
APPENDIX B

CALEEMOD ASSESSMENT AND RESULTS



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: Polaris Kinison Brown, Project Manager
From: Tanya Kalaskar, Associate Planner
Cc: File
Date: August 13, 2020

Re: Baywood Mixed-Use Project – Criteria Air Pollutant and GHG Emissions
Modeling Assessment

PROJECT DESCRIPTION

The proposed project is the demolition of three existing single-family residences, one detached garage, and one shed, and their replacement with a new 11-story commercial and residential mixed-use building on a 0.44-acre project site located at 375 and 383 S. Baywood Avenue and 382 S. Redwood Avenue in the City of San José.

The proposed building would consist of 79 residential condominium units and 9,820 square feet of commercial space in up to five units. A residential lobby, gym, commercial entrance, commercial/office units, and parking ramp would be located on the ground floor. Floors three through 11 would include condominium units.

A total of 98 vehicle parking spaces are provided by two underground levels and one aboveground level. 73 parking spaces covering an area of 31,260 square feet would be provided in two underground levels. The remaining 25 parking spaces covering an area of 15,610.5 square feet would be located on the second floor.

The proposed project includes the removal of 7 trees. The proposed landscape plan includes planting of 60 new trees.

MEMORANDUM

Grading for the proposed project includes excavation of 19,500 cubic yards of soil to accommodate the proposed underground parking garage. The excavated soils would be disposed of off-site.

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 and greenhouse gas (GHG) emissions 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 2020) and trip generation information provided in the transportation analysis prepared for the proposed project (Hexagon Transportation Consultants 2020).

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 and GHG emissions from land use projects. The model also calculates indirect emissions from processes "downstream" of the proposed project such as GHG emissions from energy use, solid waste disposal, vegetation planting and/or removal, and water use.

CalEEMod is capable of estimating changes in the carbon sequestration potential of a site based on changes in natural vegetation communities and the net number of new trees that would be planted as part of the project. The model calculates a one-time only loss in the carbon sequestration potential of the site that would result from changes in land use such as converting vegetation to built or paved surfaces, and can provide an estimate of the change in the carbon

sequestration potential that would result from planting new trees greater than the number of trees to be removed (net number of new trees).

The project site is already developed and there are no natural vegetation communities on the site. However, the project plans include proposed tree plantings for the project site (Carpira Design Group 2020). Therefore, this assessment includes quantification of the change in carbon sequestration potential from planting new trees.

Existing and Proposed Emissions Sources

The size and type of the existing and proposed sources of criteria air pollutants and GHG 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	Proposed ²
Single-family Residence	Single Family Housing	3 units	-
Condominiums	Condo/Townhouse High Rise	-	79 units
Commercial Office	General Office Building	-	9,820
Underground Parking	Enclosed Parking With Elevator	-	73 spaces ³
Aboveground Parking	Enclosed Parking With Elevator	-	25 spaces ⁴
Impervious Surfaces (on- and off-site)	Other Asphalt Surfaces	-	4,037
Pervious Surfaces (landscaping) ⁵	Other Non-Asphalt Surfaces	-	664

SOURCE: Trinity Consultants 2017, Carpira Design Group 2020.

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 2016.3.2 available online at: <http://www.aqmd.gov/caleemod/user's-guide>
2. Expressed in units of square feet unless otherwise noted.
3. The total area of two underground parking levels is 31,260 square feet.
4. The aboveground parking level covers an area of 15,610.5 square feet.
5. Pervious surfaces are not substantial sources of operational emissions and are included in the model only to capture GHG emissions from construction activities.

METHODOLOGY

Unless otherwise noted, the calculated emissions estimates are based primarily on model default emissions factors for construction and operations of the project. Construction and

operational criteria air pollutant and GHG emissions estimates are derived for existing conditions and proposed project conditions 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.

Baseline (Existing) Emissions

Baseline GHG emissions are those generated under existing conditions. This scenario consists of unmitigated GHG emissions volumes that are generated by the existing single-family homes 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

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 GHG emissions generated by the existing single-family residential uses on the site are assumed to be similar to emissions that would be generated by the CalEEMod default land use subtype "Single Family Housing", which is defined as single-family detached homes on individual lots typical of a suburban subdivision.
2. Construction of the proposed project is anticipated to begin in January 2021.
3. The anticipated operational year of the proposed project is 2023.

4. Construction and operational emissions for proposed conditions were estimated as follows:
 - a. Emissions generated by the proposed residential condominium units are assumed to be similar to emissions that would be generated by the CalEEMod default land use subtype “Condo/Townhouse High Rise”, which is defined as ownership units that have three or more levels. The model default trip generation rate for “Condo/Townhouse High Rise” has been modified based on information provided in the transportation analysis prepared for the proposed project (Hexagon Transportation Consultants 2020);
 - 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”, which is defined as a building that houses multiple tenants where affairs of businesses, commercial, industrial organizations, or professional persons or firms are conducted. 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 2020);
 - c. Emissions generated by the proposed underground and aboveground parking are assumed to be similar to emissions that would be generated by the CalEEMod default land subtype “Enclosed Parking with Elevator”, which is defined as an enclosed parking structure that may be above or below ground, is not covered in asphalt, includes an elevator, and will require lighting and ventilation;
 - d. Emissions generated by the proposed on-site and off-site paving are assumed to be similar to emissions that would be generated by the CalEEMod default land use subtype “Other Asphalt Surfaces”, which is defined as an asphalt surface not used as a parking lot; and
 - e. Emissions generated by construction and curing of the proposed landscaping are assumed to be similar to emissions that would be generated by the CalEEMod default land use subtype “Other Non-Asphalt Surfaces”.

5. The proposed project includes the use of an emergency generator and a fire pump. Model inputs for the emergency generator and fire pump are based on the size and horsepower provided by the applicant (Henry Cord, email message, July 6, 2020), and are assumed to be diesel-fueled. The model data input assumes that each equipment would be run for an average of 24 hours per year for maintenance.

