

ENVIRONMENT | PLANNING | DEVELOPMENT SOLUTIONS, INC.

To: Konnie Dobrev
From: Alex J. Garber
Date: 3/8/2022
Re: Air Quality, Greenhouse Gas Comparison, and Energy Analysis for the Holly Triangle Project

The project site is 2.1 gross-acre site (1.80 net-acre) and is located at 19006 Holly Lane (APN: 159-281-01, -02, -04, -05, 03). The site is currently unimproved aside from an existing approximately 4,200 SF one-story building at the northwest corner occupied by De Guelle Glass. There are four abandon oil wells on the property. In addition to the glass shop, the site is currently used by a local car dealership as a storage lot for cars.

The site is designated Commercial (C) by the Holly-Seacliff Specific Plan (HSSP) and has a General Plan land use designation of Commercial Neighborhood -Specific Plan (CN-sp). The HSSP designation of Commercial (C), allows development of General Commercial uses pursuant to the development standards set forth for the General Commercial (CG) zoning designation in the Huntington Beach Municipal Code. The Municipal Code's CG zoning designation allows for development of general commercial uses at a floor area ratio (FAR) of 1.5. As such, the HSSP Final EIR analyzed development of up to 117,612 square feet (SF) of commercial uses on the 1.80 net-acre project site.

The City of Huntington Beach is evaluating a proposal to demolish the existing building and construct 35 three-story townhomes. The CEQA compliance document for the project is an Addendum to the HSSP Final EIR. As such, this technical memorandum presents a comparison of the Air Quality and Greenhouse Gases (GHG) emissions and Energy consumption of the Commercial land use assumed as part of the HSSP Final EIR (previously approved project), to the proposed 35-unit townhome development (proposed project). The analysis compares the Southern California Air Quality Management District (SCAQMD) air quality criteria pollutants¹ and GHG emissions generated from construction and operation of the previously approved project to the proposed project, using CalEEmod. No credit was taken for the onsite uses. The project site plan is provided at the end of this memo.

- Existing land use: 4,200 SF neighborhood commercial building and car storage lot.
- Previously approved project: 117,612 SF of commercial uses.
- Proposed project: 35 townhomes.

¹ Criteria pollutants are the only air pollutants with national air quality standards that define allowable concentrations of these substances in ambient air. Criteria pollutants include carbon monoxide (CO), oxides of nitrogen (NOx), sulfur dioxide (SOx), and particulate matter (PM10 and PM2.5). Note that ozone is another criteria pollutant; however, in terms of defining significance thresholds, ozone is represented as a threshold by its precursor components, oxides of nitrogen (NOx) and reactive organic gases.

The Air Quality and GHG emissions were calculated using the California Emissions Model (CalEEMod, Version 2020.0.4). SCAQMD has both regional² and localized³ thresholds for development projects. The regional thresholds for development projects, pursuant to the SCAQMD's California Environmental Quality Act (CEQA) Air Quality Significance Thresholds, with daily emissions that exceed any of the indicated thresholds is considered to result in an individually and cumulatively significant air quality impact. The localized thresholds for development projects were derived using the SCAQMD Fact Sheet for Applying CalEEMod to Localized Significance Threshold⁴ and Appendix C of the SCAQMD 2008 Final Localized Significance Threshold Methodology (SRA 18); the thresholds from Appendix C are for one-, two-, or five-acre sites, and distances of sensitive receptors for 25 to 500 meters. The closest sensitive receptor from the project is a residence to the west about 20 meters away; therefore, the most restrictive (25 meter) thresholds were used.

For construction, approximately two acres are anticipated to be graded per day; therefore, the two-acre thresholds were used. For operation, the two-acre thresholds were used for a conservative analysis. To calculate the onsite operational emissions, a distance of 0.1 miles was used to analyze the onsite mobile emissions only.

The regional and local operational impact of both the previously approved project (neighborhood commercial land use) and the proposed project are discussed in this report. The construction analysis only includes modeling for the proposed project and does not provide modeling for the previously approved neighborhood commercial land use due to lack of site-specific information provided in the Final EIR. Table 1 presents the SCAQMD regional significance thresholds for the criteria pollutants and GHG emissions, and Table 2 presents the SCAQMD localized significance thresholds for the criteria pollutants.

Table 1. SCAQMD Regional Emissions Significance Thresholds

Criteria Pollutants		
Air Pollutant	Maximum Daily Emissions (pounds/day)	
	Construction	Operation
ROGs	75	55
NO _x	100	55
CO	550	550
SO ₂	150	150
PM ₁₀	150	150
PM _{2.5}	55	55
Greenhouse Gas		
Air Pollutant	Maximum Annual Emissions (MTCO ₂ e) for	
	Commercial Projects	Industrial Projects
CO ₂ e	3,000	3,000

Source: SCAQMD Air Quality Significance Thresholds Revision April 2019, SCAQMD 2010 Minutes of the GHG CEQA Significance Threshold Stakeholder Working Group #15

² SCAQMD Air Quality Significance Thresholds Revision April 2019: <http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf>

³ SCAQMD 2008: Final Localized Significance Threshold Methodology. <http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf>

⁴ SCAQMD Fact Sheet for Applying CalEEMod to Localized Significance Thresholds. <http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/caleemod-guidance.pdf?sfvrsn=2od-guidance.pdf> (aqmd.gov)

Table 2. Localized Significance Thresholds

Air Pollutant	Maximum Daily Emissions (pounds/day)	Maximum Daily Emissions (pounds/day)
	Construction	Operation
NO _x	115	115
CO	962	962
PM ₁₀	7	2
PM _{2.5}	5	2

Source: SCAQMD 2008: Final Localized Significance Threshold Methodology

Methodology

The previous air quality analysis was done without using CalEEMod; therefore, the previous land use was re-run using CalEEMod for comparison. In addition, the trip generation for the previous analysis used the Institute of Transportation Engineers (ITE) 4th Edition Trip Generation Manual, therefore the neighborhood commercial rates were updated to the ITE 10th Edition Trip Generation Manual rates to be consistent with the traffic analysis. ITE 11th Edition Trip Generation Manual was released since the traffic analysis was complete, however, the rates for ITE 10th Edition are more conservative, therefore they were used.

The area, energy, and mobile emissions were calculated for the existing use and proposed project. The area CalEEMod defaults were used except for paints to conform to SCAQMD Rule 1113, which only allows the use of Low-Volatile Organic Compounds (VOC) paints (no more than 50 gram/liter (g/L) of VOC). Table 3 provides the breakdown of the details used for the analysis for each facility.

Table 3. Previously Approved and Proposed Project Data Inputs

Metric	Previously Approved Project (Commercial)	Proposed Project (Residential)
Size	117,612 Square Feet	35 Dwelling Units
Base Year	2023	2023
Utility	Southern California Edison	Southern California Edison
CalEEMod Land Use	Shopping Center	Apartments (Low Rise) ¹
Daily Trip rate (ITE 10 th Ed)	Land Use Code 820: Shopping Center 57.08 (weekday, fitted curve) 83.8 (Saturday, fitted curve) 21.1 (Sunday)	Land Use Code 220: Multifamily Housing (Low-Rise) 7.32 (weekday) 8.14 (Saturday) 6.28 (Sunday)
Fleet Mix	CalEEMod Defaults	CalEEMod Defaults
Trip Distances	CalEEMod Defaults	CalEEMod Defaults

Note 1: ITE trip rate for Apartment (Low Rise) is characterized Low-rise multifamily housing includes apartments, townhouses, and condominiums located within the same building with at least three other dwelling units and that have two or three floors (levels).

Table 4 shows the estimated operational emissions from the previous commercial land use and Table 5 shows the estimated operational emissions for the proposed project. Table 6 shows the net change in total operational emissions. As seen in Tables 5 and 6, the proposed project would result in fewer emissions compared to the previously approved project and would be below the SCAQMD threshold for all criteria pollutant emissions.

Table 4. Previously Approved Commercial Operational Emission Estimates

Operational Activity	Maximum Daily Regional Emissions (pounds/day)					
	ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Area	2.5	0.0	0.0	0.0	0.0	0.0
Energy	0.0	0.1	0.1	0.0	0.0	0.0
Mobile	21.4	19.8	178.9	0.4	39.8	10.8
Total Existing Operational Emissions	24.0	19.9	179.0	0.4	39.8	10.8
SCAQMD Significance Thresholds	55	55	550	150	150	55
Threshold Exceeded?	No	No	No	No	No	No

Table 5. Proposed Project Operational Emission Estimates

Operational Activity	Maximum Daily Regional Emissions (pounds/day)					
	ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Area	1.3	0.0	2.9	0.0	0.0	0.0
Energy	0.0	0.1	0.0	0.0	0.0	0.0
Mobile	0.8	0.9	8.2	0.0	2.1	0.6
Total Proposed Operational Emissions	2.1	1.0	11.1	0.0	2.1	0.6
SCAQMD Significance Thresholds	55	55	550	150	150	55
Threshold Exceeded?	No	No	No	No	No	No

Table 6. Net Operational Emission Estimates

	Maximum Daily Regional Emissions (pounds/day)					
	ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Total Proposed Project Operational Emissions	2.1	1.0	11.1	0.0	2.1	0.6
Total Previously Approved Commercial Operational Emissions	24.0	19.9	179.0	0.4	39.8	10.8
Total Net Operational Emissions	-21.9	-18.9	-167.9	-0.4	-27.7	-10.2

The operation of the previously approved commercial project and proposed project would involve emissions of CO₂ and other greenhouse gases. For the purpose of this analysis, all GHG emissions are calculated CO₂ equivalents (CO₂e), as reported by CalEEMod and utilized by SCAQMD for their thresholds. Table 7 shows the estimated operational GHG emissions from the previously approved commercial project. Table 8 shows the operational GHG emissions from the proposed project⁵. Table 9 shows the total net change GHG emissions from the previously approved project to the proposed project. As seen in Table 9, the net change in GHG emissions from implementation of the proposed project is estimated to be negative 4,200 MTCO₂e. Therefore, the proposed project would result in fewer MTCO₂e than the previously approved project. In addition, the proposed project would emit less than the SCAQMD threshold of 3,000 MTCO₂e, and therefore, would have a less than significant impact on GHG emissions.

⁵ Includes the construction GHG emissions amortized over 30 years per SCAQMD guidance (SCAQMD 2010 Minutes of the GHG CEQA Significance Threshold Stakeholder Working Group #15)

Table 7. Previously Approved Project Total GHG Emissions

Activity	Annual GHG Emissions (MTCO ₂ e)
Previous Operational Emissions	
Area	0
Energy	246
Mobile	4,221
Waste	62
Water	43
Total Emissions	4,572
Significance Threshold	3,000
Threshold Exceeded?	Yes

Table 8. Proposed Project Total GHG Emissions

Activity	Annual GHG Emissions (MTCO ₂ e)
Proposed Operational Emissions	
Area	1
Energy	48
Mobile	290
Waste	8
Water	13
Total Operational Emissions	360
Total Construction Emissions	365
Emissions (amortized over 30 years)	12
Total Emissions	372
Significance Threshold	3,000
Threshold Exceeded?	No

Table 9. Proposed Project Net GHG Emissions

Activity	Annual GHG Emissions (MTCO ₂ e)
Project Net Operational Emissions	
Total Proposed Project Emissions	372
Total	4,572
Previously Approved Emissions	
Total Net Emissions	-4,200

Construction Impact Tables

As stated previously, SCAQMD has adopted maximum daily emission regional thresholds (pounds/day) for the criteria during the construction of a project. The project construction schedule can be seen in Table 10, would last for approximately 12 months. The estimated construction emissions can be found in Table 11. Due to the previously approved project is speculative, no construction impacts were analyzed. These emission thresholds include the estimated project emissions that would be generated from onsite sources (such as off-road construction equipment and fugitive dust) and offsite sources (vehicle travel leaving and arriving at the site). As shown in Table 11, the project would have less than significant regional air quality impacts.

Table 10. Construction Schedule

Activity	Start Date	End Date	Total Days
Demolition	9/1/2022	9/28/2022	20
Site Preparation	9/29/2022	10/3/2022	3
Grading	10/4/2022	10/11/2022	6
Building Construction	10/12/2022	8/15/2023	220
Paving	8/16/2023	8/29/2023	10
Architectural Coating	8/30/2023	9/12/2023	10

Table 11. Construction Emission Estimates

Construction Activity	Maximum Daily Regional Emissions (pounds/day)					
	ROG	NO _x	CO	SO _x	PM-10	PM-2.5
2022						
Demolition	1.7	16.8	14.4	0.0	1.1	0.8
Site Prep	1.8	20.2	10.7	0.0	1.7	0.8
Grading	2.3	26.1	10.3	0.0	4.3	2.4
Building Construction	2.1	16.1	17.1	0.0	1.4	0.9
Maximum Daily Emissions	2.3	26.1	17.1	0.0	4.3	2.4
2023						
Building Construction	2.0	14.9	16.9	0.0	1.3	0.8
Paving	1.1	8.6	12.1	0.0	0.6	0.4
Architectural Coating	36.6	1.8	2.7	0.0	0.2	0.1
Maximum Daily Emissions	36.6	14.9	16.9	0.0	1.3	0.8
Maximum Daily Emissions 2022-2023	36.6	26.1	17.1	0.0	4.3	2.4
SCAQMD Significance Thresholds	75	100	550	150	150	55
Threshold Exceeded?	No	No	No	No	No	No

Local Emissions

As stated previously, SCAQMD has adopted localized maximum daily emission thresholds (pounds/day) for the criteria during the construction and operation of a project. The estimated construction emissions can be found in Table 12 and the localized operational emissions for the neighborhood commercial and proposed project can be found in Table 13, Table 14, and Table 15. As shown in Tables 12 and 14, the proposed project would have less than significant localized air quality impact, and Table 15 shows the proposed project would have less localized operational emissions than the previously approved project.

Table 12. Localized Construction Emission Estimates

Construction Activity	Maximum Daily Regional Emissions (pounds/day)			
	NO _x	CO	PM-10	PM-2.5
2022				
Demolition	16.6	14.0	0.9	0.8
Site Prep	20.2	10.4	1.6	0.8
Grading	26.1	9.9	4.2	2.3
Building Construction	15.3	15.2	0.7	0.7

Maximum Daily Emissions	26.1	15.2	4.2	2.3
2023				
Building Construction	14.2	15.1	0.6	0.6
Paving	8.6	11.7	0.4	0.4
Architectural Coating	1.7	2.4	0.1	0.1
Maximum Daily Emissions	14.2	15.1	0.6	0.6
Maximum Daily Emission 2022-2023	26.1	15.2	4.2	2.3
SCAQMD Significance Thresholds	115	962	7	5
Threshold Exceeded?	No	No	No	No

Table 13. Localized Previously Approved Commercial Project Operational Emission Estimates

Operational Activity	Maximum Daily Regional Emissions (pounds/day)			
	NO _x	CO	PM ₁₀	PM _{2.5}
Area	0.0	0.0	0.0	0.0
Energy	0.1	0.1	0.0	0.0
Mobile	6.2	54.4	0.6	0.2
Total Previously Approved Operational Emissions	6.3	54.5	0.6	0.2
SCAQMD Significance Thresholds	115	962	2	2
Threshold Exceeded?	No	No	No	No

Table 14. Localized Proposed Project Operational Emission Estimates

Operational Activity	Maximum Daily Regional Emissions (pounds/day)			
	NO _x	CO	PM ₁₀	PM _{2.5}
Area	0.0	2.9	0.0	0.0
Energy	0.1	0.0	0.0	0.0
Mobile	0.2	1.6	0.0	0.0
Total Proposed Project Operational Emissions	0.3	4.5	0.0	0.0
SCAQMD Significance Thresholds	115	962	2	2
Threshold Exceeded?	No	No	No	No

Table 15. Localized Net Operational Emission Estimates

Operational Activity	Maximum Daily Regional Emissions (pounds/day)			
	NO _x	CO	PM ₁₀	PM _{2.5}
Total Proposed Project Operational Emissions	0.3	4.5	0.0	0.0
Total Previously Approved Commercial Operational Emissions	6.3	54.5	0.6	0.2
Total Net Emissions	-6.0	-50.0	-0.6	-0.2

Energy Comparison

The State CEQA Guidelines do not have specific thresholds for Energy consumption. Rather, the question in Appendix G: VI Energy (a) asks, “[Does the proposed project] Result in potentially significant environmental

impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?”. Therefore, for the purpose of this analysis, a significant impact would occur if:

- The Project design and/or location encourages wasteful, inefficient, and unnecessary consumption of energy, especially fossil fuels such as coal, natural gas, and petroleum, as well as the use of fuel by vehicles anticipated to travel to and from the project.

