emissions Data Inputs

CalEEMod default construction parameters allow estimates of short-term construction emissions based upon empirical data collected and analyzed by CARB. CalEEMod estimates construction emissions associated with land use development projects and allows for the input of project-specific construction information including phasing and equipment information, if known. Project construction is estimated to occur over a 20-month period. Grading for the proposed project includes excavation and off-site disposal of 14,144 cubic yards of soil, and import of 600 cubic yards of fill. Proposed demolition includes disposal of 4,954 square feet of building material and 262 tons of pavement/concrete. Estimates of the number, type, and size of construction equipment, and vendor trips (concrete delivery) was derived from information provided by the applicant (Henry Cord, email communication to consultant, June 21, 2021).

The model default construction data inputs were modified to reflect compliance with the air district best management practices of watering exposed soils three times per day and reducing speeds on unpaved surfaces to five miles per hour. The modeling results for unmitigated construction emissions volumes are attached to this assessment.

RESULTS

Detailed model results for criteria air pollutants emissions are included as attachments to this assessment.

Construction Emissions

The highest year unmitigated criteria air pollutant emissions resulting from project construction are summarized in [Table 2, Unmitigated Construction Criteria Air Pollutant Emissions](#). The highest year represents a worst-case scenario for annual construction emissions and is applied to the entire construction period.

Table 2 Unmitigated Construction Criteria Air Pollutant Emissions

Emissions	Reactive Organic Gases (ROG)	Nitrogen Oxides (NOx)	Diesel Exhaust PM ₁₀	Total PM ₁₀	Total PM _{2.5}
Highest Annual Emissions (2024) ^{1,2}	0.27	0.29	0.12	0.03	0.02
Highest year Average Daily Emissions ^{1,3}	1.39	1.59	0.62	0.15	0.10

SOURCE: EMC Planning Group 2021

NOTES:

1. Results may vary due to rounding.
2. Tons per year
3. CalEEMod estimates construction criteria air pollutant emissions in **tons per year**. A U.S. ton is equal to 2,000 pounds. The emissions estimates in ton per year are multiplied by 2,000 pounds to arrive at emissions volume in pounds per year. CalEEMod estimates a total of 390 construction days (see Section 3.0 of the attached CalEEMod results). Highest year average daily emissions (in pounds per day) are computed by dividing the annual construction emissions (in pounds per year) by the number of construction days.

Operational Emissions

Unmitigated operational criteria air pollutant emissions generated by the proposed project are summarized in [Table 3, Unmitigated Operational Criteria Air Pollutant Emissions](#).

Table 3 Unmitigated Operational Criteria Air Pollutant Emissions

Emissions	Reactive Organic Gases (ROG) ¹	Nitrogen Oxides (NOx) ¹	Respirable Particulate Matter (Total PM ₁₀) ¹	Fine Particulate Matter (Total PM _{2.5}) ¹
Existing Annual Emissions ²	0.04	0.01	0.01	<0.01

MEMORANDUM

Proposed Annual Emissions ²	0.75	0.68	0.55	0.21
Net Operational Emissions ²	0.71	0.67	0.54	0.21
Net Average Daily Emissions	3.89	3.67	3.01	1.15

SOURCE: EMC Planning Group 2021

NOTES:

1. Results may vary due to rounding.
2. Reported in tons per year.
3. CalEEMod estimates operational criteria air pollutant emissions in tons per year. A U.S. ton is equal to 2,000 pounds. The emissions estimates in ton per year are multiplied by 2,000 pounds to arrive at emissions volume in pounds per year. Average daily emissions (in pounds per day) are computed by dividing the annual operational emissions (in pounds per year) by the number of operational days (assuming 365 days of operation).

SOURCES

1. Trinity Consultants. November 2021. *California Emissions Estimator (CalEEMod) Version 2020.4.0*. Available online at: <http://www.aqmd.gov/caleemod/home>
2. Trinity Consultants. November 2021. *CalEEMod User's Guide (Version 2020.4.0)*. Available online at: <http://www.aqmd.gov/caleemod/user's-guide>
3. Bay Area Air Quality Management District. May 2017. *California Environmental Quality Act Air Quality Guidelines*. http://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en
4. Carpira Design Group. April 2021. *Project Plans*. Concord, CA.
5. Hexagon Transportation Consultants. *1065 South Winchester Mixed-Use Development Transportation Analysis*. June 21, 2021. Gilroy, CA.

Trinity Consultants

MEMORANDUM

1065 South Winchester Blvd - Existing Emissions - Bay Area AQMD Air District, Annual

1065 South Winchester Blvd - Existing Emissions

Bay Area AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	1.00	Dwelling Unit	0.93	6,024.00	3

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	64
Climate Zone	4			Operational Year	2024
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	203	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Most current PG&E intensity factor

Land Use - Provided on the Modeling Data Input Needs Form. Square Feet is the house and other buildings.

Construction Phase - No Construction. This is the existing site.

Off-road Equipment - Existing

Trips and VMT - Existing

On-road Fugitive Dust - Existing

Demolition - Existing

Grading - Existing

Architectural Coating - Existing

Road Dust - Existing

Energy Use -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	5.00	0.00
tblConstructionPhase	NumDays	100.00	0.00
tblConstructionPhase	NumDays	10.00	0.00
tblConstructionPhase	NumDays	2.00	0.00
tblConstructionPhase	NumDays	5.00	0.00
tblConstructionPhase	NumDays	1.00	0.00
tblLandUse	LandUseSquareFeet	1,800.00	6,024.00
tblLandUse	LotAcreage	0.32	0.93
tblOffRoadEquipment	UsageHours	6.00	0.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	4.00	0.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	1.00	0.00
tblOffRoadEquipment	UsageHours	1.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblOffRoadEquipment	UsageHours	6.00	0.00

tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOnRoadDust	HaulingPercentPave	100.00	0.00
tblOnRoadDust	HaulingPercentPave	100.00	0.00
tblOnRoadDust	HaulingPercentPave	100.00	0.00
tblOnRoadDust	HaulingPercentPave	100.00	0.00
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tblOnRoadDust	VendorPercentPave	100.00	0.00
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tblOnRoadDust	VendorPercentPave	100.00	0.00
tblOnRoadDust	VendorPercentPave	100.00	0.00
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tblOnRoadDust	WorkerPercentPave	100.00	0.00
tblOnRoadDust	WorkerPercentPave	100.00	0.00
tblOnRoadDust	WorkerPercentPave	100.00	0.00
tblOnRoadDust	WorkerPercentPave	100.00	0.00
tblOnRoadDust	WorkerPercentPave	100.00	0.00
tblOnRoadDust	WorkerPercentPave	100.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	203
tblTripsAndVMT	HaulingTripLength	20.00	0.00
tblTripsAndVMT	HaulingTripLength	20.00	0.00
tblTripsAndVMT	HaulingTripLength	20.00	0.00
tblTripsAndVMT	HaulingTripLength	20.00	0.00
tblTripsAndVMT	HaulingTripLength	20.00	0.00
tblTripsAndVMT	HaulingTripLength	20.00	0.00
tblTripsAndVMT	VendorTripLength	7.30	0.00
tblTripsAndVMT	VendorTripLength	7.30	0.00