Operational Emissions Data Inputs

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 of 641 pounds/megawatt hour is adjusted to 290 pounds/megawatt hour to reflect Pacific Gas & Electric (PG&E) energy intensity projections for 2020, which is the horizon year for the provider's energy intensity factor projections. 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. Emissions intensity data is from PG&E's *Greenhouse Gas Factors: Guidance for PG&E Customers*, dated November 2015.
- As noted previously, the model default trip generation rates for the proposed condominium units and office spaces are adjusted based on information provided in the transportation analysis prepared for the proposed project (Hexagon Transportation Consultants 2020).
- The Title 24 BEES defaults in CalEEMod Version 2016.3.2 are the 2016 BEES. Title 24 BEES are updated every three years. The 2019 BEES became effective on January 1, 2020. Projects are constructed after January 1, 2020 will be required to comply with the 2019 BEES. Adjustments were made to the energy mitigation screen under the proposed project scenario to account for Title 24 increases in energy efficiencies that have occurred since CalEEMod Version 2016.3.2 was released. Compliance with the 2019 BEES increases building energy efficiencies by 30 percent over the 2016 BEES for non-residential buildings (California Energy Commission 2018).

- The water mitigation screen for the proposed project includes an adjustment to reflect required compliance with the State requirements for MWELo.

Construction Emissions Data Inputs

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. Modeling of construction emissions is based on the available project-specific construction information (Henry Cord, email message, July 6, 2020). The spreadsheet containing project-specific construction schedule, construction phases, type of construction equipment, hours of operation of each equipment, and area to be demolished is attached to this assessment. The modeled volume of dust from material movement during construction is based on information provided in the project plans: 19,500 cubic yards of excavated soils to be exported from the site. The model's default construction hauling trip length of 20 miles was used to calculate emissions for hauling equipment.

The modeling results for construction emissions are attached to this assessment. The air district recommends amortizing the short-term construction GHG emissions over a 30-year time period to yield an annual emissions volume.

Carbon Sequestration Potential Data Inputs

CalEEMod calculates the change in carbon sequestration potential based upon the net number of trees (the difference between trees removed and new tree plantings) on a site, averaged over a 20-year growth cycle. The proposed project includes removal of seven existing trees and planting of 60 new trees, for a net total of 62 trees (Carpira Design Group 2020). Changes in sequestration potential are reported in metric tons of carbon dioxide equivalent (MT CO_{2e}).

RESULTS

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

Criteria Air Pollutant Emissions

Construction Emissions

The unmitigated criteria air pollutant emissions resulting from project construction are summarized in [Table 2, Construction Criteria Air Pollutant Emissions](#).

Table 2 Construction Criteria Air Pollutant Emissions

Emissions	Reactive Organic Gases (ROG)	Nitrogen Oxides (NO_x)	Exhaust Respirable Particulate Matter (PM₁₀)	Exhaust Fine Particulate Matter (PM_{2.5})
Total Annual Emissions (tons/year) ¹	1.40	6.51	0.10	0.09
Average Daily Emissions (pounds/day) ^{1,2}	7.00	32.55	0.50	0.45

SOURCE: EMC Planning Group 2020

NOTES:

1. Results may vary due to rounding.
2. 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 400 construction days (see construction data sheet). 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, Operational Criteria Air Pollutant Emissions](#).

Table 3 Operational Criteria Air Pollutant Emissions

Emissions	Reactive Organic Gases (ROG)	Nitrogen Oxides (NO_x)	Respirable Particulate Matter (PM₁₀)	Fine Particulate Matter (PM_{2.5})
Total Annual Emissions (tons/year) ^{1,3}	1.03	0.59	0.50	0.17
Average Daily Emissions (pounds/day) ^{1,2,3}	5.64	3.23	2.74	0.93

SOURCE: EMC Planning Group 2020

NOTES:

1. Results may vary due to rounding.
2. 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 (conservatively assuming 365 days of operation).
3. Includes reductions from compliance with 2019 BEES. Compliance with MWEL0 does not result in reduction of criteria air pollutant emissions.

GHG Emissions

Baseline Emissions

Baseline (existing) uses generate approximately 38.15 MT CO_{2e} of GHG emissions per year.

Construction Emissions

Construction activity would generate a total of 1,463.17 MT CO_{2e} of unmitigated GHG emissions. When averaged over a 30-year operational lifetime, the annual amortized emissions equal 48.77 MT CO_{2e} per year.

Operational Emissions

The unmitigated operational GHG emissions estimates are summarized in [Table 4, Unmitigated Operational GHG Emissions](#).

Table 4 Annual Operational GHG Emissions

Emissions Sources	GHG Emissions^{1,2}
Area	6.28
Energy ³	130.63
Mobile	466.98
Stationary	2.29
Waste	22.87
Water ⁴	16.21
Total	645.26

SOURCE: EMC Planning Group 2020

NOTES:

1. Results may vary due to rounding.
2. Expressed in MT CO₂e per year.
3. Results include emissions reductions from compliance with 2019 BEES.
4. Results include emissions reductions from compliance with MWEL0.

Carbon Sequestration Potential

Model results indicating the change in carbon sequestration potential on the project site are shown in Section 2.3 of the model results for annual emissions. The model estimates a net gain in sequestration potential of 37.52 MT CO₂e. Averaged over a 30-year lifetime, the annual gain in sequestration potential associated with the proposed project would be equivalent to 1.25 MT CO₂e per year (37.52 MT CO₂e / 30 years). This amount is deducted from the project's annual operational GHG emissions.