The following assumptions were used to calculate the energy consumption of the proposed project:

- The project’s construction and operational energy consumption would be provided by Southern California Edison Company.
- Construction equipment fuel consumption derived from ARB Offroad2021 emission model
- Fuel Consumption from vehicle travel derived from ARB EMFAC2021 emission model
- Electrical and natural gas usage derived from the CalEEMod model

Construction

Electricity and Natural Gas Usage:

Due to the project size and the fact that construction is temporary, the electricity used would be substantially less than that required for project operation and would have a negligible contribution to the project’s overall energy consumption. The electric power used would be for as-necessary lighting and electronic equipment such as computers inside temporary construction trailers. Natural gas is not anticipated to be needed for construction activities. Any consumption of natural gas would be minor and negligible in comparison to the operation of the proposed project.

Petroleum Fuel Usage:

The construction equipment associated with construction activities (off-road/heavy duty vehicles) would rely on diesel fuel as would vendor and haul trucks involved in delivering building materials and removing the demolition debris from the project site. Construction workers would travel to and from the project site throughout the duration of construction, and for a conservative analysis it is assumed that construction workers would travel in gasoline-powered passenger vehicles.

Table 16: Construction Equipment Fuel Usage, used the total fuel consumption and horsepower-hour data contained within the ARB OffRoad2021 emission model for specific types of diesel construction equipment. It should be noted that the total fuel consumption is a conservative analysis and would likely overstate the amount of fuel usage, as specific construction equipment is not expected to operate during the duration of the construction activity (i.e., crane). Table 17: Estimate Project Vehicle Fuel Usage, summarizes the project’s construction vehicle fuel usage based on vehicle miles traveled and fuel usage factors contained in the ARB EMFAC2021. The trips included are worker vehicles, vendor vehicles, and haul vehicles. Table 18: Total Construction Fuel Usage, shows the overall fuel consumption for construction of the proposed project.

The proposed project has no unusual characteristics that would make the construction fuel and energy consumption associated with construction of the project less efficient compared with other similar construction sites throughout the state. The consumption would also be temporary and localized.

Table 16. Construction Equipment Fuel Usage

Activity	Equipment	Number	Hours per day	Horsepower	Load Factor	Days of Construction	Total Horsepower-hours	Fuel Rate (gal/hp-hr)	Fuel Use (gallons)
Demolition	Concrete/Industrial Saws	1	8	81	0.73	20	9461	0.041907068	396
	Rubber Tired Dozers	1	8	247	0.4	20	15808	0.020601315	326
	Tractors/Loaders/Backhoes	3	8	97	0.37	20	17227	0.019146832	330
Site Preparation	Crawler Tractors	1	8	212	0.43	3	2188	0.022175849	49
	Graders	1	8	187	0.41	3	1840	0.021161331	39
	Scrapers	1	8	367	0.48	3	4228	0.024988526	106
Grading	Crawler Tractors	2	8	212	0.43	6	8751	0.022175849	194
	Graders	1	8	187	0.41	6	3680	0.021161331	78
	Rubber Tired Dozers	1	8	247	0.4	6	4742	0.020601315	98
Building Construction	Cranes	1	8	231	0.29	220	117902	0.014895293	1756
	Forklifts	2	8	89	0.2	220	62656	0.010444403	654
	Generator Sets	1	8	84	0.74	220	109402	0.046976028	5139
	Tractors/Loaders/Backhoes	1	8	97	0.37	220	63166	0.019146832	1209
	Welder	3	8	46	0.45	220	109296	0.026611905	2909
Paving	Cement and Mortar Mixers	1	8	9	0.56	10	403	0.035533486	14
	Pavers	1	8	130	0.42	10	4368	0.021532281	94
	Paving Equipment	1	8	132	0.36	10	3802	0.018464524	70
	Rollers	2	8	80	0.38	10	4864	0.019836075	96
	Tractors/Loaders/Backhoes	1	8	97	0.37	10	2871	0.019146832	55
Architectural Coating	Air Compressors	1	8	78	0.48	10	2995	0.027922152	84
Total									13,696

Table 17. Estimated Project Vehicle Fuel Usage

Construction Source	Number	VMT	Fuel Rate	Gallons of Diesel Fuel	Gallons of Gasoline Fuel
Haul Trucks	19	380	5.85	65	0
Vendor Trucks	14	16,698	8.90	2,387	0
Worker Vehicles	95	176,900	26.24	0	6,741
Total				2,452	6,741

Table 18. Total Construction Fuel Usage

Construction Source	Gallons of Diesel Fuel	Gallons of Gasoline Fuel
Construction Vehicles	2,452	6,741
Off-road Construction Equipment	13,696	0
Total	16,148	6,741

Operation

The operation of the proposed project would consume electricity, natural gas, and petroleum. The net energy consumption is provided in Table 19: Project Annual Net Operational Energy Requirements. Electricity and Natural Gas consumption were determined by the Annual CalEEMod Output Sheets in attached.

The gasoline consumption rates, and diesel consumption rates used the EMFAC2021 model consumption rates, with the average gasoline consumption rate (miles/gallon or mpg) at 26.24 mpg.

Operation of the proposed project would have a net negative electricity and gasoline consumption, with negative 1,168,291 kilowatt-hours and negative 442,244 gallons of gasoline respectively, in comparison with the previously approved neighborhood shopping center. The proposed warehouse would have an increase in natural gas, with a net increase of 200,622 thousands British thermal units in comparison to the previously approved neighborhood shopping center. This is due to the nature of residential land uses verses commercial uses.

Operation of the of proposed project would comply with all the energy efficiency requirements under Title 24 and all applicable City energy codes. Therefore, the construction and operation of the project would result in a less than significant impact related to inefficient, wasteful, or unnecessary energy use, and no mitigation would be required.

Table 19. Proposed Project Annual Net Operational Energy Requirements

Operational Source	Energy Usage	
Electricity (Kilowatt-Hours)		
Proposed	140,729	
Previous	1,309,020	
Net	-1,168,291	
Natural Gas (Thousands British Thermal Units)		
Proposed	434,670	
Previous	234,048	
Net	200,622	
Petroleum (gasoline) Consumption		
	Annual VMT	Gallons of Gasoline Fuel
Proposed	871,715	33,219
Previous	12,476,666	475,463
Net	-11,604,951	-442,244

If you have any questions about this analysis, please contact me at (717) 756-1997 or at alex@epdsolutions.com.

CalEEMod Output Sheets

Neighborhood Commercial - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Neighborhood Commercial

Orange County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	0.94	Acre	0.94	40,946.40	0
Strip Mall	117.61	1000sqft	1.17	117,612.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	30
Climate Zone	8			Operational Year	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Lot acreage based on site plan.

Construction Phase - Operational Analysis Only.

Off-road Equipment - Operational Analysis Only.

Trips and VMT - Operational Analysis Only.

Vehicle Trips - Used Fitted Curve rate for Shopping Center (ITE 10ed Land Use Code 820)

Area Mitigation - SCAQMD Rule 1113

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	100	50
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	100	50

Neighborhood Commercial - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	100	50
tblConstructionPhase	NumDays	10.00	0.00
tblLandUse	LotAcreage	2.70	1.17
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblTripsAndVMT	WorkerTripNumber	11.00	0.00
tblVehicleTrips	ST_TR	42.04	83.80
tblVehicleTrips	SU_TR	20.43	21.10
tblVehicleTrips	WD_TR	44.32	57.08

2.0 Emissions Summary

Neighborhood Commercial - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Neighborhood Commercial
Orange County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	0.94	Acre	0.94	40,946.40	0
Strip Mall	117.61	1000sqft	1.17	117,612.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	30
Climate Zone	8			Operational Year	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Lot acreage based on site plan.

Construction Phase - Operational Analysis Only.

Off-road Equipment - Operational Analysis Only.

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Table Name	Column Name	Default Value	New Value
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Neighborhood Commercial - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	100	50
tblConstructionPhase	NumDays	10.00	0.00
tblLandUse	LotAcreage	2.70	1.17
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblTripsAndVMT	WorkerTripNumber	11.00	0.00
tblVehicleTrips	ST_TR	42.04	83.80
tblVehicleTrips	SU_TR	20.43	21.10
tblVehicleTrips	WD_TR	44.32	57.08

2.0 Emissions Summary

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Unmitigated Construction

Mitigated Construction

[illegible]

Neighborhood Commercial - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.6462	1.1000e-004	0.0121	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0260	0.0260	7.0000e-005		0.0277
Energy	6.9200e-003	0.0629	0.0528	3.8000e-004		4.7800e-003	4.7800e-003		4.7800e-003	4.7800e-003		75.4385	75.4385	1.4500e-003	1.3800e-003	75.8868
Mobile	21.4353	18.4476	177.6022	0.3785	39.5109	0.2668	39.7777	10.5312	0.2479	10.7791		38,928.3604	38,928.3604	2.6682	1.7217	39,508.1435
Total	24.0884	18.5105	177.6671	0.3789	39.5109	0.2717	39.7825	10.5312	0.2527	10.7839		39,003.8248	39,003.8248	2.6697	1.7231	39,584.0579

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.4953	1.1000e-004	0.0121	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0260	0.0260	7.0000e-005		0.0277
Energy	6.9200e-003	0.0629	0.0528	3.8000e-004		4.7800e-003	4.7800e-003		4.7800e-003	4.7800e-003		75.4385	75.4385	1.4500e-003	1.3800e-003	75.8868
Mobile	21.4353	18.4476	177.6022	0.3785	39.5109	0.2668	39.7777	10.5312	0.2479	10.7791		38,928.3604	38,928.3604	2.6682	1.7217	39,508.1435
Total	23.9375	18.5105	177.6671	0.3789	39.5109	0.2717	39.7825	10.5312	0.2527	10.7839		39,003.8248	39,003.8248	2.6697	1.7231	39,584.0579

Neighborhood Commercial - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	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	0.63	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	Operational Analysis Only	Architectural Coating	2/3/2023	2/2/2023	5	0	

Acres of Grading (Site Preparation Phase): 0**Acres of Grading (Grading Phase): 0****Acres of Paving: 0.94****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 176,418; Non-Residential Outdoor: 58,806; Striped Parking Area: 2,457 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Operational Analysis Only	Air Compressors	0	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Operational Analysis Only	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Neighborhood Commercial - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Operational Analysis Only - 2023

Unmitigated Construction On-Site

[illegible]

Unmitigated Construction Off-Site

[illegible]

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Mitigated Construction On-Site

[illegible]

Neighborhood Commercial - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	lb/day										lb/day					
Mitigated	21.4353	18.4476	177.6022	0.3785	39.5109	0.2668	39.7777	10.5312	0.2479	10.7791		38,928.3604	38,928.3604	2.6682	1.7217	39,508.1435
Unmitigated	21.4353	18.4476	177.6022	0.3785	39.5109	0.2668	39.7777	10.5312	0.2479	10.7791		38,928.3604	38,928.3604	2.6682	1.7217	39,508.1435

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Strip Mall	6,713.29	9,855.89	2,481.61	12,476,666	12,476,666
Total	6,713.29	9,855.89	2,481.61	12,476,666	12,476,666

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Neighborhood Commercial - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.544795	0.058861	0.186903	0.129401	0.024381	0.006522	0.014242	0.004855	0.000656	0.000385	0.024332	0.000723	0.003942
Strip Mall	0.544795	0.058861	0.186903	0.129401	0.024381	0.006522	0.014242	0.004855	0.000656	0.000385	0.024332	0.000723	0.003942

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	6.9200e-003	0.0629	0.0528	3.8000e-004		4.7800e-003	4.7800e-003		4.7800e-003	4.7800e-003		75.4385	75.4385	1.4500e-003	1.3800e-003	75.8868
NaturalGas Unmitigated	6.9200e-003	0.0629	0.0528	3.8000e-004		4.7800e-003	4.7800e-003		4.7800e-003	4.7800e-003		75.4385	75.4385	1.4500e-003	1.3800e-003	75.8868

Neighborhood Commercial - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
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
Strip Mall	641.227	6.9200e-003	0.0629	0.0528	3.8000e-004		4.7800e-003	4.7800e-003		4.7800e-003	4.7800e-003		75.4385	75.4385	1.4500e-003	1.3800e-003	75.8868
Total		6.9200e-003	0.0629	0.0528	3.8000e-004		4.7800e-003	4.7800e-003		4.7800e-003	4.7800e-003		75.4385	75.4385	1.4500e-003	1.3800e-003	75.8868

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
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
Strip Mall	0.641227	6.9200e-003	0.0629	0.0528	3.8000e-004		4.7800e-003	4.7800e-003		4.7800e-003	4.7800e-003		75.4385	75.4385	1.4500e-003	1.3800e-003	75.8868
Total		6.9200e-003	0.0629	0.0528	3.8000e-004		4.7800e-003	4.7800e-003		4.7800e-003	4.7800e-003		75.4385	75.4385	1.4500e-003	1.3800e-003	75.8868

6.0 Area Detail

Neighborhood Commercial - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**6.1 Mitigation Measures Area**

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.4953	1.1000e-004	0.0121	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0260	0.0260	7.0000e-005		0.0277
Unmitigated	2.6462	1.1000e-004	0.0121	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0260	0.0260	7.0000e-005		0.0277

Neighborhood Commercial - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3018					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.3432					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.1200e-003	1.1000e-004	0.0121	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0260	0.0260	7.0000e-005		0.0277
Total	2.6462	1.1000e-004	0.0121	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0260	0.0260	7.0000e-005		0.0277

Neighborhood Commercial - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1509					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.3432					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.1200e-003	1.1000e-004	0.0121	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0260	0.0260	7.0000e-005		0.0277
Total	2.4953	1.1000e-004	0.0121	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0260	0.0260	7.0000e-005		0.0277

7.0 Water Detail

7.1 Mitigation Measures Water

Neighborhood Commercial - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**8.0 Waste Detail**

8.1 Mitigation Measures Waste**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
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

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

11.0 Vegetation

Neighborhood Commercial LST - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Neighborhood Commercial LST

Orange County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	0.94	Acre	0.94	40,946.40	0
Strip Mall	117.61	1000sqft	1.17	117,612.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	30
Climate Zone	8			Operational Year	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Lot acreage based on site plan.

Construction Phase - Operational Analysis Only.

Off-road Equipment - Operational Analysis Only.

Trips and VMT - Operational Analysis Only.

Vehicle Trips - Used Fitted Curve rate for Shopping Center (ITE 10ed Land Use Code 820). Trip length to analyze onsite emissions only.