tblTripsAndVMT	VendorTripLength	7.30	0.00
tblTripsAndVMT	VendorTripLength	7.30	0.00
tblTripsAndVMT	VendorTripLength	7.30	0.00
tblTripsAndVMT	VendorTripLength	7.30	0.00
tblTripsAndVMT	WorkerTripLength	10.80	0.00
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tblTripsAndVMT	WorkerTripLength	10.80	0.00
tblTripsAndVMT	WorkerTripNumber	10.00	0.00
tblTripsAndVMT	WorkerTripNumber	5.00	0.00
tblTripsAndVMT	WorkerTripNumber	10.00	0.00
tblTripsAndVMT	WorkerTripNumber	18.00	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Year	tons/yr										MT/yr						
2022	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quarter	Start Date		End Date		Maximum Unmitigated ROG + NOX (tons/quarter)					Maximum Mitigated ROG + NOX (tons/quarter)						
	Highest															

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Area	0.0339	2.1000e-004	0.0160	2.0000e-005		1.2800e-003	1.2800e-003		1.2800e-003	1.2800e-003	0.1271	0.0433	0.1705	2.5000e-004	1.0000e-005	0.1789	
Energy	1.6000e-004	1.3400e-003	5.7000e-004	1.0000e-005		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0000	2.2960	2.2960	1.4000e-004	5.0000e-005	2.3144	
Mobile	2.0200e-003	9.1900e-003	0.0228	9.0000e-005	8.1200e-003	7.0000e-005	8.1900e-003	2.1800e-003	7.0000e-005	2.2500e-003	0.0000	8.0903	8.0903	2.8000e-004	0.0000	8.0972	
Waste						0.0000	0.0000		0.0000	0.0000	0.2558	0.0000	0.2558	0.0151	0.0000	0.6337	
Water						0.0000	0.0000		0.0000	0.0000	0.0207	0.0457	0.0664	2.1300e-003	5.0000e-005	0.1350	
Total	0.0361	0.0107	0.0394	1.2000e-004	8.1200e-003	1.4600e-003	9.5800e-003	2.1800e-003	1.4600e-003	3.6400e-003	0.4036	10.4753	10.8789	0.0179	1.1000e-004	11.3591	

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	0.0339	2.1000e-004	0.0160	2.0000e-005		1.2800e-003	1.2800e-003		1.2800e-003	1.2800e-003	0.1271	0.0433	0.1705	2.5000e-004	1.0000e-005	0.1789	
Energy	1.6000e-004	1.3400e-003	5.7000e-004	1.0000e-005		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0000	2.2960	2.2960	1.4000e-004	5.0000e-005	2.3144	
Mobile	2.0200e-003	9.1900e-003	0.0228	9.0000e-005	8.1200e-003	7.0000e-005	8.1900e-003	2.1800e-003	7.0000e-005	2.2500e-003	0.0000	8.0903	8.0903	2.8000e-004	0.0000	8.0972	
Waste						0.0000	0.0000		0.0000	0.0000	0.2558	0.0000	0.2558	0.0151	0.0000	0.6337	
Water						0.0000	0.0000		0.0000	0.0000	0.0207	0.0457	0.0664	2.1300e-003	5.0000e-005	0.1350	
Total	0.0361	0.0107	0.0394	1.2000e-004	8.1200e-003	1.4600e-003	9.5800e-003	2.1800e-003	1.4600e-003	3.6400e-003	0.4036	10.4753	10.8789	0.0179	1.1000e-004	11.3591	

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2022	12/31/2021	5	0	
2	Site Preparation	Site Preparation	1/15/2022	1/14/2022	5	0	
3	Grading	Grading	1/18/2022	1/17/2022	5	0	
4	Building Construction	Building Construction	1/20/2022	1/19/2022	5	0	
5	Paving	Paving	6/9/2022	6/8/2022	5	0	
6	Architectural Coating	Architectural Coating	6/16/2022	6/15/2022	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 12,199; Residential Outdoor: 4,066; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	0.00	81	0.73
Demolition	Rubber Tired Dozers	1	0.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	0.00	97	0.37
Site Preparation	Graders	1	0.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	0.00	97	0.37
Grading	Concrete/Industrial Saws	1	0.00	81	0.73
Grading	Rubber Tired Dozers	1	0.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	0.00	97	0.37
Building Construction	Cranes	1	0.00	231	0.29
Building Construction	Forklifts	2	0.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	0.00	97	0.37
Paving	Cement and Mortar Mixers	4	0.00	9	0.56
Paving	Pavers	1	0.00	130	0.42
Paving	Rollers	1	0.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	0.00	97	0.37
Architectural Coating	Air Compressors	1	0.00	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	4	0.00	0.00	0.00	0.00	0.00	0.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	0.00	0.00	0.00	0.00	0.00	0.00	LD_Mix	HDT_Mix	HHDT
Grading	4	0.00	0.00	0.00	0.00	0.00	0.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	0.00	0.00	0.00	0.00	0.00	0.00	LD_Mix	HDT_Mix	HHDT

Paving	7	0.00	0.00	0.00	0.00	0.00	0.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	0.00	0.00	0.00	0.00	0.00	0.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.3 Site Preparation - 2022

Unmitigated Construction On-Site

Unmitigated Construction Off-Site

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	

Mitigated Construction Off-Site

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

3.4 Grading - 2022

Unmitigated Construction On-Site

Unmitigated Construction Off-Site

Mitigated Construction On-Site

Mitigated Construction Off-Site

3.5 Building Construction - 2022

Unmitigated Construction On-Site

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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3.6 Paving - 2022

Unmitigated Construction On-Site

Unmitigated Construction Off-Site

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	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	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

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

3.7 Architectural Coating - 2022

Unmitigated Construction On-Site

Unmitigated Construction Off-Site

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	tons/yr												MT/yr					
	Mitigated	2.0200e-003	9.1900e-003	0.0228	9.0000e-005	8.1200e-003	7.0000e-005	8.1900e-003	2.1800e-003	7.0000e-005	2.2500e-003	0.0000	8.0903	8.0903	2.8000e-004	0.0000	8.0972	
Unmitigated	2.0200e-003	9.1900e-003	0.0228	9.0000e-005	8.1200e-003	7.0000e-005	8.1900e-003	2.1800e-003	7.0000e-005	2.2500e-003	0.0000	8.0903	8.0903	2.8000e-004	0.0000	8.0972		