GHG Emissions Attributable to the Proposed Project

The total GHG emissions that would be attributable to the proposed project consist of amortized construction emissions added to the unmitigated operational emissions, less the baseline emissions and amortized annual gain in carbon sequestration potential on the site. The net GHG emissions attributable to the proposed project annually are presented in [Table 5, Summary of Annual GHG Emissions Attributable to the Project](#).

Table 5 Summary of Annual GHG Emissions Attributable to the Project^{1,2}

Annual Operations ³	Amortized Construction	Annual Project Emissions ⁴	Baseline Emissions ⁵	Sequestration Potential ⁵	Net Project Emissions
645.26	48.77	694.03	<38.15>	<1.25>	654.63

SOURCE: EMC Planning Group 2020

NOTES:

1. Results may vary due to rounding.
2. Expressed in MT CO₂e per year.
3. Unmitigated Operational GHG emissions (See Table 4).
4. Sum of amortized construction and unmitigated operational emissions.
5. <Brackets> Indicate deductions.

SOURCES

1. Trinity Consultants. November 2017. *California Emissions Estimator (CalEEMod) Version 2016.3.2*. Available online at: <http://www.aqmd.gov/caleemod/home>
2. Trinity Consultants. November 2017. *CalEEMod User's Guide (Version 2016.3.2)*. 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. June 24, 2020. *Project Plans*. Concord, CA.
5. Hexagon Transportation Consultants. *Baywood Condominium Mixed-Use Development Transportation Analysis*. July 6, 2020. Gilroy, CA.
6. Pacific Gas & Electric. November 2015. *Greenhouse Gas Factors: Guidance for PG&E Customers*; Accessed December 13, 2019. https://www.ca-ilg.org/sites/main/files/file-attachments/ghg_emission_factor_guidance.pdf?1436996158
7. California Energy Commission. March 2018. *2019 Building Energy Efficiency Standards Frequently Asked Questions*. https://ww2.energy.ca.gov/title24/2019standards/documents/Title_24_2019_Building_Standards_FAQ_ada.pdf
8. Cord, Henry. Email message to consultant, 6 July 2020.

Air Quality Construction Information Data Request

Project Name: 375 and 383 South Baywood Ave Condos **Complete ALL Portions in Yellow**

<p>See Equipment Type TAB for type, horsepower and load factor</p> <p>Project Size</p> <p>79 Dwelling Units .444 acres total project acres disturbed</p> <p>141,128 s.f. residential</p> <p>s.f. retail</p> <p>9,820 s.f. office/commercial</p> <p>8,456 s.f. other, specify: private & Open space</p> <p>46,330 s.f. parking garage 98 spaces</p> <p>s.f. parking lot spaces</p> <p>Construction Hours 7 am to 5 pm</p>	<p>Pile Driving? Y/N? No</p> <p>Project include OPERATIONAL GENERATOR OR FIRE PUMP on-site? Y/N? __Y__</p> <p>IF YES (if BOTH separate values) --> Fire Pump / Generator</p> <p>Kilowatts/Horsepower: Pump 48/100 Generator 75/150</p> <p>Fuel Type: Electric / Diesel</p> <p>Location in project (Plans Desired if Available); 1st Floor</p>
--	--

DO NOT MULTIPLY EQUIPMENT HOURS/DAY BY THE QUANTITY OF EQUIPMENT

Quantity	Description	HP	Load Factor	Hours/day	Total Work Days	Avg. Hours per day	Annual Hours	Comments
Demolition								
		Start Date:	1/1/2021	Total phase:	20			Overall Import/Export Volumes
		End Date:	2/1/2021					
2	Concrete/Industrial Saws	81	0.73	8	3	1.2	48	Demolition Volume
1	Excavators	158	0.38	8	10	4	80	Square footage of buildings to be demolished
1	Rubber-Tired Dozers	247	0.4	8	10	4	80	4,954 square feet
3	Tractors/Loaders/Backhoes	97	0.37	8	7	2.8	168	Square footage of pavement to be demolished
								6,265 square feet
								Any pavement demolished and hauled? 262 tons
Site Preparation								
		Start Date:	2/1/2021	Total phase:	10			
		End Date:	2/15/2021					
1	Graders	187	0.41	8	5	4	40	
1	Rubber Tired Dozers	247	0.4	8	5	4	40	
3	Tractors/Loaders/Backhoes	97	0.37	8	10	8	240	
Grading / Excavation								
		Start Date:	2/15/2021	Total phase:	40			Soil Hauling Volume
		End Date:	4/15/2021					Export volume = 19,500 cubic yards
2	Excavators	158	0.38	8	40	8	640	Import volume = 0 cubic yards
1	Graders	187	0.41	8	10	2	80	
1	Rubber Tired Dozers	247	0.4	8	20	4	160	
	Concrete/Industrial Saws	81	0.73	0	0	0	0	
2	Tractors/Loaders/Backhoes	97	0.37	8	30	6	480	
	Other Equipment?							
Trenching/Foundation								
		Start Date:	4/15/2021	Total phase:	20			
		End Date:	5/15/2021					
1	Tractor/Loader/Backhoe	97	0.37	8	20	8	160	
1	Excavators	158	0.38	8	20	8	160	
	Other Equipment?							
Building - Exterior								
		Start Date:	5/15/2021	Total phase:	200			Cement Trucks? 800 Total Round-Trips
		End Date:	3/15/2022					
1	Cranes	231	0.29	8	100	4	800	Electric? (Y/N) N Otherwise assumed diesel
2	Forklifts	89	0.2	8	200	8	3200	Liquid Propane (LPG)? (Y/N) N Otherwise Assumed diesel
0	Generator Sets	84	0.74			0	0	Or temporary line power? (Y/N) Y
1	Tractors/Loaders/Backhoes	97	0.37	4	100	2	400	
0	Welders	46	0.45			0	0	
	Other Equipment?							
Building - Interior/Architectural Coating								
		Start Date:	3/15/2022	Total phase:	90			
		End Date:	8/1/2022					
1	Air Compressors	78	0.48	4	90	4	360	
1	Aerial Lift	62	0.31	8	90	8	720	Electric
	Other Equipment?							
Paving								
		Start Date:	8/1/2022	Total phase:	20			Asphalt? ___ cubic yards or ___ round trips?
		Start Date:	9/1/2022					
2	Cement and Mortar Mixers	9	0.56	8	10	4	160	
	Pavers	130	0.42			0	0	
	Paving Equipment	132	0.36			0	0	
	Rollers	80	0.38			0	0	
2	Tractors/Loaders/Backhoes	97	0.37	8	10	4	160	
	Other Equipment?							
Additional Phases								
		Start Date:		Total phase:				
		Start Date:						
						#DIV/0!	0	
						#DIV/0!	0	
						#DIV/0!	0	
						#DIV/0!	0	
						#DIV/0!	0	