Area Mitigation - SCAQMD Rule 1113

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	100	50
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	100	50

Neighborhood Commercial LST - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	100	50
tblConstructionPhase	NumDays	10.00	0.00
tblLandUse	LotAcreage	2.70	1.17
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblTripsAndVMT	WorkerTripNumber	11.00	0.00
tblVehicleTrips	CC_TL	8.40	0.10
tblVehicleTrips	CNW_TL	6.90	0.10
tblVehicleTrips	CW_TL	16.60	0.10
tblVehicleTrips	ST_TR	42.04	83.80
tblVehicleTrips	SU_TR	20.43	21.10
tblVehicleTrips	WD_TR	44.32	57.08

2.0 Emissions Summary

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Unmitigated Construction

Mitigated Construction

[illegible]

Neighborhood Commercial LST - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.6462	1.1000e-004	0.0121	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0260	0.0260	7.0000e-005		0.0277
Energy	6.9200e-003	0.0629	0.0528	3.8000e-004		4.7800e-003	4.7800e-003		4.7800e-003	4.7800e-003		75.4385	75.4385	1.4500e-003	1.3800e-003	75.8868
Mobile	13.7489	5.7545	46.4046	0.0182	0.5291	0.0416	0.5707	0.1410	0.0384	0.1794		1,867.678 2	1,867.678 2	1.1027	0.5669	2,064.176 4
Total	16.4019	5.8175	46.4695	0.0185	0.5291	0.0464	0.5756	0.1410	0.0432	0.1842		1,943.142 6	1,943.142 6	1.1042	0.5683	2,140.090 8

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.4953	1.1000e-004	0.0121	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0260	0.0260	7.0000e-005		0.0277
Energy	6.9200e-003	0.0629	0.0528	3.8000e-004		4.7800e-003	4.7800e-003		4.7800e-003	4.7800e-003		75.4385	75.4385	1.4500e-003	1.3800e-003	75.8868
Mobile	13.7489	5.7545	46.4046	0.0182	0.5291	0.0416	0.5707	0.1410	0.0384	0.1794		1,867.678 2	1,867.678 2	1.1027	0.5669	2,064.176 4
Total	16.2510	5.8175	46.4695	0.0185	0.5291	0.0464	0.5756	0.1410	0.0432	0.1842		1,943.142 6	1,943.142 6	1.1042	0.5683	2,140.090 8

Neighborhood Commercial LST - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	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	0.92	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	Operational Analysis Only	Architectural Coating	2/3/2023	2/2/2023	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0.94

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 176,418; Non-Residential Outdoor: 58,806; Striped Parking Area: 2,457 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Operational Analysis Only	Air Compressors	0	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Operational Analysis Only	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Unmitigated Construction On-Site

[illegible]

Neighborhood Commercial LST - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Operational Analysis Only - 2023

Mitigated Construction On-Site

[illegible]

Mitigated Construction Off-Site

[illegible]

Neighborhood Commercial LST - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	lb/day										lb/day					
Mitigated	13.7489	5.7545	46.4046	0.0182	0.5291	0.0416	0.5707	0.1410	0.0384	0.1794		1,867.678 2	1,867.678 2	1.1027	0.5669	2,064.176 4
Unmitigated	13.7489	5.7545	46.4046	0.0182	0.5291	0.0416	0.5707	0.1410	0.0384	0.1794		1,867.678 2	1,867.678 2	1.1027	0.5669	2,064.176 4

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Strip Mall	6,713.29	9,855.89	2,481.61	167,090	167,090
Total	6,713.29	9,855.89	2,481.61	167,090	167,090

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Strip Mall	0.10	0.10	0.10	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Neighborhood Commercial LST - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.544795	0.058861	0.186903	0.129401	0.024381	0.006522	0.014242	0.004855	0.000656	0.000385	0.024332	0.000723	0.003942
Strip Mall	0.544795	0.058861	0.186903	0.129401	0.024381	0.006522	0.014242	0.004855	0.000656	0.000385	0.024332	0.000723	0.003942

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	6.9200e-003	0.0629	0.0528	3.8000e-004		4.7800e-003	4.7800e-003		4.7800e-003	4.7800e-003		75.4385	75.4385	1.4500e-003	1.3800e-003	75.8868
NaturalGas Unmitigated	6.9200e-003	0.0629	0.0528	3.8000e-004		4.7800e-003	4.7800e-003		4.7800e-003	4.7800e-003		75.4385	75.4385	1.4500e-003	1.3800e-003	75.8868

Neighborhood Commercial LST - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
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
Strip Mall	641.227	6.9200e-003	0.0629	0.0528	3.8000e-004		4.7800e-003	4.7800e-003		4.7800e-003	4.7800e-003		75.4385	75.4385	1.4500e-003	1.3800e-003	75.8868
Total		6.9200e-003	0.0629	0.0528	3.8000e-004		4.7800e-003	4.7800e-003		4.7800e-003	4.7800e-003		75.4385	75.4385	1.4500e-003	1.3800e-003	75.8868

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
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
Strip Mall	0.641227	6.9200e-003	0.0629	0.0528	3.8000e-004		4.7800e-003	4.7800e-003		4.7800e-003	4.7800e-003		75.4385	75.4385	1.4500e-003	1.3800e-003	75.8868
Total		6.9200e-003	0.0629	0.0528	3.8000e-004		4.7800e-003	4.7800e-003		4.7800e-003	4.7800e-003		75.4385	75.4385	1.4500e-003	1.3800e-003	75.8868

6.0 Area Detail

Neighborhood Commercial LST - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**6.1 Mitigation Measures Area**

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.4953	1.1000e-004	0.0121	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0260	0.0260	7.0000e-005		0.0277
Unmitigated	2.6462	1.1000e-004	0.0121	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0260	0.0260	7.0000e-005		0.0277

Neighborhood Commercial LST - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3018					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.3432					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.1200e-003	1.1000e-004	0.0121	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0260	0.0260	7.0000e-005		0.0277
Total	2.6462	1.1000e-004	0.0121	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0260	0.0260	7.0000e-005		0.0277

Neighborhood Commercial LST - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1509					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.3432					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.1200e-003	1.1000e-004	0.0121	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0260	0.0260	7.0000e-005		0.0277
Total	2.4953	1.1000e-004	0.0121	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0260	0.0260	7.0000e-005		0.0277

7.0 Water Detail

7.1 Mitigation Measures Water

Neighborhood Commercial LST - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**8.0 Waste Detail**

8.1 Mitigation Measures Waste**9.0 Operational Offroad**

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

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Holly Triangle Proposed Project LST - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Holly Triangle Proposed Project LST

Orange County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	0.80	Acre	0.80	34,848.00	0
City Park	0.67	Acre	0.67	29,185.20	0
Apartments Low Rise	35.00	Dwelling Unit	0.64	57,300.00	100

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	30
Climate Zone	8			Operational Year	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Lot Acreage from project site plan.

Construction Phase - Operational Analysis only.

Off-road Equipment - Operational Analysis only.

Trips and VMT - Operational Analysis Only.

Vehicle Trips - City park in place of landscaping and does not independently generate trips, trip length reduced to 0.1 miles to analyze onsite emissions only.

Woodstoves - No woodstoves or fireplaces proposed.

Area Coating - SCAQMD Rule 1113

Area Mitigation - SCAQMD Rule 1113

Holly Triangle Proposed Project LST - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblFireplaces	FireplaceDayYear	25.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	29.75	0.00
tblFireplaces	NumberNoFireplace	3.50	35.00
tblFireplaces	NumberWood	1.75	0.00
tblLandUse	LandUseSquareFeet	35,000.00	57,300.00
tblLandUse	LotAcreage	2.19	0.64
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblTripsAndVMT	WorkerTripNumber	10.00	0.00
tblVehicleTrips	HO_TL	8.70	0.10
tblVehicleTrips	HS_TL	5.90	0.10
tblVehicleTrips	HW_TL	14.70	0.10
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	WD_TR	0.78	0.00
tblWoodstoves	NumberCatalytic	1.75	0.00
tblWoodstoves	NumberNoncatalytic	1.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Unmitigated Construction

[illegible]

Mitigated Construction

[illegible][illegible]

Holly Triangle Proposed Project LST - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.3363	0.0333	2.8883	1.5000e-004		0.0160	0.0160		0.0160	0.0160	0.0000	5.1997	5.1997	5.0000e-003	0.0000	5.3247
Energy	0.0128	0.1098	0.0467	7.0000e-004		8.8700e-003	8.8700e-003		8.8700e-003	8.8700e-003		140.1031	140.1031	2.6900e-003	2.5700e-003	140.9357
Mobile	0.3984	0.1679	1.3574	5.7000e-004	0.0201	1.2300e-003	0.0213	5.3400e-003	1.1300e-003	6.4800e-003		58.5066	58.5066	0.0321	0.0165	64.2334
Total	1.7475	0.3109	4.2924	1.4200e-003	0.0201	0.0261	0.0461	5.3400e-003	0.0260	0.0313	0.0000	203.8093	203.8093	0.0398	0.0191	210.4937

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.3363	0.0333	2.8883	1.5000e-004		0.0160	0.0160		0.0160	0.0160	0.0000	5.1997	5.1997	5.0000e-003	0.0000	5.3247
Energy	0.0128	0.1098	0.0467	7.0000e-004		8.8700e-003	8.8700e-003		8.8700e-003	8.8700e-003		140.1031	140.1031	2.6900e-003	2.5700e-003	140.9357
Mobile	0.3984	0.1679	1.3574	5.7000e-004	0.0201	1.2300e-003	0.0213	5.3400e-003	1.1300e-003	6.4800e-003		58.5066	58.5066	0.0321	0.0165	64.2334
Total	1.7475	0.3109	4.2924	1.4200e-003	0.0201	0.0261	0.0461	5.3400e-003	0.0260	0.0313	0.0000	203.8093	203.8093	0.0398	0.0191	210.4937

Holly Triangle Proposed Project LST - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	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	Architectural Coating	Architectural Coating	2/7/2022	2/18/2022	5	10	

Acres of Grading (Site Preparation Phase): 0**Acres of Grading (Grading Phase): 0****Acres of Paving: 0.8****Residential Indoor: 116,033; Residential Outdoor: 38,678; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 2,091 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	0	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Holly Triangle Proposed Project LST - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.2 Architectural Coating - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	36.8235					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
Total	36.8235	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Unmitigated Construction Off-Site

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

Holly Triangle Proposed Project LST - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.2 Architectural Coating - 2022****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	36.8235					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
Total	36.8235	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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
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
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

Holly Triangle Proposed Project LST - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	lb/day										lb/day					
Mitigated	0.3984	0.1679	1.3574	5.7000e-004	0.0201	1.2300e-003	0.0213	5.3400e-003	1.1300e-003	6.4800e-003		58.5066	58.5066	0.0321	0.0165	64.2334
Unmitigated	0.3984	0.1679	1.3574	5.7000e-004	0.0201	1.2300e-003	0.0213	5.3400e-003	1.1300e-003	6.4800e-003		58.5066	58.5066	0.0321	0.0165	64.2334

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	256.20	284.90	219.80	8,520	8,520
City Park	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	256.20	284.90	219.80	8,520	8,520

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	0.10	0.10	0.10	40.20	19.20	40.60	86	11	3
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

Holly Triangle Proposed Project LST - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.544795	0.058861	0.186903	0.129401	0.024381	0.006522	0.014242	0.004855	0.000656	0.000385	0.024332	0.000723	0.003942
City Park	0.544795	0.058861	0.186903	0.129401	0.024381	0.006522	0.014242	0.004855	0.000656	0.000385	0.024332	0.000723	0.003942
Other Asphalt Surfaces	0.544795	0.058861	0.186903	0.129401	0.024381	0.006522	0.014242	0.004855	0.000656	0.000385	0.024332	0.000723	0.003942

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0128	0.1098	0.0467	7.0000e-004		8.8700e-003	8.8700e-003		8.8700e-003	8.8700e-003		140.1031	140.1031	2.6900e-003	2.5700e-003	140.9357
NaturalGas Unmitigated	0.0128	0.1098	0.0467	7.0000e-004		8.8700e-003	8.8700e-003		8.8700e-003	8.8700e-003		140.1031	140.1031	2.6900e-003	2.5700e-003	140.9357

Holly Triangle Proposed Project LST - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**5.2 Energy by Land Use - NaturalGas****Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1190.88	0.0128	0.1098	0.0467	7.0000e-004		8.8700e-003	8.8700e-003		8.8700e-003	8.8700e-003		140.1031	140.1031	2.6900e-003	2.5700e-003	140.9357
City Park	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
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
Total		0.0128	0.1098	0.0467	7.0000e-004		8.8700e-003	8.8700e-003		8.8700e-003	8.8700e-003		140.1031	140.1031	2.6900e-003	2.5700e-003	140.9357

Holly Triangle Proposed Project LST - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**5.2 Energy by Land Use - NaturalGas****Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1.19088	0.0128	0.1098	0.0467	7.0000e-004		8.8700e-003	8.8700e-003		8.8700e-003	8.8700e-003		140.1031	140.1031	2.6900e-003	2.5700e-003	140.9357
City Park	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
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
Total		0.0128	0.1098	0.0467	7.0000e-004		8.8700e-003	8.8700e-003		8.8700e-003	8.8700e-003		140.1031	140.1031	2.6900e-003	2.5700e-003	140.9357

6.0 Area Detail**6.1 Mitigation Measures Area**

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Holly Triangle Proposed Project LST - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.3363	0.0333	2.8883	1.5000e-004		0.0160	0.0160		0.0160	0.0160	0.0000	5.1997	5.1997	5.0000e-003	0.0000	5.3247
Unmitigated	1.3363	0.0333	2.8883	1.5000e-004		0.0160	0.0160		0.0160	0.0160	0.0000	5.1997	5.1997	5.0000e-003	0.0000	5.3247

6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1009					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.1484					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	0.0870	0.0333	2.8883	1.5000e-004		0.0160	0.0160		0.0160	0.0160		5.1997	5.1997	5.0000e-003		5.3247
Total	1.3363	0.0333	2.8883	1.5000e-004		0.0160	0.0160		0.0160	0.0160	0.0000	5.1997	5.1997	5.0000e-003	0.0000	5.3247

Holly Triangle Proposed Project LST - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1009					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.1484					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	0.0870	0.0333	2.8883	1.5000e-004		0.0160	0.0160		0.0160	0.0160		5.1997	5.1997	5.0000e-003		5.3247
Total	1.3363	0.0333	2.8883	1.5000e-004		0.0160	0.0160		0.0160	0.0160	0.0000	5.1997	5.1997	5.0000e-003	0.0000	5.3247

7.0 Water Detail

7.1 Mitigation Measures Water

Holly Triangle Proposed Project LST - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**8.0 Waste Detail**

8.1 Mitigation Measures Waste**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
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

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

11.0 Vegetation

Holly Triangle Proposed Project - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Holly Triangle Proposed Project

Orange County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	0.80	Acre	0.80	34,848.00	0
City Park	0.67	Acre	0.67	29,185.20	0
Apartments Low Rise	35.00	Dwelling Unit	0.64	57,300.00	100

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	30
Climate Zone	8			Operational Year	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Lot Acreage Based on site plan.

Off-road Equipment - Crawler Tractors in place of Tractors/Loaders/Backhoes

Off-road Equipment - Crawler Tractors in place of Tractors/Loaders/Backhoes

Off-road Equipment - Assumed 8hr work days

Off-road Equipment -

Off-road Equipment - Assumed 8hr work days

Demolition -

Architectural Coating - SCAQMD Rule 1113

Vehicle Trips - City park on place of landscaping, does not independently generate trips.

Holly Triangle Proposed Project - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Woodstoves - No woodstoves or fireplaces proposed.