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	9.52	9.91	8.62	21,819	21,819
Total	9.52	9.91	8.62	21,819	21,819

4.3 Trip Type Information

	Miles				Trip %				Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-M	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by		
Single Family Housing	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3		

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.580272	0.038274	0.193741	0.109917	0.015100	0.005324	0.018491	0.026678	0.002649	0.002134	0.005793	0.000896	0.000732

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	tons/yr												MT/yr					
Electricity Mitigated							0.0000	0.0000			0.0000	0.0000	0.0000	0.7450	0.7450	1.1000e-004	2.0000e-005	0.7542
Electricity Unmitigated							0.0000	0.0000			0.0000	0.0000	0.0000	0.7450	0.7450	1.1000e-004	2.0000e-005	0.7542
NaturalGas Mitigated	1.6000e-004	1.3400e-003	5.7000e-004	1.0000e-005			1.1000e-004	1.1000e-004			1.1000e-004	1.1000e-004	0.0000	1.5510	1.5510	3.0000e-005	3.0000e-005	1.5602
NaturalGas Unmitigated	1.6000e-004	1.3400e-003	5.7000e-004	1.0000e-005			1.1000e-004	1.1000e-004			1.1000e-004	1.1000e-004	0.0000	1.5510	1.5510	3.0000e-005	3.0000e-005	1.5602

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU/yr	tons/yr										MT/yr						
Single Family Housing	29065.1	1.6000e-004	1.3400e-003	5.7000e-004	1.0000e-005		1.1000e-004	1.1000e-004			1.1000e-004	1.1000e-004	0.0000	1.5510	1.5510	3.0000e-005	3.0000e-005	1.5602
Total		1.6000e-004	1.3400e-003	5.7000e-004	1.0000e-005		1.1000e-004	1.1000e-004			1.1000e-004	1.1000e-004	0.0000	1.5510	1.5510	3.0000e-005	3.0000e-005	1.5602

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU/yr	tons/yr										MT/yr						
Single Family Housing	29065.1	1.6000e-004	1.3400e-003	5.7000e-004	1.0000e-005		1.1000e-004	1.1000e-004			1.1000e-004	1.1000e-004	0.0000	1.5510	1.5510	3.0000e-005	3.0000e-005	1.5602
Total		1.6000e-004	1.3400e-003	5.7000e-004	1.0000e-005		1.1000e-004	1.1000e-004			1.1000e-004	1.1000e-004	0.0000	1.5510	1.5510	3.0000e-005	3.0000e-005	1.5602

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	8090.57	0.7450	1.1000e-004	2.0000e-005	0.7542
Total		0.7450	1.1000e-004	2.0000e-005	0.7542

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	8090.57	0.7450	1.1000e-004	2.0000e-005	0.7542
Total		0.7450	1.1000e-004	2.0000e-005	0.7542

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	0.0339	2.1000e-004	0.0160	2.0000e-005		1.2800e-003	1.2800e-003		1.2800e-003	1.2800e-003	0.1271	0.0433	0.1705	2.5000e-004	1.0000e-005	0.1789
Unmitigated	0.0339	2.1000e-004	0.0160	2.0000e-005		1.2800e-003	1.2800e-003		1.2800e-003	1.2800e-003	0.1271	0.0433	0.1705	2.5000e-004	1.0000e-005	0.1789

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	4.2400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0235					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	5.8900e-003	1.3000e-004	8.5700e-003	2.0000e-005		1.2400e-003	1.2400e-003		1.2400e-003	1.2400e-003	0.1271	0.0312	0.1583	2.4000e-004	1.0000e-005	0.1665
Landscaping	2.2000e-004	9.0000e-005	7.4200e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0121	0.0121	1.0000e-005	0.0000	0.0124
Total	0.0339	2.2000e-004	0.0160	2.0000e-005		1.2800e-003	1.2800e-003		1.2800e-003	1.2800e-003	0.1271	0.0433	0.1705	2.5000e-004	1.0000e-005	0.1789

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	4.2400e-003						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0235						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	5.8900e-003	1.3000e-004	8.5700e-003	2.0000e-005		1.2400e-003	1.2400e-003		1.2400e-003	1.2400e-003	0.1271	0.0312	0.1583	2.4000e-004	1.0000e-005	0.1665	
Landscaping	2.2000e-004	9.0000e-005	7.4200e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0121	0.0121	1.0000e-005	0.0000	0.0124	
Total	0.0339	2.2000e-004	0.0160	2.0000e-005		1.2800e-003	1.2800e-003		1.2800e-003	1.2800e-003	0.1271	0.0433	0.1705	2.5000e-004	1.0000e-005	0.1789	

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0664	2.1300e-003	5.0000e-005	0.1350
Unmitigated	0.0664	2.1300e-003	5.0000e-005	0.1350

7.2 Water by Land Use

Unmitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	0.065154 / 0.0410754	0.0664	2.1300e- 003	5.0000e- 005	0.1350
Total		0.0664	2.1300e- 003	5.0000e- 005	0.1350

Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	0.065154 / 0.0410754	0.0664	2.1300e- 003	5.0000e- 005	0.1350
Total		0.0664	2.1300e- 003	5.0000e- 005	0.1350

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e

	MT/yr			
Mitigated	0.2558	0.0151	0.0000	0.6337
Unmitigated	0.2558	0.0151	0.0000	0.6337

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	1.26	0.2558	0.0151	0.0000	0.6337
Total		0.2558	0.0151	0.0000	0.6337

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	1.26	0.2558	0.0151	0.0000	0.6337
Total		0.2558	0.0151	0.0000	0.6337

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

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

11.0 Vegetation

1065 South Winchester Blvd Mixed Use_Proposed Conditions- Bay Area AQMD Air District, Annual

1065 South Winchester Blvd Mixed Use Project - Proposed Conditions
Bay Area AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	20.41	1000sqft	0.00	20,410.00	0
Enclosed Parking with Elevator	104.00	Space	0.69	44,112.00	0
Other Non-Asphalt Surfaces	2.60	1000sqft	0.14	3,000.00	0
Other Non-Asphalt Surfaces	4.41	1000sqft	0.10	4,437.00	0
Condo/Townhouse	70.00	Dwelling Unit	0.00	101,648.00	200

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	64
Climate Zone	4			Operational Year	2025
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	203	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Adjusted PG&E CO2 Intensity Factor represents the most current data available, 2019

Land Use - from site plans

Construction Phase - adjusted for 20-month construction period

Off-road Equipment - From Construction Info Request.