Equipment types listed in "Equipment Types" worksheet tab.

Equipment listed in this sheet is to provide an example of inputs

It is assumed that water trucks would be used during grading

Add or subtract phases and equipment, as appropriate

Modify horsepower or load factor, as appropriate

Complete one sheet for each project component

Baywood Condos_Existing Conditions - Bay Area AQMD Air District, Annual

Baywood Condos_Existing 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
Single Family Housing	3.00	Dwelling Unit	0.97	4,954.00	9

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	64
Climate Zone	4	Operational Year	2020		
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	290	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 for 2020

Land Use - from google earth

Construction Phase - no construction. existing conditions run

Energy Use -

Table Name	Column Name	Default Value	New Value
tblLandUse	LandUseSquareFeet	5,400.00	4,954.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	290

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	0.0412	6.5000e-004	0.0481	5.0000e-005		3.8300e-003	3.8300e-003		3.8300e-003	3.8300e-003	0.3813	0.1300	0.5114	7.6000e-004	2.0000e-005	0.5367
Energy	4.7000e-004	4.0200e-003	1.7100e-003	3.0000e-005		3.2000e-004	3.2000e-004		3.2000e-004	3.2000e-004	0.0000	7.8458	7.8458	4.1000e-004	1.5000e-004	7.9011
Mobile	8.2400e-003	0.0395	0.0930	3.0000e-004	0.0244	3.3000e-004	0.0247	6.5400e-003	3.1000e-004	6.8500e-003	0.0000	27.3176	27.3176	1.0800e-003	0.0000	27.3446
Waste						0.0000	0.0000		0.0000	0.0000	0.7673	0.0000	0.7673	0.0454	0.0000	1.9010
Water						0.0000	0.0000		0.0000	0.0000	0.0620	0.1959	0.2579	6.3900e-003	1.5000e-004	0.4636
Total	0.0499	0.0442	0.1428	3.8000e-004	0.0244	4.4800e-003	0.0289	6.5400e-003	4.4600e-003	0.0110	1.2107	35.4893	36.6999	0.0540	3.2000e-004	38.1470

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Unmitigated	8.2400e-003	0.0395	0.0930	3.0000e-004	0.0244	3.3000e-004	0.0247	6.5400e-003	3.1000e-004	6.8500e-003	0.0000	27.3176	27.3176	1.0800e-003	0.0000	27.3446

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	28.56	29.73	25.86	65,458	65,458
Total	28.56	29.73	25.86	65,458	65,458

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by

Single Family Housing	10.80	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	0.573139	0.040894	0.193976	0.114604	0.017740	0.005371	0.017133	0.024527	0.002545	0.002442	0.005942	0.000877	0.000812

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	0.0000	3.1927	3.1927	3.2000e-004	7.0000e-005	3.2204
NaturalGas Unmitigated	4.7000e-004	4.0200e-003	1.7100e-003	3.0000e-005		3.2000e-004	3.2000e-004		3.2000e-004	3.2000e-004	0.0000	4.6531	4.6531	9.0000e-005	9.0000e-005	4.6807

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	87195.3	4.7000e-004	4.0200e-003	1.7100e-003	3.0000e-005		3.2000e-004	3.2000e-004		3.2000e-004	3.2000e-004	0.0000	4.6531	4.6531	9.0000e-005	9.0000e-005	4.6807
Total		4.7000e-004	4.0200e-003	1.7100e-003	3.0000e-005		3.2000e-004	3.2000e-004		3.2000e-004	3.2000e-004	0.0000	4.6531	4.6531	9.0000e-005	9.0000e-005	4.6807

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	24271.7	3.1927	3.2000e-004	7.0000e-005	3.2204
Total		3.1927	3.2000e-004	7.0000e-005	3.2204

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	0.0412	6.5000e-004	0.0481	5.0000e-005		3.8300e-003	3.8300e-003		3.8300e-003	3.8300e-003	0.3813	0.1300	0.5114	7.6000e-004	2.0000e-005	0.5367

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	3.4900e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0194					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0177	3.9000e-004	0.0257	5.0000e-005		3.7100e-003	3.7100e-003		3.7100e-003	3.7100e-003	0.3813	0.0936	0.4750	7.2000e-004	2.0000e-005	0.4995
Landscaping	6.8000e-004	2.6000e-004	0.0224	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004	0.0000	0.0364	0.0364	4.0000e-005	0.0000	0.0373
Total	0.0412	6.5000e-004	0.0481	5.0000e-005		3.8300e-003	3.8300e-003		3.8300e-003	3.8300e-003	0.3813	0.1300	0.5114	7.6000e-004	2.0000e-005	0.5367

7.0 Water Detail

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Unmitigated	0.2579	6.3900e-003	1.5000e-004	0.4636

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			

Single Family Housing	0.195462 / 0.123226	0.2579	6.3900e-003	1.5000e-004	0.4636
Total		0.2579	6.3900e-003	1.5000e-004	0.4636