Consumer Products -

Area Coating -

Construction Off-road Equipment Mitigation - SCAQMD Rule 403

Area Mitigation - SCAQMD Rule 1113

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Parking	100.00	50.00
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	100	50
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	100	50
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	100	50
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblFireplaces	FireplaceDayYear	25.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	29.75	0.00
tblFireplaces	NumberNoFireplace	3.50	35.00
tblFireplaces	NumberWood	1.75	0.00
tblLandUse	LandUseSquareFeet	35,000.00	57,300.00
tblLandUse	LotAcreage	2.19	0.64
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00

Holly Triangle Proposed Project - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	WD_TR	0.78	0.00
tblWoodstoves	NumberCatalytic	1.75	0.00
tblWoodstoves	NumberNoncatalytic	1.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

Holly Triangle Proposed Project - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**2.1 Overall Construction (Maximum Daily Emission)****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	2.2660	26.0872	17.1355	0.0339	8.2549	1.0386	9.2935	3.5689	0.9555	4.5244	0.0000	3,207.260 8	3,207.260 8	0.9682	0.0531	3,235.754 3
2023	36.6226	14.8322	16.8542	0.0336	0.6708	0.6529	1.3237	0.1799	0.6243	0.8042	0.0000	3,180.315 8	3,180.315 8	0.5451	0.0504	3,207.743 9
Maximum	36.6226	26.0872	17.1355	0.0339	8.2549	1.0386	9.2935	3.5689	0.9555	4.5244	0.0000	3,207.260 8	3,207.260 8	0.9682	0.0531	3,235.754 3

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	2.2660	26.0872	17.1355	0.0339	3.2876	1.0386	4.3262	1.4100	0.9555	2.3655	0.0000	3,207.260 8	3,207.260 8	0.9682	0.0531	3,235.754 3
2023	36.6226	14.8322	16.8542	0.0336	0.6708	0.6529	1.3237	0.1799	0.6243	0.8042	0.0000	3,180.315 8	3,180.315 8	0.5451	0.0504	3,207.743 9
Maximum	36.6226	26.0872	17.1355	0.0339	3.2876	1.0386	4.3262	1.4100	0.9555	2.3655	0.0000	3,207.260 8	3,207.260 8	0.9682	0.0531	3,235.754 3

Holly Triangle Proposed Project - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	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	55.65	0.00	46.79	57.59	0.00	40.52	0.00	0.00	0.00	0.00	0.00	0.00

Holly Triangle Proposed Project - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.3363	0.0333	2.8883	1.5000e-004		0.0160	0.0160		0.0160	0.0160	0.0000	5.1997	5.1997	5.0000e-003	0.0000	5.3247
Energy	0.0128	0.1098	0.0467	7.0000e-004		8.8700e-003	8.8700e-003		8.8700e-003	8.8700e-003		140.1031	140.1031	2.6900e-003	2.5700e-003	140.9357
Mobile	0.7989	0.8293	8.1938	0.0193	2.0513	0.0130	2.0643	0.5468	0.0121	0.5588		1,989.6662	1,989.6662	0.1136	0.0767	2,015.3652
Total	2.1480	0.9723	11.1289	0.0202	2.0513	0.0378	2.0891	0.5468	0.0369	0.5837	0.0000	2,134.9689	2,134.9689	0.1213	0.0793	2,161.6256

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.3350	0.0333	2.8883	1.5000e-004		0.0160	0.0160		0.0160	0.0160	0.0000	5.1997	5.1997	5.0000e-003	0.0000	5.3247
Energy	0.0128	0.1098	0.0467	7.0000e-004		8.8700e-003	8.8700e-003		8.8700e-003	8.8700e-003		140.1031	140.1031	2.6900e-003	2.5700e-003	140.9357
Mobile	0.7989	0.8293	8.1938	0.0193	2.0513	0.0130	2.0643	0.5468	0.0121	0.5588		1,989.6662	1,989.6662	0.1136	0.0767	2,015.3652
Total	2.1467	0.9723	11.1289	0.0202	2.0513	0.0378	2.0891	0.5468	0.0369	0.5837	0.0000	2,134.9689	2,134.9689	0.1213	0.0793	2,161.6256

Holly Triangle Proposed Project - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	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	0.06	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	9/1/2022	9/28/2022	5	20	
2	Site Preparation	Site Preparation	9/29/2022	10/3/2022	5	3	
3	Grading	Grading	10/4/2022	10/11/2022	5	6	
4	Building Construction	Building Construction	10/12/2022	8/15/2023	5	220	
5	Paving	Paving	8/16/2023	8/29/2023	5	10	
6	Architectural Coating	Architectural Coating	8/30/2023	9/12/2023	5	10	

Acres of Grading (Site Preparation Phase): 6**Acres of Grading (Grading Phase): 12****Acres of Paving: 0.8****Residential Indoor: 116,033; Residential Outdoor: 38,678; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 2,091 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Crawler Tractors	1	8.00	212	0.43
Site Preparation	Graders	1	8.00	187	0.41

Holly Triangle Proposed Project - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Grading	Crawler Tractors	2	8.00	212	0.43
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	8.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	19.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	52.00	14.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Holly Triangle Proposed Project - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2022**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2067	0.0000	0.2067	0.0313	0.0000	0.0313			0.0000			0.0000
Off-Road	1.6889	16.6217	13.9605	0.0241		0.8379	0.8379		0.7829	0.7829		2,323.4168	2,323.4168	0.5921		2,338.2191
Total	1.6889	16.6217	13.9605	0.0241	0.2067	0.8379	1.0446	0.0313	0.7829	0.8142		2,323.4168	2,323.4168	0.5921		2,338.2191

Holly Triangle Proposed Project - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	3.8500e-003	0.1479	0.0416	5.7000e-004	0.0166	1.1200e-003	0.0177	4.5400e-003	1.0700e-003	5.6100e-003		64.2292	64.2292	6.1200e-003	0.0103	67.4478
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
Worker	0.0391	0.0263	0.4278	1.2700e-003	0.1453	7.8000e-004	0.1461	0.0385	7.2000e-004	0.0393		128.8404	128.8404	3.0100e-003	2.8800e-003	129.7729
Total	0.0430	0.1742	0.4694	1.8400e-003	0.1619	1.9000e-003	0.1638	0.0431	1.7900e-003	0.0449		193.0695	193.0695	9.1300e-003	0.0132	197.2207

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0806	0.0000	0.0806	0.0122	0.0000	0.0122			0.0000			0.0000
Off-Road	1.6889	16.6217	13.9605	0.0241		0.8379	0.8379		0.7829	0.7829	0.0000	2,323.4168	2,323.4168	0.5921		2,338.2191
Total	1.6889	16.6217	13.9605	0.0241	0.0806	0.8379	0.9185	0.0122	0.7829	0.7951	0.0000	2,323.4168	2,323.4168	0.5921		2,338.2191

Holly Triangle Proposed Project - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	3.8500e-003	0.1479	0.0416	5.7000e-004	0.0166	1.1200e-003	0.0177	4.5400e-003	1.0700e-003	5.6100e-003		64.2292	64.2292	6.1200e-003	0.0103	67.4478
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
Worker	0.0391	0.0263	0.4278	1.2700e-003	0.1453	7.8000e-004	0.1461	0.0385	7.2000e-004	0.0393		128.8404	128.8404	3.0100e-003	2.8800e-003	129.7729
Total	0.0430	0.1742	0.4694	1.8400e-003	0.1619	1.9000e-003	0.1638	0.0431	1.7900e-003	0.0449		193.0695	193.0695	9.1300e-003	0.0132	197.2207

3.3 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.1210	0.0000	2.1210	0.2290	0.0000	0.2290			0.0000			0.0000
Off-Road	1.7262	20.2089	10.4124	0.0296		0.7430	0.7430		0.6836	0.6836		2,870.6052	2,870.6052	0.9284		2,893.8155
Total	1.7262	20.2089	10.4124	0.0296	2.1210	0.7430	2.8640	0.2290	0.6836	0.9126		2,870.6052	2,870.6052	0.9284		2,893.8155

Holly Triangle Proposed Project - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
Worker	0.0241	0.0162	0.2633	7.8000e-004	0.0894	4.8000e-004	0.0899	0.0237	4.4000e-004	0.0242		79.2864	79.2864	1.8500e-003	1.7700e-003	79.8603
Total	0.0241	0.0162	0.2633	7.8000e-004	0.0894	4.8000e-004	0.0899	0.0237	4.4000e-004	0.0242		79.2864	79.2864	1.8500e-003	1.7700e-003	79.8603

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.8272	0.0000	0.8272	0.0893	0.0000	0.0893			0.0000			0.0000
Off-Road	1.7262	20.2089	10.4124	0.0296		0.7430	0.7430		0.6836	0.6836	0.0000	2,870.6052	2,870.6052	0.9284		2,893.8155
Total	1.7262	20.2089	10.4124	0.0296	0.8272	0.7430	1.5702	0.0893	0.6836	0.7729	0.0000	2,870.6052	2,870.6052	0.9284		2,893.8155

Holly Triangle Proposed Project - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
Worker	0.0241	0.0162	0.2633	7.8000e-004	0.0894	4.8000e-004	0.0899	0.0237	4.4000e-004	0.0242		79.2864	79.2864	1.8500e-003	1.7700e-003	79.8603
Total	0.0241	0.0162	0.2633	7.8000e-004	0.0894	4.8000e-004	0.0899	0.0237	4.4000e-004	0.0242		79.2864	79.2864	1.8500e-003	1.7700e-003	79.8603

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.1431	0.0000	8.1431	3.5393	0.0000	3.5393			0.0000			0.0000
Off-Road	2.2359	26.0669	9.9334	0.0308		1.0380	1.0380		0.9550	0.9550		2,986.3790	2,986.3790	0.9659		3,010.5254
Total	2.2359	26.0669	9.9334	0.0308	8.1431	1.0380	9.1811	3.5393	0.9550	4.4942		2,986.3790	2,986.3790	0.9659		3,010.5254

Holly Triangle Proposed Project - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.4 Grading - 2022****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
Worker	0.0301	0.0202	0.3291	9.7000e-004	0.1118	6.0000e-004	0.1124	0.0296	5.6000e-004	0.0302		99.1080	99.1080	2.3200e-003	2.2100e-003	99.8253
Total	0.0301	0.0202	0.3291	9.7000e-004	0.1118	6.0000e-004	0.1124	0.0296	5.6000e-004	0.0302		99.1080	99.1080	2.3200e-003	2.2100e-003	99.8253

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.1758	0.0000	3.1758	1.3803	0.0000	1.3803			0.0000			0.0000
Off-Road	2.2359	26.0669	9.9334	0.0308		1.0380	1.0380		0.9550	0.9550	0.0000	2,986.3790	2,986.3790	0.9659		3,010.5254
Total	2.2359	26.0669	9.9334	0.0308	3.1758	1.0380	4.2138	1.3803	0.9550	2.3353	0.0000	2,986.3790	2,986.3790	0.9659		3,010.5254

Holly Triangle Proposed Project - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.4 Grading - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
Worker	0.0301	0.0202	0.3291	9.7000e-004	0.1118	6.0000e-004	0.1124	0.0296	5.6000e-004	0.0302		99.1080	99.1080	2.3200e-003	2.2100e-003	99.8253
Total	0.0301	0.0202	0.3291	9.7000e-004	0.1118	6.0000e-004	0.1124	0.0296	5.6000e-004	0.0302		99.1080	99.1080	2.3200e-003	2.2100e-003	99.8253

3.5 Building Construction - 2022**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9251	15.2867	15.2012	0.0262		0.7422	0.7422		0.7099	0.7099		2,401.5987	2,401.5987	0.4780		2,413.5486
Total	1.9251	15.2867	15.2012	0.0262		0.7422	0.7422		0.7099	0.7099		2,401.5987	2,401.5987	0.4780		2,413.5486

Holly Triangle Proposed Project - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0233	0.6282	0.2231	2.6500e-003	0.0895	6.1100e-003	0.0956	0.0258	5.8500e-003	0.0316		290.3006	290.3006	0.0166	0.0416	303.1141
Worker	0.1565	0.1051	1.7113	5.0700e-003	0.5812	3.1400e-003	0.5844	0.1542	2.8900e-003	0.1570		515.3615	515.3615	0.0120	0.0115	519.0917
Total	0.1797	0.7333	1.9343	7.7200e-003	0.6708	9.2500e-003	0.6800	0.1799	8.7400e-003	0.1886		805.6621	805.6621	0.0287	0.0531	822.2057

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9251	15.2867	15.2012	0.0262		0.7422	0.7422		0.7099	0.7099	0.0000	2,401.5987	2,401.5987	0.4780		2,413.5486
Total	1.9251	15.2867	15.2012	0.0262		0.7422	0.7422		0.7099	0.7099	0.0000	2,401.5987	2,401.5987	0.4780		2,413.5486

Holly Triangle Proposed Project - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0233	0.6282	0.2231	2.6500e-003	0.0895	6.1100e-003	0.0956	0.0258	5.8500e-003	0.0316		290.3006	290.3006	0.0166	0.0416	303.1141
Worker	0.1565	0.1051	1.7113	5.0700e-003	0.5812	3.1400e-003	0.5844	0.1542	2.8900e-003	0.1570		515.3615	515.3615	0.0120	0.0115	519.0917
Total	0.1797	0.7333	1.9343	7.7200e-003	0.6708	9.2500e-003	0.6800	0.1799	8.7400e-003	0.1886		805.6621	805.6621	0.0287	0.0531	822.2057

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7771	14.2478	15.0585	0.0262		0.6474	0.6474		0.6191	0.6191		2,401.9252	2,401.9252	0.4693		2,413.6585
Total	1.7771	14.2478	15.0585	0.0262		0.6474	0.6474		0.6191	0.6191		2,401.9252	2,401.9252	0.4693		2,413.6585

Holly Triangle Proposed Project - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0141	0.4907	0.2034	2.5200e-003	0.0895	2.5200e-003	0.0920	0.0258	2.4100e-003	0.0282		276.4291	276.4291	0.0164	0.0397	288.6599
Worker	0.1465	0.0937	1.5923	4.9000e-003	0.5812	2.9700e-003	0.5842	0.1542	2.7400e-003	0.1569		501.9615	501.9615	0.0109	0.0107	505.4254
Total	0.1607	0.5844	1.7957	7.4200e-003	0.6708	5.4900e-003	0.6763	0.1799	5.1500e-003	0.1851		778.3906	778.3906	0.0273	0.0504	794.0853

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7771	14.2478	15.0585	0.0262		0.6474	0.6474		0.6191	0.6191	0.0000	2,401.9252	2,401.9252	0.4693		2,413.6585
Total	1.7771	14.2478	15.0585	0.0262		0.6474	0.6474		0.6191	0.6191	0.0000	2,401.9252	2,401.9252	0.4693		2,413.6585

Holly Triangle Proposed Project - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0141	0.4907	0.2034	2.5200e-003	0.0895	2.5200e-003	0.0920	0.0258	2.4100e-003	0.0282		276.4291	276.4291	0.0164	0.0397	288.6599
Worker	0.1465	0.0937	1.5923	4.9000e-003	0.5812	2.9700e-003	0.5842	0.1542	2.7400e-003	0.1569		501.9615	501.9615	0.0109	0.0107	505.4254
Total	0.1607	0.5844	1.7957	7.4200e-003	0.6708	5.4900e-003	0.6763	0.1799	5.1500e-003	0.1851		778.3906	778.3906	0.0273	0.0504	794.0853

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8802	8.6098	11.6840	0.0179		0.4338	0.4338		0.4003	0.4003		1,709.9926	1,709.9926	0.5420		1,723.5414
Paving	0.2096					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0898	8.6098	11.6840	0.0179		0.4338	0.4338		0.4003	0.4003		1,709.9926	1,709.9926	0.5420		1,723.5414

Holly Triangle Proposed Project - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
Worker	0.0423	0.0270	0.4593	1.4100e-003	0.1677	8.6000e-004	0.1685	0.0445	7.9000e-004	0.0453		144.7966	144.7966	3.1400e-003	3.0900e-003	145.7958
Total	0.0423	0.0270	0.4593	1.4100e-003	0.1677	8.6000e-004	0.1685	0.0445	7.9000e-004	0.0453		144.7966	144.7966	3.1400e-003	3.0900e-003	145.7958

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8802	8.6098	11.6840	0.0179		0.4338	0.4338		0.4003	0.4003	0.0000	1,709.9926	1,709.9926	0.5420		1,723.5414
Paving	0.2096					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0898	8.6098	11.6840	0.0179		0.4338	0.4338		0.4003	0.4003	0.0000	1,709.9926	1,709.9926	0.5420		1,723.5414

Holly Triangle Proposed Project - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.6 Paving - 2023****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
Worker	0.0423	0.0270	0.4593	1.4100e-003	0.1677	8.6000e-004	0.1685	0.0445	7.9000e-004	0.0453		144.7966	144.7966	3.1400e-003	3.0900e-003	145.7958
Total	0.0423	0.0270	0.4593	1.4100e-003	0.1677	8.6000e-004	0.1685	0.0445	7.9000e-004	0.0453		144.7966	144.7966	3.1400e-003	3.0900e-003	145.7958

3.7 Architectural Coating - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	36.3389					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2556	1.7373	2.4148	3.9600e-003		0.0944	0.0944		0.0944	0.0944		375.2641	375.2641	0.0225		375.8253
Total	36.5944	1.7373	2.4148	3.9600e-003		0.0944	0.0944		0.0944	0.0944		375.2641	375.2641	0.0225		375.8253