Off-road Equipment - From Construction Info Data Request

Off-road Equipment - From Construction Info Data Request

Off-road Equipment - From Construction info request.

Off-road Equipment - From Construction Info Data Request. Concrete will be used for paving.

Off-road Equipment - From Construction Info Data Request

Off-road Equipment - From Construction info request.

Trips and VMT - 720 round trips, cement trucks

Demolished pavement is include in the demolition estimate.

On-road Fugitive Dust - Assume 5 mph onsite because site is too small to go faster than 5 mph.

Demolition - Based on FEMA estimates.

Construction Off-road Equipment Mitigation - 5 Tier 4 engines, only mitigation for DPM PM10

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	NumberofEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberofEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberofEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberofEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberofEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberofEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberofEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberofEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberofEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberofEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberofEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberofEquipmentMitigated	0.00	12.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final

tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	5.00	100.00
tblConstructionPhase	NumDays	100.00	200.00
tblConstructionPhase	NumDays	2.00	40.00
tblConstructionPhase	NumDays	5.00	10.00
tblConstructionPhase	NumDays	1.00	10.00
tblGrading	AcresOfGrading	20.00	0.93
tblGrading	AcresOfGrading	5.00	0.93
tblGrading	MaterialExported	0.00	14,144.00
tblGrading	MaterialImported	0.00	600.00
tblLandUse	LandUseSquareFeet	41,600.00	44,112.00
tblLandUse	LandUseSquareFeet	2,600.00	3,000.00
tblLandUse	LandUseSquareFeet	4,410.00	4,437.00
tblLandUse	LandUseSquareFeet	70,000.00	101,648.00
tblLandUse	LotAcreage	0.47	0.00
tblLandUse	LotAcreage	0.94	0.69
tblLandUse	LotAcreage	0.06	0.14
tblLandUse	LotAcreage	4.38	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	UsageHours	1.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00

tblOffRoadEquipment	UsageHours	1.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	4.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOnRoadDust	MeanVehicleSpeed	40.00	5.00
tblOnRoadDust	MeanVehicleSpeed	40.00	5.00
tblOnRoadDust	MeanVehicleSpeed	40.00	5.00
tblOnRoadDust	MeanVehicleSpeed	40.00	5.00
tblOnRoadDust	MeanVehicleSpeed	40.00	5.00
tblOnRoadDust	MeanVehicleSpeed	40.00	5.00
tblOnRoadDust	MeanVehicleSpeed	40.00	5.00
tblOnRoadDust	MeanVehicleSpeed	40.00	5.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	203
tblRoadDust	MeanVehicleSpeed	40	5
tblTripsAndVMT	HaulingTripNumber	0.00	720.00
tblTripsAndVMT	WorkerTripNumber	15.00	10.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.1502	1.5669	1.3637	4.0000e-003	0.2503	0.0576	0.3078	0.1084	0.0533	0.1617	0.0000	364.5919	364.5919	0.0629	0.0000	366.1642
2024	0.8679	0.2861	0.3778	7.9000e-004	0.0198	0.0117	0.0315	5.3200e-003	0.0111	0.0164	0.0000	70.2840	70.2840	0.0117	0.0000	70.5767
Maximum	0.8679	1.5669	1.3637	4.0000e-003	0.2503	0.0576	0.3078	0.1084	0.0533	0.1617	0.0000	364.5919	364.5919	0.0629	0.0000	366.1642

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.0630	0.5320	1.5378	4.0000e-003	0.1517	5.9100e-003	0.1576	0.0569	5.8500e-003	0.0628	0.0000	364.5917	364.5917	0.0629	0.0000	366.1640
2024	0.8571	0.1751	0.4085	7.9000e-004	0.0198	4.5500e-003	0.0244	5.3200e-003	4.5400e-003	9.8600e-003	0.0000	70.2839	70.2839	0.0117	0.0000	70.5766
Maximum	0.8571	0.5320	1.5378	4.0000e-003	0.1517	5.9100e-003	0.1576	0.0569	5.8500e-003	0.0628	0.0000	364.5917	364.5917	0.0629	0.0000	366.1640

	ROG	NOx	CO	SO2	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	9.63	61.84	-11.76	0.00	36.51	84.89	46.38	45.27	83.85	59.21	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-15-2023	4-14-2023	0.8033	0.3084
2	4-15-2023	7-14-2023	0.3153	0.1277
3	7-15-2023	10-14-2023	0.3222	0.0857
4	10-15-2023	1-14-2024	0.3205	0.0870
5	1-15-2024	4-14-2024	0.3206	0.2474
6	4-15-2024	7-14-2024	0.6222	0.6360
7	7-15-2024	9-30-2024	0.1592	0.1344
		Highest	0.8033	0.6360

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	1/15/2023	1/27/2023	5	10	
2	Site Preparation	Site Preparation	2/1/2023	2/14/2023	5	10	
3	Grading	Grading	2/15/2023	4/11/2023	5	40	
4	Trenching	Trenching	4/15/2023	5/14/2023	5	20	
5	Building Construction	Building Construction	5/15/2023	2/16/2024	5	200	
6	Architectural Coating	Architectural Coating	3/15/2024	8/1/2024	5	100	

7	Paving	Paving	8/1/2024	8/14/2024	5	10
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Acres of Grading (Site Preparation Phase): 0.93

Acres of Grading (Grading Phase): 0.93

Acres of Paving: 0.93

Residential Indoor: 205,837; Residential Outdoor: 68,612; Non-Residential Indoor: 30,615; Non-Residential Outdoor: 10,205; Striped

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	2	8.00	81	0.73
Demolition	Excavators	1	8.00	158	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Trenching	Excavators	1	8.00	158	0.38
Trenching	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	8.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Aerial Lifts	1	8.00	63	0.31
Architectural Coating	Air Compressors	1	8.00	78	0.48
Paving	Cement and Mortar Mixers	2	8.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38

Paving	Tractors/Loaders/Backhoes	2	8.00	97	0.37
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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	7	18.00	0.00	86.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	7	18.00	0.00	1,843.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	2	5.00	0.00	720.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	4	79.00	19.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	2	16.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Water Exposed Area

3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr											MT/yr				
Fugitive Dust					9.2600e-003	0.0000	9.2600e-003	1.4000e-003	0.0000	1.4000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.9700e-003	0.0923	0.1019	1.8000e-004	4.4000e-003	4.4000e-003		4.1500e-003	4.1500e-003	0.0000	15.5000	15.5000	3.5400e-003	0.0000	15.5885	
Total	9.9700e-003	0.0923	0.1019	1.8000e-004	9.2600e-003	4.4000e-003	0.0137	1.4000e-003	4.1500e-003	5.5500e-003	0.0000	15.5000	15.5000	3.5400e-003	0.0000	15.5885