8.0 Waste Detail

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Unmitigated	0.7673	0.0454	0.0000	1.9010

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	3.78	0.7673	0.0454	0.0000	1.9010
Total		0.7673	0.0454	0.0000	1.9010

Baywood Condos_Project Conditions - Bay Area AQMD Air District, Annual

Baywood Condos_Project 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	9.82	1000sqft	0.33	9,820.00	0
Enclosed Parking with Elevator	73.00	Space	0.00	31,260.00	0
Enclosed Parking with Elevator	25.00	Space	0.00	15,610.50	0
Other Asphalt Surfaces	4.04	1000sqft	0.09	4,037.00	0
Other Non-Asphalt Surfaces	0.66	1000sqft	0.02	664.00	0
Condo/Townhouse High Rise	79.00	Dwelling Unit	0.00	141,127.80	226

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	64
Climate Zone	4	Operational Year		2023	
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	290	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - adjusted PG&E CO2 Intensity factor for 2020

Land Use - From site plans. Bld footprint = ground floor acreage. Paving includes on-site and off-site.

Construction Phase - construction schedule adjusted per construction data sheet

Trips and VMT - 800 cement round trips added to Bldg Construction vendor trips

Demolition - buildings and pavement to be demolished

Grading - Soil exported = 19,500 CY

Vehicle Trips - Trip rates from traffic report

Sequestration - trees removed = 7, new trees = 60, net new trees = 53

Construction Off-road Equipment Mitigation - includes compliance with air district basic MMs

Energy Mitigation - Compliance with 2019 BEES

Water Mitigation - compliance with MWEL0

Off-road Equipment - adjusted per construction data sheet

Stationary Sources - Emergency Generators and Fire Pumps - from applicant construction data sheet. Fire pump and generator assuming 2 hours operation per month for maintenance

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	5.00	90.00
tblConstructionPhase	NumDays	100.00	200.00
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	NumDays	2.00	40.00
tblConstructionPhase	NumDays	5.00	20.00
tblConstructionPhase	NumDays	1.00	10.00
tblConstructionPhase	PhaseEndDate	6/23/2021	6/17/2022
tblConstructionPhase	PhaseEndDate	6/9/2021	2/11/2022
tblConstructionPhase	PhaseEndDate	1/15/2021	1/29/2021
tblConstructionPhase	PhaseEndDate	1/20/2021	4/9/2021
tblConstructionPhase	PhaseEndDate	6/16/2021	7/15/2022
tblConstructionPhase	PhaseEndDate	1/18/2021	2/12/2021
tblConstructionPhase	PhaseStartDate	6/17/2021	2/14/2022
tblConstructionPhase	PhaseStartDate	1/21/2021	5/10/2021
tblConstructionPhase	PhaseStartDate	1/19/2021	2/15/2021
tblConstructionPhase	PhaseStartDate	6/10/2021	6/20/2022
tblConstructionPhase	PhaseStartDate	1/16/2021	2/1/2021
tblGrading	AcresOfGrading	20.00	0.00

tblGrading	MaterialExported	0.00	19,500.00
tblLandUse	LandUseSquareFeet	10,000.00	15,610.50
tblLandUse	LandUseSquareFeet	29,200.00	31,260.00
tblLandUse	LandUseSquareFeet	4,040.00	4,037.00
tblLandUse	LandUseSquareFeet	660.00	664.00
tblLandUse	LandUseSquareFeet	79,000.00	141,127.80
tblLandUse	LotAcreage	0.23	0.33
tblLandUse	LotAcreage	0.22	0.00
tblLandUse	LotAcreage	0.66	0.00
tblLandUse	LotAcreage	1.23	0.00
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.40	0.40
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.41	0.41
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.31	0.31
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Rubber Tired Dozers
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Graders
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
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	8.00	4.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	6.00	4.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	290
tblSequestration	NumberOfNewTrees	0.00	53.00
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	150.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	100.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	24.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	24.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblTripsAndVMT	VendorTripNumber	19.00	419.00
tblTripsAndVMT	WorkerTripNumber	10.00	18.00
tblVehicleTrips	ST_TR	4.31	5.44
tblVehicleTrips	ST_TR	2.46	9.74
tblVehicleTrips	SU_TR	3.43	5.44

tblVehicleTrips	SU_TR	1.05	9.74
tblVehicleTrips	WD_TR	4.18	5.44
tblVehicleTrips	WD_TR	11.03	9.74

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					
2021	0.2983	5.6668	2.3034	0.0132	0.4742	0.0889	0.5631	0.1733	0.0824	0.2557	0.0000	1,250.6326	1,250.6326	0.1075	0.0000	1,253.3188
2022	1.1027	0.8409	0.4320	2.2300e-003	0.0581	0.0117	0.0698	0.0164	0.0111	0.0275	0.0000	209.4308	209.4308	0.0169	0.0000	209.8524
Maximum	1.1027	5.6668	2.3034	0.0132	0.4742	0.0889	0.5631	0.1733	0.0824	0.2557	0.0000	1,250.6326	1,250.6326	0.1075	0.0000	1,253.3188

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	0.8985	0.0110	0.8388	5.3000e-004		0.0391	0.0391		0.0391	0.0391	3.6016	2.4395	6.0411	6.7200e-003	2.4000e-004	6.2794
Energy	3.5900e-003	0.0310	0.0155	2.0000e-004		2.4800e-003	2.4800e-003		2.4800e-003	2.4800e-003	0.0000	129.6043	129.6043	0.0101	2.6000e-003	130.6307
Mobile	0.1198	0.5308	1.3637	5.0800e-003	0.4544	4.1600e-003	0.4586	0.1220	3.8800e-003	0.1259	0.0000	466.5768	466.5768	0.0162	0.0000	466.9813
Stationary	4.9200e-003	0.0138	0.0179	2.0000e-005		8.6000e-004	8.6000e-004		8.6000e-004	8.6000e-004	0.0000	2.2848	2.2848	3.2000e-004	0.0000	2.2928
Waste						0.0000	0.0000		0.0000	0.0000	9.2300	0.0000	9.2300	0.5455	0.0000	22.8669
Water						0.0000	0.0000		0.0000	0.0000	2.1867	6.7712	8.9579	0.2253	5.4400e-003	16.2117
Total	1.0267	0.5865	2.2358	5.8300e-003	0.4544	0.0466	0.5011	0.1220	0.0464	0.1683	15.0183	607.6766	622.6949	0.8041	8.2800e-003	645.2628