Holly Triangle Proposed Project - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
Worker	0.0282	0.0180	0.3062	9.4000e-004	0.1118	5.7000e-004	0.1124	0.0296	5.3000e-004	0.0302		96.5311	96.5311	2.1000e-003	2.0600e-003	97.1972
Total	0.0282	0.0180	0.3062	9.4000e-004	0.1118	5.7000e-004	0.1124	0.0296	5.3000e-004	0.0302		96.5311	96.5311	2.1000e-003	2.0600e-003	97.1972

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	36.3389					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2556	1.7373	2.4148	3.9600e-003		0.0944	0.0944		0.0944	0.0944	0.0000	375.2641	375.2641	0.0225		375.8253
Total	36.5944	1.7373	2.4148	3.9600e-003		0.0944	0.0944		0.0944	0.0944	0.0000	375.2641	375.2641	0.0225		375.8253

Holly Triangle Proposed Project - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.7 Architectural Coating - 2023****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
Worker	0.0282	0.0180	0.3062	9.4000e-004	0.1118	5.7000e-004	0.1124	0.0296	5.3000e-004	0.0302		96.5311	96.5311	2.1000e-003	2.0600e-003	97.1972
Total	0.0282	0.0180	0.3062	9.4000e-004	0.1118	5.7000e-004	0.1124	0.0296	5.3000e-004	0.0302		96.5311	96.5311	2.1000e-003	2.0600e-003	97.1972

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

Holly Triangle Proposed Project - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.7989	0.8293	8.1938	0.0193	2.0513	0.0130	2.0643	0.5468	0.0121	0.5588		1,989.666 2	1,989.666 2	0.1136	0.0767	2,015.365 2
Unmitigated	0.7989	0.8293	8.1938	0.0193	2.0513	0.0130	2.0643	0.5468	0.0121	0.5588		1,989.666 2	1,989.666 2	0.1136	0.0767	2,015.365 2

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	256.20	284.90	219.80	871,715	871,715
City Park	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	256.20	284.90	219.80	871,715	871,715

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Other Asphalt Surfaces	16.60	8.40	6.90	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
Apartments Low Rise	0.544795	0.058861	0.186903	0.129401	0.024381	0.006522	0.014242	0.004855	0.000656	0.000385	0.024332	0.000723	0.003942
City Park	0.544795	0.058861	0.186903	0.129401	0.024381	0.006522	0.014242	0.004855	0.000656	0.000385	0.024332	0.000723	0.003942

Holly Triangle Proposed Project - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Other Asphalt Surfaces	0.544795	0.058861	0.186903	0.129401	0.024381	0.006522	0.014242	0.004855	0.000656	0.000385	0.024332	0.000723	0.003942
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5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0128	0.1098	0.0467	7.0000e-004		8.8700e-003	8.8700e-003		8.8700e-003	8.8700e-003		140.1031	140.1031	2.6900e-003	2.5700e-003	140.9357
NaturalGas Unmitigated	0.0128	0.1098	0.0467	7.0000e-004		8.8700e-003	8.8700e-003		8.8700e-003	8.8700e-003		140.1031	140.1031	2.6900e-003	2.5700e-003	140.9357

Holly Triangle Proposed Project - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1190.88	0.0128	0.1098	0.0467	7.0000e-004		8.8700e-003	8.8700e-003		8.8700e-003	8.8700e-003		140.1031	140.1031	2.6900e-003	2.5700e-003	140.9357
City Park	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
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
Total		0.0128	0.1098	0.0467	7.0000e-004		8.8700e-003	8.8700e-003		8.8700e-003	8.8700e-003		140.1031	140.1031	2.6900e-003	2.5700e-003	140.9357

Holly Triangle Proposed Project - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**5.2 Energy by Land Use - NaturalGas****Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1.19088	0.0128	0.1098	0.0467	7.0000e-004		8.8700e-003	8.8700e-003		8.8700e-003	8.8700e-003		140.1031	140.1031	2.6900e-003	2.5700e-003	140.9357
City Park	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
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
Total		0.0128	0.1098	0.0467	7.0000e-004		8.8700e-003	8.8700e-003		8.8700e-003	8.8700e-003		140.1031	140.1031	2.6900e-003	2.5700e-003	140.9357

6.0 Area Detail**6.1 Mitigation Measures Area**

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Holly Triangle Proposed Project - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.3350	0.0333	2.8883	1.5000e-004		0.0160	0.0160		0.0160	0.0160	0.0000	5.1997	5.1997	5.0000e-003	0.0000	5.3247
Unmitigated	1.3363	0.0333	2.8883	1.5000e-004		0.0160	0.0160		0.0160	0.0160	0.0000	5.1997	5.1997	5.0000e-003	0.0000	5.3247

6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1009					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.1484					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	0.0870	0.0333	2.8883	1.5000e-004		0.0160	0.0160		0.0160	0.0160		5.1997	5.1997	5.0000e-003		5.3247
Total	1.3363	0.0333	2.8883	1.5000e-004		0.0160	0.0160		0.0160	0.0160	0.0000	5.1997	5.1997	5.0000e-003	0.0000	5.3247

Holly Triangle Proposed Project - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0996					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.1484					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	0.0870	0.0333	2.8883	1.5000e-004		0.0160	0.0160		0.0160	0.0160		5.1997	5.1997	5.0000e-003		5.3247
Total	1.3350	0.0333	2.8883	1.5000e-004		0.0160	0.0160		0.0160	0.0160	0.0000	5.1997	5.1997	5.0000e-003	0.0000	5.3247

7.0 Water Detail

7.1 Mitigation Measures Water

Holly Triangle Proposed Project - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

Neighborhood Commercial - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	0.0000	0.0000	0.0000	0.0000	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

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	0.0000	0.0000	0.0000	0.0000	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)
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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	0.4829	1.0000e-005	1.5100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.9400e-003	2.9400e-003	1.0000e-005	0.0000	3.1400e-003
Energy	1.2600e-003	0.0115	9.6400e-003	7.0000e-005		8.7000e-004	8.7000e-004		8.7000e-004	8.7000e-004	0.0000	244.6388	244.6388	0.0198	2.6000e-003	245.9107
Mobile	2.4959	2.4256	21.7250	0.0445	4.6999	0.0323	4.7321	1.2545	0.0300	1.2845	0.0000	4,154.3283	4,154.3283	0.3046	0.1981	4,220.9691
Waste						0.0000	0.0000		0.0000	0.0000	25.0674	0.0000	25.0674	1.4814	0.0000	62.1033
Water						0.0000	0.0000		0.0000	0.0000	2.7638	30.6374	33.4012	0.2865	7.0200e-003	42.6535
Total	2.9800	2.4371	21.7361	0.0446	4.6999	0.0332	4.7330	1.2545	0.0309	1.2854	27.8312	4,429.6075	4,457.4387	2.0923	0.2077	4,571.6396

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.4553	1.0000e-005	1.5100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.9400e-003	2.9400e-003	1.0000e-005	0.0000	3.1400e-003
Energy	1.2600e-003	0.0115	9.6400e-003	7.0000e-005		8.7000e-004	8.7000e-004		8.7000e-004	8.7000e-004	0.0000	244.6388	244.6388	0.0198	2.6000e-003	245.9107
Mobile	2.4959	2.4256	21.7250	0.0445	4.6999	0.0323	4.7321	1.2545	0.0300	1.2845	0.0000	4,154.3283	4,154.3283	0.3046	0.1981	4,220.9691
Waste						0.0000	0.0000		0.0000	0.0000	25.0674	0.0000	25.0674	1.4814	0.0000	62.1033
Water						0.0000	0.0000		0.0000	0.0000	2.7638	30.6374	33.4012	0.2865	7.0200e-003	42.6535
Total	2.9524	2.4371	21.7361	0.0446	4.6999	0.0332	4.7330	1.2545	0.0309	1.2854	27.8312	4,429.6075	4,457.4387	2.0923	0.2077	4,571.6396

	ROG	NOx	CO	SO2	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	0.92	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	Operational Analysis Only	Architectural Coating	2/3/2023	2/2/2023	5	0	

Acres of Grading (Site Preparation Phase): 0

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Acres of Paving: 0.94

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Operational Analysis Only	Air Compressors	0	6.00	78	0.48

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
Operational Analysis Only	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.2 Operational Analysis Only - 2023

Unmitigated Construction On-Site

[illegible]

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Unmitigated Construction Off-Site

[illegible]

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Operational Analysis Only - 2023

Mitigated Construction Off-Site

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	2.4959	2.4256	21.7250	0.0445	4.6999	0.0323	4.7321	1.2545	0.0300	1.2845	0.0000	4,154.328 3	4,154.328 3	0.3046	0.1981	4,220.969 1
Unmitigated	2.4959	2.4256	21.7250	0.0445	4.6999	0.0323	4.7321	1.2545	0.0300	1.2845	0.0000	4,154.328 3	4,154.328 3	0.3046	0.1981	4,220.969 1

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Strip Mall	6,713.29	9,855.89	2481.61	12,476,666	12,476,666
Total	6,713.29	9,855.89	2,481.61	12,476,666	12,476,666

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.544795	0.058861	0.186903	0.129401	0.024381	0.006522	0.014242	0.004855	0.000656	0.000385	0.024332	0.000723	0.003942
Strip Mall	0.544795	0.058861	0.186903	0.129401	0.024381	0.006522	0.014242	0.004855	0.000656	0.000385	0.024332	0.000723	0.003942

5.0 Energy Detail

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	232.1491	232.1491	0.0196	2.3800e-003	233.3468
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	232.1491	232.1491	0.0196	2.3800e-003	233.3468
NaturalGas Mitigated	1.2600e-003	0.0115	9.6400e-003	7.0000e-005		8.7000e-004	8.7000e-004		8.7000e-004	8.7000e-004	0.0000	12.4897	12.4897	2.4000e-004	2.3000e-004	12.5639
NaturalGas Unmitigated	1.2600e-003	0.0115	9.6400e-003	7.0000e-005		8.7000e-004	8.7000e-004		8.7000e-004	8.7000e-004	0.0000	12.4897	12.4897	2.4000e-004	2.3000e-004	12.5639

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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					
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
Strip Mall	234048	1.2600e-003	0.0115	9.6400e-003	7.0000e-005		8.7000e-004	8.7000e-004		8.7000e-004	8.7000e-004	0.0000	12.4897	12.4897	2.4000e-004	2.3000e-004	12.5639
Total		1.2600e-003	0.0115	9.6400e-003	7.0000e-005		8.7000e-004	8.7000e-004		8.7000e-004	8.7000e-004	0.0000	12.4897	12.4897	2.4000e-004	2.3000e-004	12.5639

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					
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
Strip Mall	234048	1.2600e-003	0.0115	9.6400e-003	7.0000e-005		8.7000e-004	8.7000e-004		8.7000e-004	8.7000e-004	0.0000	12.4897	12.4897	2.4000e-004	2.3000e-004	12.5639
Total		1.2600e-003	0.0115	9.6400e-003	7.0000e-005		8.7000e-004	8.7000e-004		8.7000e-004	8.7000e-004	0.0000	12.4897	12.4897	2.4000e-004	2.3000e-004	12.5639

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	1.30902e+006	232.1491	0.0196	2.3800e-003	233.3468
Total		232.1491	0.0196	2.3800e-003	233.3468

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	1.30902e+006	232.1491	0.0196	2.3800e-003	233.3468
Total		232.1491	0.0196	2.3800e-003	233.3468

6.0 Area Detail

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**6.1 Mitigation Measures Area**

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.4553	1.0000e-005	1.5100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.9400e-003	2.9400e-003	1.0000e-005	0.0000	3.1400e-003
Unmitigated	0.4829	1.0000e-005	1.5100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.9400e-003	2.9400e-003	1.0000e-005	0.0000	3.1400e-003

Neighborhood Commercial - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	0.0551					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4276					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.4000e-004	1.0000e-005	1.5100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.9400e-003	2.9400e-003	1.0000e-005	0.0000	3.1400e-003
Total	0.4829	1.0000e-005	1.5100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.9400e-003	2.9400e-003	1.0000e-005	0.0000	3.1400e-003

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0275					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4276					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.4000e-004	1.0000e-005	1.5100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.9400e-003	2.9400e-003	1.0000e-005	0.0000	3.1400e-003
Total	0.4553	1.0000e-005	1.5100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.9400e-003	2.9400e-003	1.0000e-005	0.0000	3.1400e-003

7.0 Water Detail

7.1 Mitigation Measures Water

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	33.4012	0.2865	7.0200e-003	42.6535
Unmitigated	33.4012	0.2865	7.0200e-003	42.6535

7.2 Water by Land Use**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	8.71167 / 5.33941	33.4012	0.2865	7.0200e-003	42.6535
Total		33.4012	0.2865	7.0200e-003	42.6535

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**7.2 Water by Land Use****Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	8.71167 / 5.33941	33.4012	0.2865	7.0200e-003	42.6535
Total		33.4012	0.2865	7.0200e-003	42.6535

8.0 Waste Detail**8.1 Mitigation Measures Waste****Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	25.0674	1.4814	0.0000	62.1033
Unmitigated	25.0674	1.4814	0.0000	62.1033

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**8.2 Waste by Land Use****Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	123.49	25.0674	1.4814	0.0000	62.1033
Total		25.0674	1.4814	0.0000	62.1033

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	123.49	25.0674	1.4814	0.0000	62.1033
Total		25.0674	1.4814	0.0000	62.1033

9.0 Operational Offroad

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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

Fire Pumps and Emergency Generators

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

Boilers

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

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

11.0 Vegetation

Holly Triangle Proposed Project - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Holly Triangle Proposed Project

Orange County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	0.80	Acre	0.80	34,848.00	0
City Park	0.67	Acre	0.67	29,185.20	0
Apartments Low Rise	35.00	Dwelling Unit	0.64	57,300.00	100

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	30
Climate Zone	8			Operational Year	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Lot Acreage Based on site plan.

Off-road Equipment - Crawler Tractors in place of Tractors/Loaders/Backhoes

Off-road Equipment - Crawler Tractors in place of Tractors/Loaders/Backhoes

Off-road Equipment - Assumed 8hr work days

Off-road Equipment -

Off-road Equipment - Assumed 8hr work days

Demolition -

Architectural Coating - SCAQMD Rule 1113

Vehicle Trips - City park on place of landscaping, does not independently generate trips.

Holly Triangle Proposed Project - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Woodstoves - No woodstoves or fireplaces proposed.