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr												MT/yr				
Hauling	2.2000e-004	7.1300e-003	2.2000e-003	3.0000e-005	7.3000e-004	1.0000e-005	7.4000e-004	2.0000e-004	1.0000e-005	2.1000e-004	0.0000	3.0865	3.0865	1.5000e-004	0.0000	3.0902	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	2.4000e-004	1.5000e-004	1.7100e-003	1.0000e-005	7.1000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.5570	0.5570	1.0000e-005	0.0000	0.5572	
Total	4.6000e-004	7.2800e-003	3.9100e-003	4.0000e-005	1.4400e-003	1.0000e-005	1.4600e-003	3.9000e-004	1.0000e-005	4.0000e-004	0.0000	3.6435	3.6435	1.6000e-004	0.0000	3.6474	

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					3.6100e-003	0.0000	3.6100e-003	5.5000e-004	0.0000	5.5000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	4.7500e-003	0.0320	0.1105	1.8000e-004		1.3800e-003	1.3800e-003		1.3800e-003	1.3800e-003	0.0000	15.5000	15.5000	3.5400e-003	0.0000	15.5885	
Total	4.7500e-003	0.0320	0.1105	1.8000e-004	3.6100e-003	1.3800e-003	4.9900e-003	5.5000e-004	1.3800e-003	1.9300e-003	0.0000	15.5000	15.5000	3.5400e-003	0.0000	15.5885	

Mitigated Construction Off-Site

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

Hauling	2.2000e-004	7.1300e-003	2.2000e-003	3.0000e-005	7.3000e-004	1.0000e-005	7.4000e-004	2.0000e-004	1.0000e-005	2.1000e-004	0.0000	3.0865	3.0865	1.5000e-004	0.0000	3.0902
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4000e-004	1.5000e-004	1.7100e-003	1.0000e-005	7.1000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.5570	0.5570	1.0000e-005	0.0000	0.5572
Total	4.6000e-004	7.2800e-003	3.9100e-003	4.0000e-005	1.4400e-003	1.0000e-005	1.4600e-003	3.9000e-004	1.0000e-005	4.0000e-004	0.0000	3.6435	3.6435	1.6000e-004	0.0000	3.6474

3.3 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0306	0.0000	0.0306	0.0166	0.0000	0.0166	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.6100e-003	0.0819	0.0575	1.2000e-004		3.5000e-003	3.5000e-003		3.2200e-003	3.2200e-003	0.0000	10.7619	10.7619	3.4800e-003	0.0000	10.8489
Total	7.6100e-003	0.0819	0.0575	1.2000e-004	0.0306	3.5000e-003	0.0341	0.0166	3.2200e-003	0.0198	0.0000	10.7619	10.7619	3.4800e-003	0.0000	10.8489

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7000e-004	1.1000e-004	1.2300e-003	0.0000	5.1000e-004	0.0000	5.2000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4023	0.4023	1.0000e-005	0.0000	0.4025
Total	1.7000e-004	1.1000e-004	1.2300e-003	0.0000	5.1000e-004	0.0000	5.2000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4023	0.4023	1.0000e-005	0.0000	0.4025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					0.0119	0.0000	0.0119	6.4800e-003	0.0000	6.4800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	1.5000e-003	6.4900e-003	0.0692	1.2000e-004	0.0119	9.0000e-005	9.0000e-005	9.0000e-005	9.0000e-005	0.0000	10.7619	10.7619	3.4800e-003	0.0000	10.8489		
Total	1.5000e-003	6.4900e-003	0.0692	1.2000e-004	0.0119	9.0000e-005	0.0120	6.4800e-003	9.0000e-005	6.5700e-003	0.0000	10.7619	10.7619	3.4800e-003	0.0000	10.8489	

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr												MT/yr				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	1.7000e-004	1.1000e-004	1.2300e-003	0.0000	5.1000e-004	0.0000	5.2000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4023	0.4023	1.0000e-005	0.0000	0.4025	
Total	1.7000e-004	1.1000e-004	1.2300e-003	0.0000	5.1000e-004	0.0000	5.2000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4023	0.4023	1.0000e-005	0.0000	0.4025	

3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	tons/yr												MT/yr					
	Fugitive Dust				0.1218	0.0000	0.1218	0.0664	0.0000	0.0664	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0416	0.4107	0.3887	7.6000e-004		0.0181	0.0181		0.0168	0.0168	0.0000	66.4764	66.4764	0.0186	0.0000	66.9402		
Total	0.0416	0.4107	0.3887	7.6000e-004	0.1218	0.0181	0.1398	0.0664	0.0168	0.0832	0.0000	66.4764	66.4764	0.0186	0.0000	66.9402		

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Hauling	4.6800e-003	0.1529	0.0472	6.8000e-004	0.0156	2.7000e-004	0.0158	4.2800e-003	2.6000e-004	4.5400e-003	0.0000	66.1452	66.1452	3.1300e-003	0.0000	66.2234	
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	9.6000e-004	6.1000e-004	6.8300e-003	2.0000e-005	2.8400e-003	2.0000e-005	2.8600e-003	7.6000e-004	2.0000e-005	7.7000e-004	0.0000	2.2279	2.2279	4.0000e-005	0.0000	2.2290	
Total	5.6400e-003	0.1535	0.0540	7.0000e-004	0.0184	2.9000e-004	0.0187	5.0400e-003	2.8000e-004	5.3100e-003	0.0000	68.3731	68.3731	3.1700e-003	0.0000	68.4524	

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					0.0475	0.0000	0.0475	0.0259	0.0000	0.0259	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.0145	0.0854	0.4597	7.6000e-004		2.8900e-003	2.8900e-003		2.8900e-003	2.8900e-003	0.0000	66.4764	66.4764	0.0186	0.0000	66.9401	
Total	0.0145	0.0854	0.4597	7.6000e-004	0.0475	2.8900e-003	0.0504	0.0259	2.8900e-003	0.0288	0.0000	66.4764	66.4764	0.0186	0.0000	66.9401	

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.6800e-003	0.1529	0.0472	6.8000e-004	0.0156	2.7000e-004	0.0158	4.2800e-003	2.6000e-004	4.5400e-003	0.0000	66.1452	66.1452	3.1300e-003	0.0000	66.2234
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	9.6000e-004	6.1000e-004	6.8300e-003	2.0000e-005	2.8400e-003	2.0000e-005	2.8600e-003	7.6000e-004	2.0000e-005	7.7000e-004	0.0000	2.2279	2.2279	4.0000e-005	0.0000	2.2290
Total	5.6400e-003	0.1535	0.0540	7.0000e-004	0.0184	2.9000e-004	0.0187	5.0400e-003	2.8000e-004	5.3100e-003	0.0000	68.3731	68.3731	3.1700e-003	0.0000	68.4524