2.3 Vegetation

Vegetation

	CO2e
Category	MT
New Trees	37.5240
Total	37.5240

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	1/4/2021	1/29/2021	5	20	
2	Site Preparation	Site Preparation	2/1/2021	2/12/2021	5	10	
3	Grading	Grading	2/15/2021	4/9/2021	5	40	
4	Trenching	Trenching	4/12/2021	5/7/2021	5	20	
5	Building Construction	Building Construction	5/10/2021	2/11/2022	5	200	
6	Architectural Coating	Architectural Coating	2/14/2022	6/17/2022	5	90	
7	Paving	Paving	6/20/2022	7/15/2022	5	20	

Acres of Grading (Site Preparation Phase): 5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0.11

Residential Indoor: 285,784; Residential Outdoor: 95,261; Non-Residential Indoor: 14,730; Non-Residential Outdoor: 4,910; 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	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	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Concrete/Industrial Saws	0	8.00	81	0.73
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	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	4.00	97	0.37
Paving	Cement and Mortar Mixers	2	8.00	9	0.56
Paving	Pavers	0	7.00	130	0.42
Paving	Rollers	0	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Architectural Coating	Air Compressors	1	4.00	78	0.48
Demolition	Excavators	1	8.00	158	0.38
Site Preparation	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Trenching	Excavators	1	8.00	158	0.38
Trenching	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Aerial Lifts	1	8.00	63	0.31

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	51.00	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	6	15.00	0.00	2,438.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	4	82.00	419.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	4	18.00	0.00	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
Trenching	2	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 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					
Fugitive Dust					5.5200e-003	0.0000	5.5200e-003	8.4000e-004	0.0000	8.4000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0261	0.2490	0.2146	3.6000e-004		0.0132	0.0132		0.0124	0.0124	0.0000	31.0083	31.0083	7.1800e-003	0.0000	31.1876
Total	0.0261	0.2490	0.2146	3.6000e-004	5.5200e-003	0.0132	0.0187	8.4000e-004	0.0124	0.0133	0.0000	31.0083	31.0083	7.1800e-003	0.0000	31.1876

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-004	6.8800e-003	1.4700e-003	2.0000e-005	4.3000e-004	2.0000e-005	4.5000e-004	1.2000e-004	2.0000e-005	1.4000e-004	0.0000	1.9292	1.9292	1.0000e-004	0.0000	1.9317
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.5000e-004	3.8000e-004	4.0400e-003	1.0000e-005	1.4200e-003	1.0000e-005	1.4300e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.2024	1.2024	3.0000e-005	0.0000	1.2031
Total	7.5000e-004	7.2600e-003	5.5100e-003	3.0000e-005	1.8500e-003	3.0000e-005	1.8800e-003	5.0000e-004	3.0000e-005	5.3000e-004	0.0000	3.1316	3.1316	1.3000e-004	0.0000	3.1347

3.3 Site Preparation - 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					

Fugitive Dust					0.0328	0.0000	0.0328	0.0168	0.0000	0.0168	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0102	0.1123	0.0627	1.2000e-004		5.2500e-003	5.2500e-003		4.8300e-003	4.8300e-003	0.0000	10.7139	10.7139	3.4700e-003	0.0000	10.8006
Total	0.0102	0.1123	0.0627	1.2000e-004	0.0328	5.2500e-003	0.0380	0.0168	4.8300e-003	0.0217	0.0000	10.7139	10.7139	3.4700e-003	0.0000	10.8006

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- 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	2.0000e-004	1.4000e-004	1.4600e-003	0.0000	5.1000e-004	0.0000	5.2000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4342	0.4342	1.0000e-005	0.0000	0.4344
Total	2.0000e-004	1.4000e-004	1.4600e-003	0.0000	5.1000e-004	0.0000	5.2000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4342	0.4342	1.0000e-005	0.0000	0.4344

3.4 Grading - 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					
Fugitive Dust					0.1215	0.0000	0.1215	0.0664	0.0000	0.0664	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0467	0.4999	0.3379	6.3000e-004		0.0231	0.0231		0.0212	0.0212	0.0000	55.7771	55.7771	0.0180	0.0000	56.2281
Total	0.0467	0.4999	0.3379	6.3000e-004	0.1215	0.0231	0.1446	0.0664	0.0212	0.0876	0.0000	55.7771	55.7771	0.0180	0.0000	56.2281

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	9.6000e-003	0.3290	0.0701	9.5000e-004	0.0206	1.0200e-003	0.0216	5.6600e-003	9.7000e-004	6.6400e-003	0.0000	92.2226	92.2226	4.7100e-003	0.0000	92.3403

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	9.2000e-004	6.4000e-004	6.7300e-003	2.0000e-005	2.3700e-003	2.0000e-005	2.3900e-003	6.3000e-004	1.0000e-005	6.4000e-004	0.0000	2.0040	2.0040	4.0000e-005	0.0000	2.0051
Total	0.0105	0.3296	0.0768	9.7000e-004	0.0230	1.0400e-003	0.0240	6.2900e-003	9.8000e-004	7.2800e-003	0.0000	94.2266	94.2266	4.7500e-003	0.0000	94.3454