Consumer Products -

Area Coating -

Construction Off-road Equipment Mitigation - SCAQMD Rule 403

Area Mitigation - SCAQMD Rule 1113

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Parking	100.00	50.00
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	100	50
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	100	50
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	100	50
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblFireplaces	FireplaceDayYear	25.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	29.75	0.00
tblFireplaces	NumberNoFireplace	3.50	35.00
tblFireplaces	NumberWood	1.75	0.00
tblLandUse	LandUseSquareFeet	35,000.00	57,300.00
tblLandUse	LotAcreage	2.19	0.64
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	WD_TR	0.78	0.00
tblWoodstoves	NumberCatalytic	1.75	0.00
tblWoodstoves	NumberNoncatalytic	1.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

Holly Triangle Proposed Project - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**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					
2022	0.0878	0.7425	0.6855	1.3800e-003	0.0508	0.0344	0.0853	0.0170	0.0326	0.0495	0.0000	119.0907	119.0907	0.0227	1.5500e-003	120.1208
2023	0.3458	1.2562	1.4335	2.8300e-003	0.0548	0.0555	0.1103	0.0147	0.0530	0.0678	0.0000	242.9357	242.9357	0.0391	3.7900e-003	245.0435
Maximum	0.3458	1.2562	1.4335	2.8300e-003	0.0548	0.0555	0.1103	0.0170	0.0530	0.0678	0.0000	242.9357	242.9357	0.0391	3.7900e-003	245.0435

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	0.0878	0.7425	0.6855	1.3800e-003	0.0327	0.0344	0.0672	0.0101	0.0326	0.0427	0.0000	119.0906	119.0906	0.0227	1.5500e-003	120.1207
2023	0.3458	1.2562	1.4335	2.8300e-003	0.0548	0.0555	0.1103	0.0147	0.0530	0.0678	0.0000	242.9355	242.9355	0.0391	3.7900e-003	245.0432
Maximum	0.3458	1.2562	1.4335	2.8300e-003	0.0548	0.0555	0.1103	0.0147	0.0530	0.0678	0.0000	242.9355	242.9355	0.0391	3.7900e-003	245.0432

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	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	17.14	0.00	9.26	21.71	0.00	5.86	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
3	8-7-2022	11-6-2022	0.4743	0.4743
4	11-7-2022	2-6-2023	0.5792	0.5792
5	2-7-2023	5-6-2023	0.5339	0.5339
6	5-7-2023	8-6-2023	0.5510	0.5510
7	8-7-2023	9-30-2023	0.2946	0.2946
		Highest	0.5792	0.5792

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	0.2389	4.1600e-003	0.3610	2.0000e-005		2.0000e-003	2.0000e-003		2.0000e-003	2.0000e-003	0.0000	0.5896	0.5896	5.7000e-004	0.0000	0.6038
Energy	2.3400e-003	0.0200	8.5200e-003	1.3000e-004		1.6200e-003	1.6200e-003		1.6200e-003	1.6200e-003	0.0000	48.1533	48.1533	2.5500e-003	6.8000e-004	48.4198
Mobile	0.1267	0.1473	1.3260	3.0600e-003	0.3284	2.1100e-003	0.3305	0.0877	1.9600e-003	0.0896	0.0000	285.5706	285.5706	0.0172	0.0119	289.5448
Waste						0.0000	0.0000		0.0000	0.0000	3.2803	0.0000	3.2803	0.1939	0.0000	8.1269
Water						0.0000	0.0000		0.0000	0.0000	0.7235	9.6714	10.3949	0.0751	1.8500e-003	12.8253
Total	0.3679	0.1715	1.6955	3.2100e-003	0.3284	5.7300e-003	0.3341	0.0877	5.5800e-003	0.0932	4.0038	343.9849	347.9887	0.2893	0.0144	359.5206

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.2386	4.1600e-003	0.3610	2.0000e-005		2.0000e-003	2.0000e-003		2.0000e-003	2.0000e-003	0.0000	0.5896	0.5896	5.7000e-004	0.0000	0.6038
Energy	2.3400e-003	0.0200	8.5200e-003	1.3000e-004		1.6200e-003	1.6200e-003		1.6200e-003	1.6200e-003	0.0000	48.1533	48.1533	2.5500e-003	6.8000e-004	48.4198
Mobile	0.1267	0.1473	1.3260	3.0600e-003	0.3284	2.1100e-003	0.3305	0.0877	1.9600e-003	0.0896	0.0000	285.5706	285.5706	0.0172	0.0119	289.5448
Waste						0.0000	0.0000		0.0000	0.0000	3.2803	0.0000	3.2803	0.1939	0.0000	8.1269
Water						0.0000	0.0000		0.0000	0.0000	0.7235	9.6714	10.3949	0.0751	1.8500e-003	12.8253
Total	0.3676	0.1715	1.6955	3.2100e-003	0.3284	5.7300e-003	0.3341	0.0877	5.5800e-003	0.0932	4.0038	343.9849	347.9887	0.2893	0.0144	359.5206

	ROG	NOx	CO	SO2	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	0.07	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	9/1/2022	9/28/2022	5	20	
2	Site Preparation	Site Preparation	9/29/2022	10/3/2022	5	3	
3	Grading	Grading	10/4/2022	10/11/2022	5	6	

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4	Building Construction	Building Construction	10/12/2022	8/15/2023	5	220
5	Paving	Paving	8/16/2023	8/29/2023	5	10
6	Architectural Coating	Architectural Coating	8/30/2023	9/12/2023	5	10

Acres of Grading (Site Preparation Phase): 6**Acres of Grading (Grading Phase): 12****Acres of Paving: 0.8****Residential Indoor: 116,033; Residential Outdoor: 38,678; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 2,091 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Crawler Tractors	1	8.00	212	0.43
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Grading	Crawler Tractors	2	8.00	212	0.43
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56

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Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	8.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	19.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	52.00	14.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 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					
Fugitive Dust					2.0700e-003	0.0000	2.0700e-003	3.1000e-004	0.0000	3.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0169	0.1662	0.1396	2.4000e-004		8.3800e-003	8.3800e-003		7.8300e-003	7.8300e-003	0.0000	21.0777	21.0777	5.3700e-003	0.0000	21.2120
Total	0.0169	0.1662	0.1396	2.4000e-004	2.0700e-003	8.3800e-003	0.0105	3.1000e-004	7.8300e-003	8.1400e-003	0.0000	21.0777	21.0777	5.3700e-003	0.0000	21.2120

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	4.0000e-005	1.5600e-003	4.2000e-004	1.0000e-005	1.6000e-004	1.0000e-005	1.7000e-004	4.0000e-005	1.0000e-005	6.0000e-005	0.0000	0.5827	0.5827	6.0000e-005	9.0000e-005	0.6119
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	3.9000e-004	2.9000e-004	4.0700e-003	1.0000e-005	1.4300e-003	1.0000e-005	1.4300e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.1279	1.1279	3.0000e-005	3.0000e-005	1.1370
Total	4.3000e-004	1.8500e-003	4.4900e-003	2.0000e-005	1.5900e-003	2.0000e-005	1.6000e-003	4.2000e-004	2.0000e-005	4.5000e-004	0.0000	1.7106	1.7106	9.0000e-005	1.2000e-004	1.7489

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3.2 Demolition - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					8.1000e-004	0.0000	8.1000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0169	0.1662	0.1396	2.4000e-004		8.3800e-003	8.3800e-003		7.8300e-003	7.8300e-003	0.0000	21.0777	21.0777	5.3700e-003	0.0000	21.2119
Total	0.0169	0.1662	0.1396	2.4000e-004	8.1000e-004	8.3800e-003	9.1900e-003	1.2000e-004	7.8300e-003	7.9500e-003	0.0000	21.0777	21.0777	5.3700e-003	0.0000	21.2119

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	4.0000e-005	1.5600e-003	4.2000e-004	1.0000e-005	1.6000e-004	1.0000e-005	1.7000e-004	4.0000e-005	1.0000e-005	6.0000e-005	0.0000	0.5827	0.5827	6.0000e-005	9.0000e-005	0.6119
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	3.9000e-004	2.9000e-004	4.0700e-003	1.0000e-005	1.4300e-003	1.0000e-005	1.4300e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.1279	1.1279	3.0000e-005	3.0000e-005	1.1370
Total	4.3000e-004	1.8500e-003	4.4900e-003	2.0000e-005	1.5900e-003	2.0000e-005	1.6000e-003	4.2000e-004	2.0000e-005	4.5000e-004	0.0000	1.7106	1.7106	9.0000e-005	1.2000e-004	1.7489

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3.3 Site Preparation - 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					
Fugitive Dust					3.1800e-003	0.0000	3.1800e-003	3.4000e-004	0.0000	3.4000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.5900e-003	0.0303	0.0156	4.0000e-005		1.1100e-003	1.1100e-003		1.0300e-003	1.0300e-003	0.0000	3.9063	3.9063	1.2600e-003	0.0000	3.9378
Total	2.5900e-003	0.0303	0.0156	4.0000e-005	3.1800e-003	1.1100e-003	4.2900e-003	3.4000e-004	1.0300e-003	1.3700e-003	0.0000	3.9063	3.9063	1.2600e-003	0.0000	3.9378

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	4.0000e-005	3.0000e-005	3.8000e-004	0.0000	1.3000e-004	0.0000	1.3000e-004	3.0000e-005	0.0000	4.0000e-005	0.0000	0.1041	0.1041	0.0000	0.0000	0.1050
Total	4.0000e-005	3.0000e-005	3.8000e-004	0.0000	1.3000e-004	0.0000	1.3000e-004	3.0000e-005	0.0000	4.0000e-005	0.0000	0.1041	0.1041	0.0000	0.0000	0.1050

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3.3 Site Preparation - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.2400e-003	0.0000	1.2400e-003	1.3000e-004	0.0000	1.3000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.5900e-003	0.0303	0.0156	4.0000e-005		1.1100e-003	1.1100e-003		1.0300e-003	1.0300e-003	0.0000	3.9063	3.9063	1.2600e-003	0.0000	3.9378
Total	2.5900e-003	0.0303	0.0156	4.0000e-005	1.2400e-003	1.1100e-003	2.3500e-003	1.3000e-004	1.0300e-003	1.1600e-003	0.0000	3.9063	3.9063	1.2600e-003	0.0000	3.9378

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	4.0000e-005	3.0000e-005	3.8000e-004	0.0000	1.3000e-004	0.0000	1.3000e-004	3.0000e-005	0.0000	4.0000e-005	0.0000	0.1041	0.1041	0.0000	0.0000	0.1050
Total	4.0000e-005	3.0000e-005	3.8000e-004	0.0000	1.3000e-004	0.0000	1.3000e-004	3.0000e-005	0.0000	4.0000e-005	0.0000	0.1041	0.1041	0.0000	0.0000	0.1050

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3.4 Grading - 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					
Fugitive Dust					0.0244	0.0000	0.0244	0.0106	0.0000	0.0106	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.7100e-003	0.0782	0.0298	9.0000e-005		3.1100e-003	3.1100e-003		2.8600e-003	2.8600e-003	0.0000	8.1276	8.1276	2.6300e-003	0.0000	8.1933
Total	6.7100e-003	0.0782	0.0298	9.0000e-005	0.0244	3.1100e-003	0.0275	0.0106	2.8600e-003	0.0135	0.0000	8.1276	8.1276	2.6300e-003	0.0000	8.1933

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	9.0000e-005	7.0000e-005	9.4000e-004	0.0000	3.3000e-004	0.0000	3.3000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.2603	0.2603	1.0000e-005	1.0000e-005	0.2624
Total	9.0000e-005	7.0000e-005	9.4000e-004	0.0000	3.3000e-004	0.0000	3.3000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.2603	0.2603	1.0000e-005	1.0000e-005	0.2624

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					9.5300e-003	0.0000	9.5300e-003	4.1400e-003	0.0000	4.1400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.7100e-003	0.0782	0.0298	9.0000e-005		3.1100e-003	3.1100e-003		2.8600e-003	2.8600e-003	0.0000	8.1276	8.1276	2.6300e-003	0.0000	8.1933
Total	6.7100e-003	0.0782	0.0298	9.0000e-005	9.5300e-003	3.1100e-003	0.0126	4.1400e-003	2.8600e-003	7.0000e-003	0.0000	8.1276	8.1276	2.6300e-003	0.0000	8.1933

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	9.0000e-005	7.0000e-005	9.4000e-004	0.0000	3.3000e-004	0.0000	3.3000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.2603	0.2603	1.0000e-005	1.0000e-005	0.2624
Total	9.0000e-005	7.0000e-005	9.4000e-004	0.0000	3.3000e-004	0.0000	3.3000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.2603	0.2603	1.0000e-005	1.0000e-005	0.2624

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3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0558	0.4433	0.4408	7.6000e-004		0.0215	0.0215		0.0206	0.0206	0.0000	63.1821	63.1821	0.0126	0.0000	63.4965
Total	0.0558	0.4433	0.4408	7.6000e-004		0.0215	0.0215		0.0206	0.0206	0.0000	63.1821	63.1821	0.0126	0.0000	63.4965

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	6.7000e-004	0.0191	6.5700e-003	8.0000e-005	2.5600e-003	1.8000e-004	2.7400e-003	7.4000e-004	1.7000e-004	9.1000e-004	0.0000	7.6384	7.6384	4.4000e-004	1.1000e-003	7.9757
Worker	4.5400e-003	3.4200e-003	0.0472	1.4000e-004	0.0166	9.0000e-005	0.0167	4.4000e-003	8.0000e-005	4.4800e-003	0.0000	13.0837	13.0837	3.2000e-004	3.3000e-004	13.1892
Total	5.2100e-003	0.0225	0.0538	2.2000e-004	0.0191	2.7000e-004	0.0194	5.1400e-003	2.5000e-004	5.3900e-003	0.0000	20.7220	20.7220	7.6000e-004	1.4300e-003	21.1649

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3.5 Building Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0558	0.4433	0.4408	7.6000e-004		0.0215	0.0215		0.0206	0.0206	0.0000	63.1820	63.1820	0.0126	0.0000	63.4964
Total	0.0558	0.4433	0.4408	7.6000e-004		0.0215	0.0215		0.0206	0.0206	0.0000	63.1820	63.1820	0.0126	0.0000	63.4964

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	6.7000e-004	0.0191	6.5700e-003	8.0000e-005	2.5600e-003	1.8000e-004	2.7400e-003	7.4000e-004	1.7000e-004	9.1000e-004	0.0000	7.6384	7.6384	4.4000e-004	1.1000e-003	7.9757
Worker	4.5400e-003	3.4200e-003	0.0472	1.4000e-004	0.0166	9.0000e-005	0.0167	4.4000e-003	8.0000e-005	4.4800e-003	0.0000	13.0837	13.0837	3.2000e-004	3.3000e-004	13.1892
Total	5.2100e-003	0.0225	0.0538	2.2000e-004	0.0191	2.7000e-004	0.0194	5.1400e-003	2.5000e-004	5.3900e-003	0.0000	20.7220	20.7220	7.6000e-004	1.4300e-003	21.1649

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3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1440	1.1541	1.2197	2.1200e-003		0.0524	0.0524		0.0502	0.0502	0.0000	176.4982	176.4982	0.0345	0.0000	177.3604
Total	0.1440	1.1541	1.2197	2.1200e-003		0.0524	0.0524		0.0502	0.0502	0.0000	176.4982	176.4982	0.0345	0.0000	177.3604

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	1.1200e-003	0.0416	0.0167	2.0000e-004	7.1400e-003	2.0000e-004	7.3500e-003	2.0600e-003	2.0000e-004	2.2600e-003	0.0000	20.3251	20.3251	1.2100e-003	2.9200e-003	21.2251
Worker	0.0119	8.5100e-003	0.1229	3.8000e-004	0.0462	2.4000e-004	0.0465	0.0123	2.2000e-004	0.0125	0.0000	35.5974	35.5974	8.2000e-004	8.5000e-004	35.8709
Total	0.0130	0.0501	0.1396	5.8000e-004	0.0534	4.4000e-004	0.0538	0.0143	4.2000e-004	0.0148	0.0000	55.9225	55.9225	2.0300e-003	3.7700e-003	57.0960

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1440	1.1541	1.2197	2.1200e-003		0.0524	0.0524		0.0502	0.0502	0.0000	176.4980	176.4980	0.0345	0.0000	177.3602
Total	0.1440	1.1541	1.2197	2.1200e-003		0.0524	0.0524		0.0502	0.0502	0.0000	176.4980	176.4980	0.0345	0.0000	177.3602

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	1.1200e-003	0.0416	0.0167	2.0000e-004	7.1400e-003	2.0000e-004	7.3500e-003	2.0600e-003	2.0000e-004	2.2600e-003	0.0000	20.3251	20.3251	1.2100e-003	2.9200e-003	21.2251
Worker	0.0119	8.5100e-003	0.1229	3.8000e-004	0.0462	2.4000e-004	0.0465	0.0123	2.2000e-004	0.0125	0.0000	35.5974	35.5974	8.2000e-004	8.5000e-004	35.8709
Total	0.0130	0.0501	0.1396	5.8000e-004	0.0534	4.4000e-004	0.0538	0.0143	4.2000e-004	0.0148	0.0000	55.9225	55.9225	2.0300e-003	3.7700e-003	57.0960

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3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.4000e-003	0.0431	0.0584	9.0000e-005		2.1700e-003	2.1700e-003		2.0000e-003	2.0000e-003	0.0000	7.7564	7.7564	2.4600e-003	0.0000	7.8179
Paving	1.0500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	5.4500e-003	0.0431	0.0584	9.0000e-005		2.1700e-003	2.1700e-003		2.0000e-003	2.0000e-003	0.0000	7.7564	7.7564	2.4600e-003	0.0000	7.8179