3.5 Trenching - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.4000e-003	0.0308	0.0549	8.0000e-005		1.5200e-003	1.5200e-003		1.3900e-003	1.3900e-003	0.0000	7.2727	7.2727	2.3500e-003	0.0000	7.3315
Total	3.4000e-003	0.0308	0.0549	8.0000e-005		1.5200e-003	1.5200e-003		1.3900e-003	1.3900e-003	0.0000	7.2727	7.2727	2.3500e-003	0.0000	7.3315

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	tons/yr												MT/yr				
	Hauling	0.0597	0.0184	2.7000e-004	6.0800e-003	1.1000e-004	6.1900e-003	1.6700e-003	1.0000e-004	1.7800e-003	0.0000	25.8408	25.8408	1.2200e-003	0.0000	25.8713	
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	9.0000e-005	9.5000e-004	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3094	0.3094	1.0000e-005	0.0000	0.3096		
Total	1.9600e-003	0.0598	0.0194	2.7000e-004	6.4800e-003	1.1000e-004	6.5900e-003	1.7800e-003	1.0000e-004	1.8900e-003	0.0000	26.1502	26.1502	1.2300e-003	0.0000	26.1809	

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Off-Road	1.0200e-003	4.4000e-003	0.0626	8.0000e-005		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	7.2727	7.2727	2.3500e-003	0.0000	7.3315	
Total	1.0200e-003	4.4000e-003	0.0626	8.0000e-005		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	7.2727	7.2727	2.3500e-003	0.0000	7.3315	

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Hauling	1.8300e-003	0.0597	0.0184	2.7000e-004	6.0800e-003	1.1000e-004	6.1900e-003	1.6700e-003	1.0000e-004	1.7800e-003	0.0000	25.8408	25.8408	1.2200e-003	0.0000	25.8713	
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	9.0000e-005	9.5000e-004	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3094	0.3094	1.0000e-005	0.0000	0.3096		

Total	1.9600e-003	0.0598	0.0194	2.7000e-004	6.4800e-003	1.1000e-004	6.5900e-003	1.7800e-003	1.0000e-004	1.8900e-003	0.0000	26.1502	26.1502	1.2300e-003	0.0000	26.1809
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3.6 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0584	0.5998	0.5243	9.9000e-004		0.0292	0.0292		0.0269	0.0269	0.0000	86.5524	86.5524	0.0280	0.0000	87.2523
Total	0.0584	0.5998	0.5243	9.9000e-004		0.0292	0.0292		0.0269	0.0269	0.0000	86.5524	86.5524	0.0280	0.0000	87.2523

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- 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	3.4800e-003	0.1196	0.0344	4.1000e-004	0.0103	1.4000e-004	0.0104	2.9700e-003	1.3000e-004	3.1000e-003	0.0000	39.1254	39.1254	1.6300e-003	0.0000	39.1661
Worker	0.0174	0.0111	0.1236	4.5000e-004	0.0515	3.2000e-004	0.0518	0.0137	3.0000e-004	0.0140	0.0000	40.3340	40.3340	7.8000e-004	0.0000	40.3536
Total	0.0209	0.1307	0.1580	8.6000e-004	0.0618	4.6000e-004	0.0622	0.0167	4.3000e-004	0.0171	0.0000	79.4594	79.4594	2.4100e-003	0.0000	79.5197

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.0121	0.0524	0.5993	9.9000e-004		6.0000e-004	6.0000e-004		6.0000e-004	6.0000e-004	0.0000	86.5523	86.5523	0.0280	0.0000	87.2522	
Total	0.0121	0.0524	0.5993	9.9000e-004		6.0000e-004	6.0000e-004		6.0000e-004	6.0000e-004	0.0000	86.5523	86.5523	0.0280	0.0000	87.2522	

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- 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	3.4800e-003	0.1196	0.0344	4.1000e-004	0.0103	1.4000e-004	0.0104	2.9700e-003	1.3000e-004	3.1000e-003	0.0000	39.1254	39.1254	1.6300e-003	0.0000	39.1661	
Worker	0.0174	0.0111	0.1236	4.5000e-004	0.0515	3.2000e-004	0.0518	0.0137	3.0000e-004	0.0140	0.0000	40.3340	40.3340	7.8000e-004	0.0000	40.3536	
Total	0.0209	0.1307	0.1580	8.6000e-004	0.0618	4.6000e-004	0.0622	0.0167	4.3000e-004	0.0171	0.0000	79.4594	79.4594	2.4100e-003	0.0000	79.5197	

3.6 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.0116	0.1176	0.1101	2.1000e-004		5.5000e-003	5.5000e-003		5.0600e-003	5.0600e-003	0.0000	18.3624	18.3624	5.9400e-003	0.0000	18.5109	
Total	0.0116	0.1176	0.1101	2.1000e-004		5.5000e-003	5.5000e-003		5.0600e-003	5.0600e-003	0.0000	18.3624	18.3624	5.9400e-003	0.0000	18.5109	

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- 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	7.1000e-004	0.0251	7.0200e-003	9.0000e-005	2.1800e-005	3.0000e-005	2.2100e-003	6.3000e-004	3.0000e-005	6.6000e-004	0.0000	8.2433	8.2433	3.4000e-004	0.0000	8.2518	
Worker	3.4800e-003	2.1300e-003	0.0243	9.0000e-005	0.0109	7.0000e-005	0.0110	2.9100e-003	6.0000e-005	2.9700e-003	0.0000	8.2171	8.2171	1.5000e-004	0.0000	8.2208	
Total	4.1900e-003	0.0272	0.0313	1.8000e-004	0.0131	1.0000e-004	0.0132	3.5400e-003	9.0000e-005	3.6300e-003	0.0000	16.4604	16.4604	4.9000e-004	0.0000	16.4726	

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	2.5600e-003	0.0111	0.1271	2.1000e-004		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	18.3624	18.3624	5.9400e-003	0.0000	18.5109	
Total	2.5600e-003	0.0111	0.1271	2.1000e-004		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	18.3624	18.3624	5.9400e-003	0.0000	18.5109	