3.5 Trenching - 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	4.1700e-003	0.0405	0.0554	8.0000e-005		2.1600e-003	2.1600e-003		1.9900e-003	1.9900e-003	0.0000	7.2790	7.2790	2.3500e-003	0.0000	7.3379
Total	4.1700e-003	0.0405	0.0554	8.0000e-005		2.1600e-003	2.1600e-003		1.9900e-003	1.9900e-003	0.0000	7.2790	7.2790	2.3500e-003	0.0000	7.3379

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- 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	1.5000e-004	1.1000e-004	1.1200e-003	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3340	0.3340	1.0000e-005	0.0000	0.3342
Total	1.5000e-004	1.1000e-004	1.1200e-003	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3340	0.3340	1.0000e-005	0.0000	0.3342

3.6 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0650	0.6932	0.4631	8.8000e-004		0.0357	0.0357		0.0329	0.0329	0.0000	77.5156	77.5156	0.0251	0.0000	78.1423

Total	0.0650	0.6932	0.4631	8.8000e-004		0.0357	0.0357		0.0329	0.0329	0.0000	77.5156	77.5156	0.0251	0.0000	78.1423
--------------	---------------	---------------	---------------	--------------------	--	---------------	---------------	--	---------------	---------------	---------------	----------------	----------------	---------------	---------------	----------------

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- 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	0.1131	3.7200	0.9285	9.6100e-003	0.2336	8.0900e-003	0.2416	0.0676	7.7400e-003	0.0753	0.0000	923.6535	923.6535	0.0454	0.0000	924.7887
Worker	0.0214	0.0148	0.1563	5.1000e-004	0.0551	3.6000e-004	0.0554	0.0147	3.3000e-004	0.0150	0.0000	46.5589	46.5589	1.0400e-003	0.0000	46.5850
Total	0.1345	3.7348	1.0849	0.0101	0.2886	8.4500e-003	0.2971	0.0822	8.0700e-003	0.0903	0.0000	970.2124	970.2124	0.0465	0.0000	971.3737

3.6 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0102	0.1070	0.0798	1.6000e-004		5.3800e-003	5.3800e-003		4.9500e-003	4.9500e-003	0.0000	13.6828	13.6828	4.4300e-003	0.0000	13.7934
Total	0.0102	0.1070	0.0798	1.6000e-004		5.3800e-003	5.3800e-003		4.9500e-003	4.9500e-003	0.0000	13.6828	13.6828	4.4300e-003	0.0000	13.7934

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- 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	0.0186	0.6217	0.1541	1.6800e-003	0.0412	1.2400e-003	0.0425	0.0119	1.1800e-003	0.0131	0.0000	161.3994	161.3994	7.6600e-003	0.0000	161.5909
Worker	3.5200e-003	2.3400e-003	0.0254	9.0000e-005	9.7200e-003	6.0000e-005	9.7800e-003	2.5900e-003	6.0000e-005	2.6400e-003	0.0000	7.9151	7.9151	1.7000e-004	0.0000	7.9192
Total	0.0221	0.6241	0.1794	1.7700e-003	0.0509	1.3000e-003	0.0522	0.0145	1.2400e-003	0.0158	0.0000	169.3145	169.3145	7.8300e-003	0.0000	169.5100

3.7 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.0554					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.7500e-003	0.0673	0.1034	1.6000e-004		2.9200e-003	2.9200e-003		2.8800e-003	2.8800e-003	0.0000	14.2599	14.2599	2.6300e-003	0.0000	14.3257
Total	1.0632	0.0673	0.1034	1.6000e-004		2.9200e-003	2.9200e-003		2.8800e-003	2.8800e-003	0.0000	14.2599	14.2599	2.6300e-003	0.0000	14.3257

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- 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	2.0600e-003	1.3700e-003	0.0148	5.0000e-005	5.6900e-003	4.0000e-005	5.7300e-003	1.5100e-003	3.0000e-005	1.5500e-003	0.0000	4.6332	4.6332	1.0000e-004	0.0000	4.6356
Total	2.0600e-003	1.3700e-003	0.0148	5.0000e-005	5.6900e-003	4.0000e-005	5.7300e-003	1.5100e-003	3.0000e-005	1.5500e-003	0.0000	4.6332	4.6332	1.0000e-004	0.0000	4.6356

3.8 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	4.4700e-003	0.0409	0.0509	8.0000e-005		2.0900e-003	2.0900e-003		1.9400e-003	1.9400e-003	0.0000	6.3821	6.3821	1.8600e-003	0.0000	6.4287
Paving	1.2000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	4.5900e-003	0.0409	0.0509	8.0000e-005		2.0900e-003	2.0900e-003		1.9400e-003	1.9400e-003	0.0000	6.3821	6.3821	1.8600e-003	0.0000	6.4287

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.1000e-004	3.4000e-004	3.7100e-003	1.0000e-005	1.4200e-003	1.0000e-005	1.4300e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.1583	1.1583	2.0000e-005	0.0000	1.1589
Total	5.1000e-004	3.4000e-004	3.7100e-003	1.0000e-005	1.4200e-003	1.0000e-005	1.4300e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.1583	1.1583	2.0000e-005	0.0000	1.1589

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	0.1198	0.5308	1.3637	5.0800e-003	0.4544	4.1600e-003	0.4586	0.1220	3.8800e-003	0.1259	0.0000	466.5768	466.5768	0.0162	0.0000	466.9813

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Condo/Townhouse High Rise	429.76	429.76	429.76	992,577	992,577
Enclosed Parking with Elevator	0.00	0.00	0.00		
Enclosed Parking with Elevator	0.00	0.00	0.00		
General Office Building	95.65	95.65	95.65	228,572	228,572
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	525.41	525.41	525.41	1,221,149	1,221,149