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	2.1000e-004	1.5000e-004	2.1900e-003	1.0000e-005	8.2000e-004	0.0000	8.3000e-004	2.2000e-004	0.0000	2.2000e-004	0.0000	0.6339	0.6339	1.0000e-005	2.0000e-005	0.6387
Total	2.1000e-004	1.5000e-004	2.1900e-003	1.0000e-005	8.2000e-004	0.0000	8.3000e-004	2.2000e-004	0.0000	2.2000e-004	0.0000	0.6339	0.6339	1.0000e-005	2.0000e-005	0.6387

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3.6 Paving - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.4000e-003	0.0431	0.0584	9.0000e-005		2.1700e-003	2.1700e-003		2.0000e-003	2.0000e-003	0.0000	7.7564	7.7564	2.4600e-003	0.0000	7.8178
Paving	1.0500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	5.4500e-003	0.0431	0.0584	9.0000e-005		2.1700e-003	2.1700e-003		2.0000e-003	2.0000e-003	0.0000	7.7564	7.7564	2.4600e-003	0.0000	7.8178

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	2.1000e-004	1.5000e-004	2.1900e-003	1.0000e-005	8.2000e-004	0.0000	8.3000e-004	2.2000e-004	0.0000	2.2000e-004	0.0000	0.6339	0.6339	1.0000e-005	2.0000e-005	0.6387
Total	2.1000e-004	1.5000e-004	2.1900e-003	1.0000e-005	8.2000e-004	0.0000	8.3000e-004	2.2000e-004	0.0000	2.2000e-004	0.0000	0.6339	0.6339	1.0000e-005	2.0000e-005	0.6387

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3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1817					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.2800e-003	8.6900e-003	0.0121	2.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	1.7022	1.7022	1.0000e-004	0.0000	1.7047
Total	0.1830	8.6900e-003	0.0121	2.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	1.7022	1.7022	1.0000e-004	0.0000	1.7047

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	1.4000e-004	1.0000e-004	1.4600e-003	0.0000	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4226	0.4226	1.0000e-005	1.0000e-005	0.4258
Total	1.4000e-004	1.0000e-004	1.4600e-003	0.0000	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4226	0.4226	1.0000e-005	1.0000e-005	0.4258

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3.7 Architectural Coating - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1817					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.2800e-003	8.6900e-003	0.0121	2.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	1.7022	1.7022	1.0000e-004	0.0000	1.7047
Total	0.1830	8.6900e-003	0.0121	2.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	1.7022	1.7022	1.0000e-004	0.0000	1.7047

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	1.4000e-004	1.0000e-004	1.4600e-003	0.0000	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4226	0.4226	1.0000e-005	1.0000e-005	0.4258
Total	1.4000e-004	1.0000e-004	1.4600e-003	0.0000	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4226	0.4226	1.0000e-005	1.0000e-005	0.4258

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1267	0.1473	1.3260	3.0600e-003	0.3284	2.1100e-003	0.3305	0.0877	1.9600e-003	0.0896	0.0000	285.5706	285.5706	0.0172	0.0119	289.5448
Unmitigated	0.1267	0.1473	1.3260	3.0600e-003	0.3284	2.1100e-003	0.3305	0.0877	1.9600e-003	0.0896	0.0000	285.5706	285.5706	0.0172	0.0119	289.5448

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	256.20	284.90	219.80	871,715	871,715
City Park	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	256.20	284.90	219.80	871,715	871,715

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.544795	0.058861	0.186903	0.129401	0.024381	0.006522	0.014242	0.004855	0.000656	0.000385	0.024332	0.000723	0.003942
City Park	0.544795	0.058861	0.186903	0.129401	0.024381	0.006522	0.014242	0.004855	0.000656	0.000385	0.024332	0.000723	0.003942
Other Asphalt Surfaces	0.544795	0.058861	0.186903	0.129401	0.024381	0.006522	0.014242	0.004855	0.000656	0.000385	0.024332	0.000723	0.003942

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	24.9576	24.9576	2.1100e-003	2.6000e-004	25.0864
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	24.9576	24.9576	2.1100e-003	2.6000e-004	25.0864
NaturalGas Mitigated	2.3400e-003	0.0200	8.5200e-003	1.3000e-004		1.6200e-003	1.6200e-003		1.6200e-003	1.6200e-003	0.0000	23.1956	23.1956	4.4000e-004	4.3000e-004	23.3335
NaturalGas Unmitigated	2.3400e-003	0.0200	8.5200e-003	1.3000e-004		1.6200e-003	1.6200e-003		1.6200e-003	1.6200e-003	0.0000	23.1956	23.1956	4.4000e-004	4.3000e-004	23.3335

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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					
Apartments Low Rise	434670	2.3400e-003	0.0200	8.5200e-003	1.3000e-004		1.6200e-003	1.6200e-003		1.6200e-003	1.6200e-003	0.0000	23.1956	23.1956	4.4000e-004	4.3000e-004	23.3335
City Park	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
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
Total		2.3400e-003	0.0200	8.5200e-003	1.3000e-004		1.6200e-003	1.6200e-003		1.6200e-003	1.6200e-003	0.0000	23.1956	23.1956	4.4000e-004	4.3000e-004	23.3335

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5.2 Energy by Land Use - NaturalGas

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					
Apartments Low Rise	434670	2.3400e-003	0.0200	8.5200e-003	1.3000e-004		1.6200e-003	1.6200e-003		1.6200e-003	1.6200e-003	0.0000	23.1956	23.1956	4.4000e-004	4.3000e-004	23.3335
City Park	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
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
Total		2.3400e-003	0.0200	8.5200e-003	1.3000e-004		1.6200e-003	1.6200e-003		1.6200e-003	1.6200e-003	0.0000	23.1956	23.1956	4.4000e-004	4.3000e-004	23.3335

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	140729	24.9576	2.1100e- 003	2.6000e- 004	25.0864
City Park	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		24.9576	2.1100e- 003	2.6000e- 004	25.0864

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**5.3 Energy by Land Use - Electricity****Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	140729	24.9576	2.1100e-003	2.6000e-004	25.0864
City Park	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		24.9576	2.1100e-003	2.6000e-004	25.0864

6.0 Area Detail**6.1 Mitigation Measures Area**

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2386	4.1600e-003	0.3610	2.0000e-005		2.0000e-003	2.0000e-003		2.0000e-003	2.0000e-003	0.0000	0.5896	0.5896	5.7000e-004	0.0000	0.6038
Unmitigated	0.2389	4.1600e-003	0.3610	2.0000e-005		2.0000e-003	2.0000e-003		2.0000e-003	2.0000e-003	0.0000	0.5896	0.5896	5.7000e-004	0.0000	0.6038

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	0.0184					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2096					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	0.0109	4.1600e-003	0.3610	2.0000e-005		2.0000e-003	2.0000e-003		2.0000e-003	2.0000e-003	0.0000	0.5896	0.5896	5.7000e-004	0.0000	0.6038
Total	0.2389	4.1600e-003	0.3610	2.0000e-005		2.0000e-003	2.0000e-003		2.0000e-003	2.0000e-003	0.0000	0.5896	0.5896	5.7000e-004	0.0000	0.6038

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0182					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2096					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	0.0109	4.1600e-003	0.3610	2.0000e-005		2.0000e-003	2.0000e-003		2.0000e-003	2.0000e-003	0.0000	0.5896	0.5896	5.7000e-004	0.0000	0.6038
Total	0.2386	4.1600e-003	0.3610	2.0000e-005		2.0000e-003	2.0000e-003		2.0000e-003	2.0000e-003	0.0000	0.5896	0.5896	5.7000e-004	0.0000	0.6038

7.0 Water Detail

7.1 Mitigation Measures Water

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	10.3949	0.0751	1.8500e-003	12.8253
Unmitigated	10.3949	0.0751	1.8500e-003	12.8253

7.2 Water by Land Use**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	2.28039 / 1.43764	8.8220	0.0750	1.8400e-003	11.2443
City Park	0 / 0.798292	1.5729	1.3000e-004	2.0000e-005	1.5810
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		10.3949	0.0751	1.8600e-003	12.8253

Holly Triangle Proposed Project - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**7.2 Water by Land Use****Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	2.28039 / 1.43764	8.8220	0.0750	1.8400e-003	11.2443
City Park	0 / 0.798292	1.5729	1.3000e-004	2.0000e-005	1.5810
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		10.3949	0.0751	1.8600e-003	12.8253

8.0 Waste Detail**8.1 Mitigation Measures Waste**

Holly Triangle Proposed Project - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	3.2803	0.1939	0.0000	8.1269
Unmitigated	3.2803	0.1939	0.0000	8.1269

8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	16.1	3.2682	0.1931	0.0000	8.0967
City Park	0.06	0.0122	7.2000e-004	0.0000	0.0302
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		3.2803	0.1939	0.0000	8.1269

Holly Triangle Proposed Project - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**8.2 Waste by Land Use****Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	16.1	3.2682	0.1931	0.0000	8.0967
City Park	0.06	0.0122	7.2000e-004	0.0000	0.0302
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		3.2803	0.1939	0.0000	8.1269

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

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

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

Equipment Type	Number
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Holly Triangle Proposed Project - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

11.0 Vegetation

Neighborhood Commercial - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Neighborhood Commercial

Orange County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	0.94	Acre	0.94	40,946.40	0
Strip Mall	117.61	1000sqft	1.17	117,612.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	30
Climate Zone	8			Operational Year	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Lot acreage based on site plan.

Construction Phase - Operational Analysis Only.

Off-road Equipment - Operational Analysis Only.

Trips and VMT - Operational Analysis Only.

Vehicle Trips - Used Fitted Curve rate for Shopping Center (ITE 10ed Land Use Code 820)

Area Mitigation - SCAQMD Rule 1113

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	100	50
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	100	50

Neighborhood Commercial - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	100	50
tblConstructionPhase	NumDays	10.00	0.00
tblLandUse	LotAcreage	2.70	1.17
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblTripsAndVMT	WorkerTripNumber	11.00	0.00
tblVehicleTrips	ST_TR	42.04	83.80
tblVehicleTrips	SU_TR	20.43	21.10
tblVehicleTrips	WD_TR	44.32	57.08

2.0 Emissions Summary

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Unmitigated Construction

Mitigated Construction

[illegible]

Neighborhood Commercial - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.6462	1.1000e-004	0.0121	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0260	0.0260	7.0000e-005		0.0277
Energy	6.9200e-003	0.0629	0.0528	3.8000e-004		4.7800e-003	4.7800e-003		4.7800e-003	4.7800e-003		75.4385	75.4385	1.4500e-003	1.3800e-003	75.8868
Mobile	21.2049	19.8277	178.9398	0.3642	39.5109	0.2670	39.7779	10.5312	0.2480	10.7793		37,465.79 15	37,465.79 15	2.7965	1.7989	38,071.78 62
Total	23.8580	19.8907	179.0048	0.3646	39.5109	0.2718	39.7827	10.5312	0.2528	10.7841		37,541.25 59	37,541.25 59	2.7980	1.8003	38,147.70 06

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.4953	1.1000e-004	0.0121	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0260	0.0260	7.0000e-005		0.0277
Energy	6.9200e-003	0.0629	0.0528	3.8000e-004		4.7800e-003	4.7800e-003		4.7800e-003	4.7800e-003		75.4385	75.4385	1.4500e-003	1.3800e-003	75.8868
Mobile	21.2049	19.8277	178.9398	0.3642	39.5109	0.2670	39.7779	10.5312	0.2480	10.7793		37,465.79 15	37,465.79 15	2.7965	1.7989	38,071.78 62
Total	23.7071	19.8907	179.0048	0.3646	39.5109	0.2718	39.7827	10.5312	0.2528	10.7841		37,541.25 59	37,541.25 59	2.7980	1.8003	38,147.70 06

Neighborhood Commercial - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	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	0.63	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	Operational Analysis Only	Architectural Coating	2/3/2023	2/2/2023	5	0	

Acres of Grading (Site Preparation Phase): 0**Acres of Grading (Grading Phase): 0****Acres of Paving: 0.94****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 176,418; Non-Residential Outdoor: 58,806; Striped Parking Area: 2,457 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Operational Analysis Only	Air Compressors	0	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Operational Analysis Only	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Unmitigated Construction On-Site

[illegible]

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Mitigated Construction On-Site

[illegible]

Neighborhood Commercial - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	lb/day										lb/day					
Mitigated	21.2049	19.8277	178.9398	0.3642	39.5109	0.2670	39.7779	10.5312	0.2480	10.7793		37,465.79 15	37,465.79 15	2.7965	1.7989	38,071.78 62
Unmitigated	21.2049	19.8277	178.9398	0.3642	39.5109	0.2670	39.7779	10.5312	0.2480	10.7793		37,465.79 15	37,465.79 15	2.7965	1.7989	38,071.78 62

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Strip Mall	6,713.29	9,855.89	2,481.61	12,476,666	12,476,666
Total	6,713.29	9,855.89	2,481.61	12,476,666	12,476,666

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Neighborhood Commercial - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.544795	0.058861	0.186903	0.129401	0.024381	0.006522	0.014242	0.004855	0.000656	0.000385	0.024332	0.000723	0.003942
Strip Mall	0.544795	0.058861	0.186903	0.129401	0.024381	0.006522	0.014242	0.004855	0.000656	0.000385	0.024332	0.000723	0.003942

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	6.9200e-003	0.0629	0.0528	3.8000e-004		4.7800e-003	4.7800e-003		4.7800e-003	4.7800e-003		75.4385	75.4385	1.4500e-003	1.3800e-003	75.8868
NaturalGas Unmitigated	6.9200e-003	0.0629	0.0528	3.8000e-004		4.7800e-003	4.7800e-003		4.7800e-003	4.7800e-003		75.4385	75.4385	1.4500e-003	1.3800e-003	75.8868

Neighborhood Commercial - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
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
Strip Mall	641.227	6.9200e-003	0.0629	0.0528	3.8000e-004		4.7800e-003	4.7800e-003		4.7800e-003	4.7800e-003		75.4385	75.4385	1.4500e-003	1.3800e-003	75.8868
Total		6.9200e-003	0.0629	0.0528	3.8000e-004		4.7800e-003	4.7800e-003		4.7800e-003	4.7800e-003		75.4385	75.4385	1.4500e-003	1.3800e-003	75.8868

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
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
Strip Mall	0.641227	6.9200e-003	0.0629	0.0528	3.8000e-004		4.7800e-003	4.7800e-003		4.7800e-003	4.7800e-003		75.4385	75.4385	1.4500e-003	1.3800e-003	75.8868
Total		6.9200e-003	0.0629	0.0528	3.8000e-004		4.7800e-003	4.7800e-003		4.7800e-003	4.7800e-003		75.4385	75.4385	1.4500e-003	1.3800e-003	75.8868

6.0 Area Detail

Neighborhood Commercial - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**6.1 Mitigation Measures Area**

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.4953	1.1000e-004	0.0121	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0260	0.0260	7.0000e-005		0.0277
Unmitigated	2.6462	1.1000e-004	0.0121	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0260	0.0260	7.0000e-005		0.0277

Neighborhood Commercial - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3018					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.3432					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.1200e-003	1.1000e-004	0.0121	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0260	0.0260	7.0000e-005		0.0277
Total	2.6462	1.1000e-004	0.0121	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0260	0.0260	7.0000e-005		0.0277

Neighborhood Commercial - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1509					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.3432					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.1200e-003	1.1000e-004	0.0121	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0260	0.0260	7.0000e-005		0.0277
Total	2.4953	1.1000e-004	0.0121	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0260	0.0260	7.0000e-005		0.0277

7.0 Water Detail

7.1 Mitigation Measures Water

Neighborhood Commercial - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**8.0 Waste Detail**

8.1 Mitigation Measures Waste**9.0 Operational Offroad**

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

Neighborhood Commercial LST - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Neighborhood Commercial LST
Orange County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	0.94	Acre	0.94	40,946.40	0
Strip Mall	117.61	1000sqft	1.17	117,612.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	30
Climate Zone	8			Operational Year	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Lot acreage based on site plan.

Construction Phase - Operational Analysis Only.

Off-road Equipment - Operational Analysis Only.

Trips and VMT - Operational Analysis Only.