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- 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	7.1000e-004	0.0251	7.0200e-003	9.0000e-005	2.1800e-003	3.0000e-005	2.2100e-003	6.3000e-004	3.0000e-005	6.6000e-004	0.0000	8.2433	8.2433	3.4000e-004	0.0000	8.2518
Worker	3.4800e-003	2.1300e-003	0.0243	9.0000e-005	0.0109	7.0000e-005	0.0110	2.9100e-003	6.0000e-005	2.9700e-003	0.0000	8.2171	8.2171	1.5000e-004	0.0000	8.2208
Total	4.1900e-003	0.0272	0.0313	1.8000e-004	0.0131	1.0000e-004	0.0132	3.5400e-003	9.0000e-005	3.6300e-003	0.0000	16.4604	16.4604	4.9000e-004	0.0000	16.4726

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.8327					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0138	0.1076	0.1753	2.8000e-004		4.5200e-003	4.5200e-003		4.4800e-003	4.4800e-003	0.0000	24.3980	24.3980	3.3400e-003	0.0000	24.4816
Total	0.8465	0.1076	0.1753	2.8000e-004		4.5200e-003	4.5200e-003		4.4800e-003	4.4800e-003	0.0000	24.3980	24.3980	3.3400e-003	0.0000	24.4816

Unmitigated Construction Off-Site

Worker	2.0100e-003	1.2300e-003	0.0141	5.0000e-005	6.3200e-003	4.0000e-005	6.3600e-003	1.6800e-003	4.0000e-005	1.7200e-003	0.0000	4.7549	4.7549	9.0000e-005	0.0000	4.7571
Total	2.0100e-003	1.2300e-003	0.0141	5.0000e-005	6.3200e-003	4.0000e-005	6.3600e-003	1.6800e-003	4.0000e-005	1.7200e-003	0.0000	4.7549	4.7549	9.0000e-005	0.0000	4.7571

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.8327						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0141	0.1284	0.1844	2.8000e-004		4.0800e-003	4.0800e-003	4.0800e-003	4.0800e-003	0.0000	24.3980	24.3980	3.3400e-003	0.0000	24.4816	
Total	0.8468	0.1284	0.1844	2.8000e-004		4.0800e-003	4.0800e-003	4.0800e-003	4.0800e-003	0.0000	24.3980	24.3980	3.3400e-003	0.0000	24.4816	

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0100e-003	1.2300e-003	0.0141	5.0000e-005	6.3200e-003	4.0000e-005	6.3600e-003	1.6800e-003	4.0000e-005	1.7200e-003	0.0000	4.7549	4.7549	9.0000e-005	0.0000	4.7571
Total	2.0100e-003	1.2300e-003	0.0141	5.0000e-005	6.3200e-003	4.0000e-005	6.3600e-003	1.6800e-003	4.0000e-005	1.7200e-003	0.0000	4.7549	4.7549	9.0000e-005	0.0000	4.7571

3.8 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr												MT/yr				
Off-Road	3.4700e-003	0.0325	0.0462	7.0000e-005		1.5200e-003	1.5200e-003		1.4100e-003	1.4100e-003	0.0000	6.0111	6.0111	1.8400e-003	0.0000	6.0571	
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Total	3.4700e-003	0.0325	0.0462	7.0000e-005		1.5200e-003	1.5200e-003		1.4100e-003	1.4100e-003	0.0000	6.0111	6.0111	1.8400e-003	0.0000	6.0571	

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr												MT/yr				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	1.3000e-004	8.0000e-005	8.8000e-004	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.2972	0.2972	1.0000e-005	0.0000	0.2973	
Total	1.3000e-004	8.0000e-005	8.8000e-004	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.2972	0.2972	1.0000e-005	0.0000	0.2973	

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr												MT/yr				
Off-Road	1.3600e-003	7.0300e-003	0.0508	7.0000e-005		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	6.0111	6.0111	1.8400e-003	0.0000	6.0571	

Paving	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	1.3600e-003	7.0300e-003	0.0508	7.0000e-005		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	6.0111	6.0111	1.8400e-003	0.0000	6.0571	

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3000e-004	8.0000e-005	8.8000e-004	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.2972	0.2972	1.0000e-005	0.0000	0.2973
Total	1.3000e-004	8.0000e-005	8.8000e-004	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.2972	0.2972	1.0000e-005	0.0000	0.2973

1065 South Winchester Blvd Mixed Use_Proposed Conditions- Bay Area AQMD Air District, Annual

1065 South Winchester Blvd Mixed Use Project - Proposed Conditions
Bay Area AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	20.41	1000sqft	0.00	20,410.00	0
Enclosed Parking with Elevator	104.00	Space	0.69	44,112.00	0
Other Non-Asphalt Surfaces	2.60	1000sqft	0.14	3,000.00	0
Other Non-Asphalt Surfaces	4.41	1000sqft	0.10	4,437.00	0
Condo/Townhouse	70.00	Dwelling Unit	0.00	101,648.00	200

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	64
Climate Zone	4			Operational Year	2025
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	203	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Adjusted PG&E CO2 Intensity Factor represents the most current data available, 2019

Land Use - from site plans

residential and office components over parking. Footprint 30,214 sf = 0.69 acres

Vehicle Trips - From Hexagon Traffic Report 2021 p. 31. Table 4.

Energy Use -

Stationary Sources - Process Boilers - From <https://www.bobvila.com/articles/how-to-choose-a-new-boiler>

(20 BTU/hr/SF) (101,648+20,410=122,058 sf) = 2,441,160 BTU/hr = 2.441 MMBTU/hr

tblLandUse	LandUseSquareFeet	41,600.00	44,112.00
tblLandUse	LandUseSquareFeet	2,600.00	3,000.00
tblLandUse	LandUseSquareFeet	4,410.00	4,437.00
tblLandUse	LandUseSquareFeet	70,000.00	101,648.00
tblLandUse	LotAcreage	0.47	0.00
tblLandUse	LotAcreage	0.94	0.69
tblLandUse	LotAcreage	0.06	0.14
tblLandUse	LotAcreage	4.38	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	203
tblRoadDust	MeanVehicleSpeed	40	5
tblSequestration	NumberOfNewTrees	0.00	107.00
tblStationaryBoilersUse	AnnualHeatInput	0.00	21,385.00
tblStationaryBoilersUse	BoilerRatingValue	0.00	2.44
tblStationaryBoilersUse	DailyHeatInput	0.00	58.59
tblStationaryBoilersUse	NumberOfEquipment	0.00	1.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	150.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.50
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	6.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblVehicleTrips	WD_TR	5.81	5.44
tblVehicleTrips	WD_TR	11.03	9.78