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Condo/Townhouse High Rise	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

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 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
Condo/Townhouse High Rise	0.578638	0.038775	0.193686	0.110919	0.015677	0.005341	0.018293	0.026358	0.002641	0.002200	0.005832	0.000891	0.000749
Enclosed Parking with Elevator	0.578638	0.038775	0.193686	0.110919	0.015677	0.005341	0.018293	0.026358	0.002641	0.002200	0.005832	0.000891	0.000749
General Office Building	0.578638	0.038775	0.193686	0.110919	0.015677	0.005341	0.018293	0.026358	0.002641	0.002200	0.005832	0.000891	0.000749
Other Asphalt Surfaces	0.578638	0.038775	0.193686	0.110919	0.015677	0.005341	0.018293	0.026358	0.002641	0.002200	0.005832	0.000891	0.000749
Other Non-Asphalt Surfaces	0.578638	0.038775	0.193686	0.110919	0.015677	0.005341	0.018293	0.026358	0.002641	0.002200	0.005832	0.000891	0.000749

5.0 Energy Detail

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	94.1046	94.1046	9.4100e-003	1.9500e-003	94.9201
NaturalGas Unmitigated	3.5900e-003	0.0310	0.0155	2.0000e-004		2.4800e-003	2.4800e-003		2.4800e-003	2.4800e-003	0.0000	35.4997	35.4997	6.8000e-004	6.5000e-004	35.7107

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 High Rise	552535	2.9800e-003	0.0255	0.0108	1.6000e-004		2.0600e-003	2.0600e-003		2.0600e-003	2.0600e-003	0.0000	29.4854	29.4854	5.7000e-004	5.4000e-004	29.6606
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	112704	6.1000e-004	5.5200e-003	4.6400e-003	3.0000e-005		4.2000e-004	4.2000e-004		4.2000e-004	4.2000e-004	0.0000	6.0143	6.0143	1.2000e-004	1.1000e-004	6.0501

Other 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	0.0000	
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	0.0000	
Total		3.5900e-003	0.0310	0.0155	1.9000e-004		2.4800e-003	2.4800e-003		2.4800e-003	2.4800e-003	0.0000	35.4997	35.4997	6.9000e-004	6.5000e-004	35.7107

5.3 Energy by Land Use - Electricity

Unmitigated

Land Use	Electricity Use kWh/yr	Total CO2	CH4	N2O	CO2e
		MT/yr			
Condo/Townhouse High Rise	338765	44.5618	4.4600e-003	9.2000e-004	44.9479
Enclosed Parking with Elevator	146422	19.2606	1.9300e-003	4.0000e-004	19.4275
Enclosed Parking with Elevator	73119.6	9.6183	9.6000e-004	2.0000e-004	9.7016
General Office Building	157091	20.6640	2.0700e-003	4.3000e-004	20.8430
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		94.1046	9.4200e-003	1.9500e-003	94.9201

6.0 Area Detail

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					
Unmitigated	0.8985	0.0110	0.8388	5.3000e-004		0.0391	0.0391		0.0391	0.0391	3.6016	2.4395	6.0411	6.7200e-003	2.4000e-004	6.2794

6.2 Area by SubCategory

Unmitigated

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					

SubCategory	tons/yr								MT/yr							
Architectural Coating	0.1055					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Consumer Products	0.5929					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Hearth	0.1823	4.1900e-003	0.2510	5.0000e-004		0.0359	0.0359		0.0359	0.0359	3.6016	1.4794	5.0809	5.7900e-003	2.4000e-004	5.2960
Landscaping	0.0178	6.7700e-003	0.5878	3.0000e-005		3.2500e-003	3.2500e-003		3.2500e-003	3.2500e-003	0.0000	0.9602	0.9602	9.3000e-004	0.0000	0.9834
Total	0.8985	0.0110	0.8388	5.3000e-004		0.0391	0.0391		0.0391	0.0391	3.6016	2.4395	6.0411	6.7200e-003	2.4000e-004	6.2794

7.0 Water Detail

Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Unmitigated	8.9579	0.2253	5.4400e-003	16.2117

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Condo/Townhouse High Rise	5.14717 / 3.04701	6.6994	0.1682	4.0700e-003	12.1165
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
General Office Building	1.74535 / 1.00447	2.2585	0.0570	1.3800e-003	4.0952
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		8.9579	0.2253	5.4500e-003	16.2117

8.0 Waste Detail

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Unmitigated	9.2300	0.5455	0.0000	22.8669

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Condo/Townhouse High Rise	36.34	7.3767	0.4360	0.0000	18.2754
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
General Office Building	9.13	1.8533	0.1095	0.0000	4.5915
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		9.2300	0.5455	0.0000	22.8669

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	24	150	0.73	Diesel
Fire Pump	1	0	24	100	0.73	Diesel

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 (100 - 175 HP)	2.9500e-003	8.2600e-003	0.0107	1.0000e-005		4.3000e-004	4.3000e-004		4.3000e-004	4.3000e-004	0.0000	1.3709	1.3709	1.9000e-004	0.0000	1.3757
Fire Pump - Diesel (100 - 175 HP)	1.9700e-003	5.5000e-003	7.1500e-003	1.0000e-005		4.2000e-004	4.2000e-004		4.2000e-004	4.2000e-004	0.0000	0.9139	0.9139	1.3000e-004	0.0000	0.9171
Total	4.9200e-003	0.0138	0.0179	2.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004	0.0000	2.2848	2.2848	3.2000e-004	0.0000	2.2928

11.0 Vegetation

	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	37.5240	0.0000	0.0000	37.5240

11.2 Net New Trees

Species Class

	Number of Trees	Total CO2	CH4	N2O	CO2e
		MT			
Miscellaneous	53	37.5240	0.0000	0.0000	37.5240
Total		37.5240	0.0000	0.0000	37.5240