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	tons/yr										MT/yr					
Area	0.5790	5.9900e-003	0.5205	3.0000e-005		2.8900e-003	2.8900e-003		2.8900e-003	2.8900e-003	0.0000	0.8514	0.8514	8.2000e-004	0.0000	0.8718
Energy	6.5700e-003	0.0568	0.0289	3.6000e-004		4.5400e-003	4.5400e-003		4.5400e-003	4.5400e-003	0.0000	146.1210	146.1210	0.0128	3.5900e-003	147.5115

Mobile	0.1076	0.5016	1.2119	4.8200e-003	0.4599	3.9300e-003	0.4638	0.1234	3.6600e-003	0.1271	0.0000	444.0003	444.0003	0.0149	0.0000	444.3723
Stationary	0.0584	0.1197	1.0300	6.2900e-003		0.0798	0.0798		0.0798	0.0798	0.0000	1,141.547	1,141.547	0.0219	0.0000	1,142.095
Waste					0.0000	0.0000			0.0000	0.0000	10.3891	0.0000	10.3891	0.6140	0.0000	25.7385
Water					0.0000	0.0000			0.0000	0.0000	2.5978	5.6227	8.2205	0.2676	6.4700e-003	16.8379
Total	0.7516	0.6841	2.7914	0.0115	0.4599	0.0911	0.5510	0.1234	0.0909	0.2143	12.9869	1,738.142	1,751.129	0.9321	0.0101	1,777.427

4.0 Operational Detail - Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Unmitigated	0.1076	0.5016	1.2119	4.8200e-003	0.4599	3.9300e-003	0.4638	0.1234	3.6600e-003	0.1271	0.0000	444.0003	444.0003	0.0149	0.0000	444.3723

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT	Annual VMT	Annual VMT
Condo/Townhouse	380.80	396.90	338.80	870,953	870,953		
Enclosed Parking with Elevator	0.00	0.00	0.00				
General Office Building	199.61	50.21	21.43	365,184	365,184		
Other Non-Asphalt Surfaces	0.00	0.00	0.00				
Other Non-Asphalt Surfaces	0.00	0.00	0.00				
Total	580.41	447.11	360.23	1,236,137	1,236,137		

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
Condo/Townhouse	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
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Condo/Townhouse	0.581705	0.037849	0.193793	0.109044	0.014574	0.005304	0.018664	0.026966	0.002656	0.002072	0.005755	0.000900	0.000719
Enclosed Parking with Elevator	0.581705	0.037849	0.193793	0.109044	0.014574	0.005304	0.018664	0.026966	0.002656	0.002072	0.005755	0.000900	0.000719
General Office Building	0.581705	0.037849	0.193793	0.109044	0.014574	0.005304	0.018664	0.026966	0.002656	0.002072	0.005755	0.000900	0.000719
Other Non-Asphalt Surfaces	0.581705	0.037849	0.193793	0.109044	0.014574	0.005304	0.018664	0.026966	0.002656	0.002072	0.005755	0.000900	0.000719

5.0 Energy Detail

Historical Energy Use: N

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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 Unmitigated							0.0000	0.0000		0.0000	0.0000	81.1277	81.1277	0.0116	2.4000e-003	82.1320
NaturalGas Unmitigated	6.5700e-003	0.0568	0.0289	3.6000e-004		4.5400e-003	4.5400e-003		4.5400e-003	4.5400e-003	0.0000	64.9933	64.9933	1.2500e-003	1.1900e-003	65.3795

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					
Condo/Townhouse	983682	5.3000e-003	0.0453	0.0193	2.9000e-004		3.6600e-003	3.6600e-003		3.6600e-003	3.6600e-003	0.0000	52.4930	52.4930	1.0100e-003	9.6000e-004	52.8050
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
General Office Building	234246	1.2600e-003	0.0115	9.6500e-003	7.0000e-005		8.7000e-004	8.7000e-004		8.7000e-004	8.7000e-004	0.0000	12.5002	12.5002	2.4000e-004	2.3000e-004	12.5745
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1217928	6.5600e-003	0.0568	0.0289	3.6000e-004		4.5300e-003	4.5300e-003		4.5300e-003	4.5300e-003	0.0000	64.9933	64.9933	1.2500e-003	1.1900e-003	65.3795

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
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Land Use	kWh/yr	MT/yr					
Condo/Townhouse	347944	32.0385	4.5800e-003	9.5000e-004	32.4351		
Enclosed Parking with Elevator	206621	19.0255	2.7200e-003	5.6000e-004	19.2610		
General Office Building	326499	30.0638	4.2900e-003	8.9000e-004	30.4359		
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		
Total	881064	81.1277	0.0116	2.4000e-003	82.1320		

6.0 Area Detail

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Unmitigated	0.5790	5.9900e-003	0.5205	3.0000e-005		2.8900e-003	2.8900e-003		2.8900e-003	2.8900e-003	0.0000	0.8514	0.8514	8.2000e-004	0.0000	0.8718

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	0.0833					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4800					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0157	5.9900e-003	0.5205	3.0000e-005		2.8900e-003	2.8900e-003		2.8900e-003	2.8900e-003	0.0000	0.8514	0.8514	8.2000e-004	0.0000	0.8718
Total	0.5790	5.9900e-003	0.5205	3.0000e-005		2.8900e-003	2.8900e-003		2.8900e-003	2.8900e-003	0.0000	0.8514	0.8514	8.2000e-004	0.0000	0.8718

7.0 Water Detail

7.2 Water by Land Use

Unmitigated

Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Condo/Townhou se	4.56078 / 2.69988	4.5894	0.1491	3.6000e- 003	9.3893
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
General Office Building	3.62755 / 2.08771	3.6311	0.1186	2.8600e- 003	7.4486
Other Non- Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		8.2205	0.2676	6.4600e- 003	16.8379

8.0 Waste Detail

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Unmitigated	10.3891	0.6140	0.0000	25.7385

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Condo/Townhou se	32.2	6.5363	0.3863	0.0000	16.1934
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
General Office Building	18.98	3.8528	0.2277	0.0000	9.5451
Other Non- Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		10.3891	0.6140	0.0000	25.7385

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	0.5	6	150	0.73	Diesel

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
Boiler	1	58.59	21385	2.441	CNG

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					
Boiler - CNG (2 - 5 MMBTU)	0.0577	0.1176	1.0273	6.2900e-003			0.0797	0.0797		0.0797	0.0000	1,141.204	1,141.204	0.0219	0.0000	1,141.751	
Emergency Generator - Diesel	7.4000e-004	2.0600e-003	2.6800e-003	0.0000			1.1000e-004	1.1000e-004		1.1000e-004	0.0000	0.3427	0.3427	5.0000e-005	0.0000	0.3439	
Total	0.0584	0.1197	1.0300	6.2900e-003			0.0798	0.0798		0.0798	0.0000	1,141.547	1,141.547	0.0219	0.0000	1,142.095	