Vehicle Trips - Used Fitted Curve rate for Shopping Center (ITE 10ed Land Use Code 820). Trip length to analyze onsite emissions only.

Area Mitigation - SCAQMD Rule 1113

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	100	50
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	100	50

Neighborhood Commercial LST - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	100	50
tblConstructionPhase	NumDays	10.00	0.00
tblLandUse	LotAcreage	2.70	1.17
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblTripsAndVMT	WorkerTripNumber	11.00	0.00
tblVehicleTrips	CC_TL	8.40	0.10
tblVehicleTrips	CNW_TL	6.90	0.10
tblVehicleTrips	CW_TL	16.60	0.10
tblVehicleTrips	ST_TR	42.04	83.80
tblVehicleTrips	SU_TR	20.43	21.10
tblVehicleTrips	WD_TR	44.32	57.08

2.0 Emissions Summary

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Unmitigated Construction

Mitigated Construction

[illegible]

Neighborhood Commercial LST - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.6462	1.1000e-004	0.0121	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0260	0.0260	7.0000e-005		0.0277
Energy	6.9200e-003	0.0629	0.0528	3.8000e-004		4.7800e-003	4.7800e-003		4.7800e-003	4.7800e-003		75.4385	75.4385	1.4500e-003	1.3800e-003	75.8868
Mobile	13.4245	6.1963	54.3905	0.0181	0.5291	0.0417	0.5709	0.1410	0.0385	0.1795		1,865.4430	1,865.4430	1.2351	0.6004	2,075.2484
Total	16.0776	6.2593	54.4555	0.0185	0.5291	0.0466	0.5757	0.1410	0.0433	0.1844		1,940.9074	1,940.9074	1.2366	0.6018	2,151.1628

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.4953	1.1000e-004	0.0121	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0260	0.0260	7.0000e-005		0.0277
Energy	6.9200e-003	0.0629	0.0528	3.8000e-004		4.7800e-003	4.7800e-003		4.7800e-003	4.7800e-003		75.4385	75.4385	1.4500e-003	1.3800e-003	75.8868
Mobile	13.4245	6.1963	54.3905	0.0181	0.5291	0.0417	0.5709	0.1410	0.0385	0.1795		1,865.4430	1,865.4430	1.2351	0.6004	2,075.2484
Total	15.9267	6.2593	54.4555	0.0185	0.5291	0.0466	0.5757	0.1410	0.0433	0.1844		1,940.9074	1,940.9074	1.2366	0.6018	2,151.1628

Neighborhood Commercial LST - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	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	0.94	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	Operational Analysis Only	Architectural Coating	2/3/2023	2/2/2023	5	0	

Acres of Grading (Site Preparation Phase): 0**Acres of Grading (Grading Phase): 0****Acres of Paving: 0.94****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 176,418; Non-Residential Outdoor: 58,806; Striped Parking Area: 2,457 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Operational Analysis Only	Air Compressors	0	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Operational Analysis Only	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Neighborhood Commercial LST - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Operational Analysis Only - 2023

Unmitigated Construction On-Site

[illegible]

Unmitigated Construction Off-Site

[illegible]

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Mitigated Construction On-Site

[illegible]

Neighborhood Commercial LST - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	lb/day										lb/day					
Mitigated	13.4245	6.1963	54.3905	0.0181	0.5291	0.0417	0.5709	0.1410	0.0385	0.1795		1,865.443 0	1,865.443 0	1.2351	0.6004	2,075.248 4
Unmitigated	13.4245	6.1963	54.3905	0.0181	0.5291	0.0417	0.5709	0.1410	0.0385	0.1795		1,865.443 0	1,865.443 0	1.2351	0.6004	2,075.248 4

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Strip Mall	6,713.29	9,855.89	2,481.61	167,090	167,090
Total	6,713.29	9,855.89	2,481.61	167,090	167,090

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Strip Mall	0.10	0.10	0.10	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Neighborhood Commercial LST - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.544795	0.058861	0.186903	0.129401	0.024381	0.006522	0.014242	0.004855	0.000656	0.000385	0.024332	0.000723	0.003942
Strip Mall	0.544795	0.058861	0.186903	0.129401	0.024381	0.006522	0.014242	0.004855	0.000656	0.000385	0.024332	0.000723	0.003942

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	6.9200e-003	0.0629	0.0528	3.8000e-004		4.7800e-003	4.7800e-003		4.7800e-003	4.7800e-003		75.4385	75.4385	1.4500e-003	1.3800e-003	75.8868
NaturalGas Unmitigated	6.9200e-003	0.0629	0.0528	3.8000e-004		4.7800e-003	4.7800e-003		4.7800e-003	4.7800e-003		75.4385	75.4385	1.4500e-003	1.3800e-003	75.8868

Neighborhood Commercial LST - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
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
Strip Mall	641.227	6.9200e-003	0.0629	0.0528	3.8000e-004		4.7800e-003	4.7800e-003		4.7800e-003	4.7800e-003		75.4385	75.4385	1.4500e-003	1.3800e-003	75.8868
Total		6.9200e-003	0.0629	0.0528	3.8000e-004		4.7800e-003	4.7800e-003		4.7800e-003	4.7800e-003		75.4385	75.4385	1.4500e-003	1.3800e-003	75.8868

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
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
Strip Mall	0.641227	6.9200e-003	0.0629	0.0528	3.8000e-004		4.7800e-003	4.7800e-003		4.7800e-003	4.7800e-003		75.4385	75.4385	1.4500e-003	1.3800e-003	75.8868
Total		6.9200e-003	0.0629	0.0528	3.8000e-004		4.7800e-003	4.7800e-003		4.7800e-003	4.7800e-003		75.4385	75.4385	1.4500e-003	1.3800e-003	75.8868

6.0 Area Detail

Neighborhood Commercial LST - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**6.1 Mitigation Measures Area**

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.4953	1.1000e-004	0.0121	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0260	0.0260	7.0000e-005		0.0277
Unmitigated	2.6462	1.1000e-004	0.0121	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0260	0.0260	7.0000e-005		0.0277

Neighborhood Commercial LST - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3018					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.3432					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.1200e-003	1.1000e-004	0.0121	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0260	0.0260	7.0000e-005		0.0277
Total	2.6462	1.1000e-004	0.0121	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0260	0.0260	7.0000e-005		0.0277

Neighborhood Commercial LST - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1509					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.3432					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.1200e-003	1.1000e-004	0.0121	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0260	0.0260	7.0000e-005		0.0277
Total	2.4953	1.1000e-004	0.0121	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0260	0.0260	7.0000e-005		0.0277

7.0 Water Detail

7.1 Mitigation Measures Water

Neighborhood Commercial LST - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**8.0 Waste Detail**

8.1 Mitigation Measures Waste**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
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Holly Triangle Proposed Project LST - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Holly Triangle Proposed Project LST

Orange County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	0.80	Acre	0.80	34,848.00	0
City Park	0.67	Acre	0.67	29,185.20	0
Apartments Low Rise	35.00	Dwelling Unit	0.64	57,300.00	100

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	30
Climate Zone	8			Operational Year	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Lot Acreage from project site plan.

Construction Phase - Operational Analysis only.

Off-road Equipment - Operational Analysis only.

Trips and VMT - Operational Analysis Only.

Vehicle Trips - City park in place of landscaping and does not independently generate trips, trip length reduced to 0.1 miles to analyze onsite emissions only.

Woodstoves - No woodstoves or fireplaces proposed.

Area Coating - SCAQMD Rule 1113

Area Mitigation - SCAQMD Rule 1113

Holly Triangle Proposed Project LST - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblFireplaces	FireplaceDayYear	25.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	29.75	0.00
tblFireplaces	NumberNoFireplace	3.50	35.00
tblFireplaces	NumberWood	1.75	0.00
tblLandUse	LandUseSquareFeet	35,000.00	57,300.00
tblLandUse	LotAcreage	2.19	0.64
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblTripsAndVMT	WorkerTripNumber	10.00	0.00
tblVehicleTrips	HO_TL	8.70	0.10
tblVehicleTrips	HS_TL	5.90	0.10
tblVehicleTrips	HW_TL	14.70	0.10
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	WD_TR	0.78	0.00
tblWoodstoves	NumberCatalytic	1.75	0.00
tblWoodstoves	NumberNoncatalytic	1.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Unmitigated Construction

Mitigated Construction

[illegible]

Holly Triangle Proposed Project LST - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.3363	0.0333	2.8883	1.5000e-004		0.0160	0.0160		0.0160	0.0160	0.0000	5.1997	5.1997	5.0000e-003	0.0000	5.3247
Energy	0.0128	0.1098	0.0467	7.0000e-004		8.8700e-003	8.8700e-003		8.8700e-003	8.8700e-003		140.1031	140.1031	2.6900e-003	2.5700e-003	140.9357
Mobile	0.3890	0.1808	1.5874	5.7000e-004	0.0201	1.2300e-003	0.0213	5.3400e-003	1.1400e-003	6.4800e-003		58.2639	58.2639	0.0359	0.0175	64.3770
Total	1.7381	0.3238	4.5225	1.4200e-003	0.0201	0.0261	0.0461	5.3400e-003	0.0260	0.0313	0.0000	203.5667	203.5667	0.0436	0.0201	210.6373

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.3363	0.0333	2.8883	1.5000e-004		0.0160	0.0160		0.0160	0.0160	0.0000	5.1997	5.1997	5.0000e-003	0.0000	5.3247
Energy	0.0128	0.1098	0.0467	7.0000e-004		8.8700e-003	8.8700e-003		8.8700e-003	8.8700e-003		140.1031	140.1031	2.6900e-003	2.5700e-003	140.9357
Mobile	0.3890	0.1808	1.5874	5.7000e-004	0.0201	1.2300e-003	0.0213	5.3400e-003	1.1400e-003	6.4800e-003		58.2639	58.2639	0.0359	0.0175	64.3770
Total	1.7381	0.3238	4.5225	1.4200e-003	0.0201	0.0261	0.0461	5.3400e-003	0.0260	0.0313	0.0000	203.5667	203.5667	0.0436	0.0201	210.6373

Holly Triangle Proposed Project LST - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	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	Architectural Coating	Architectural Coating	2/7/2022	2/18/2022	5	10	

Acres of Grading (Site Preparation Phase): 0**Acres of Grading (Grading Phase): 0****Acres of Paving: 0.8****Residential Indoor: 116,033; Residential Outdoor: 38,678; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 2,091 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	0	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Holly Triangle Proposed Project LST - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.2 Architectural Coating - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	36.8235					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
Total	36.8235	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Unmitigated Construction Off-Site

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

Holly Triangle Proposed Project LST - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.2 Architectural Coating - 2022****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	36.8235					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
Total	36.8235	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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
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
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

Holly Triangle Proposed Project LST - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	lb/day										lb/day					
Mitigated	0.3890	0.1808	1.5874	5.7000e-004	0.0201	1.2300e-003	0.0213	5.3400e-003	1.1400e-003	6.4800e-003		58.2639	58.2639	0.0359	0.0175	64.3770
Unmitigated	0.3890	0.1808	1.5874	5.7000e-004	0.0201	1.2300e-003	0.0213	5.3400e-003	1.1400e-003	6.4800e-003		58.2639	58.2639	0.0359	0.0175	64.3770

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	256.20	284.90	219.80	8,520	8,520
City Park	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	256.20	284.90	219.80	8,520	8,520

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	0.10	0.10	0.10	40.20	19.20	40.60	86	11	3
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

Holly Triangle Proposed Project LST - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.544795	0.058861	0.186903	0.129401	0.024381	0.006522	0.014242	0.004855	0.000656	0.000385	0.024332	0.000723	0.003942
City Park	0.544795	0.058861	0.186903	0.129401	0.024381	0.006522	0.014242	0.004855	0.000656	0.000385	0.024332	0.000723	0.003942
Other Asphalt Surfaces	0.544795	0.058861	0.186903	0.129401	0.024381	0.006522	0.014242	0.004855	0.000656	0.000385	0.024332	0.000723	0.003942

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0128	0.1098	0.0467	7.0000e-004		8.8700e-003	8.8700e-003		8.8700e-003	8.8700e-003		140.1031	140.1031	2.6900e-003	2.5700e-003	140.9357
NaturalGas Unmitigated	0.0128	0.1098	0.0467	7.0000e-004		8.8700e-003	8.8700e-003		8.8700e-003	8.8700e-003		140.1031	140.1031	2.6900e-003	2.5700e-003	140.9357

Holly Triangle Proposed Project LST - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1190.88	0.0128	0.1098	0.0467	7.0000e-004		8.8700e-003	8.8700e-003		8.8700e-003	8.8700e-003		140.1031	140.1031	2.6900e-003	2.5700e-003	140.9357
City Park	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
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
Total		0.0128	0.1098	0.0467	7.0000e-004		8.8700e-003	8.8700e-003		8.8700e-003	8.8700e-003		140.1031	140.1031	2.6900e-003	2.5700e-003	140.9357

Holly Triangle Proposed Project LST - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1.19088	0.0128	0.1098	0.0467	7.0000e- 004		8.8700e- 003	8.8700e- 003		8.8700e- 003	8.8700e- 003		140.1031	140.1031	2.6900e- 003	2.5700e- 003	140.9357
City Park	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
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
Total		0.0128	0.1098	0.0467	7.0000e- 004		8.8700e- 003	8.8700e- 003		8.8700e- 003	8.8700e- 003		140.1031	140.1031	2.6900e- 003	2.5700e- 003	140.9357

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Holly Triangle Proposed Project LST - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.3363	0.0333	2.8883	1.5000e-004		0.0160	0.0160		0.0160	0.0160	0.0000	5.1997	5.1997	5.0000e-003	0.0000	5.3247
Unmitigated	1.3363	0.0333	2.8883	1.5000e-004		0.0160	0.0160		0.0160	0.0160	0.0000	5.1997	5.1997	5.0000e-003	0.0000	5.3247

6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1009					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.1484					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	0.0870	0.0333	2.8883	1.5000e-004		0.0160	0.0160		0.0160	0.0160		5.1997	5.1997	5.0000e-003		5.3247
Total	1.3363	0.0333	2.8883	1.5000e-004		0.0160	0.0160		0.0160	0.0160	0.0000	5.1997	5.1997	5.0000e-003	0.0000	5.3247

Holly Triangle Proposed Project LST - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1009					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.1484					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	0.0870	0.0333	2.8883	1.5000e-004		0.0160	0.0160		0.0160	0.0160		5.1997	5.1997	5.0000e-003		5.3247
Total	1.3363	0.0333	2.8883	1.5000e-004		0.0160	0.0160		0.0160	0.0160	0.0000	5.1997	5.1997	5.0000e-003	0.0000	5.3247

7.0 Water Detail

7.1 Mitigation Measures Water

Holly Triangle Proposed Project LST - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**8.0 Waste Detail**

8.1 Mitigation Measures Waste**9.0 Operational Offroad**

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

Holly Triangle Proposed Project - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Holly Triangle Proposed Project

Orange County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	0.80	Acre	0.80	34,848.00	0
City Park	0.67	Acre	0.67	29,185.20	0
Apartments Low Rise	35.00	Dwelling Unit	0.64	57,300.00	100

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	30
Climate Zone	8			Operational Year	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Lot Acreage Based on site plan.

Off-road Equipment - Crawler Tractors in place of Tractors/Loaders/Backhoes

Off-road Equipment - Crawler Tractors in place of Tractors/Loaders/Backhoes

Off-road Equipment - Assumed 8hr work days

Off-road Equipment -

Off-road Equipment - Assumed 8hr work days

Demolition -

Architectural Coating - SCAQMD Rule 1113

Vehicle Trips - City park on place of landscaping, does not independently generate trips.

Holly Triangle Proposed Project - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Woodstoves - No woodstoves or fireplaces proposed.

Consumer Products -

Area Coating -

Construction Off-road Equipment Mitigation - SCAQMD Rule 403

Area Mitigation - SCAQMD Rule 1113

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Parking	100.00	50.00
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	100	50
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	100	50
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	100	50
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblFireplaces	FireplaceDayYear	25.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	29.75	0.00
tblFireplaces	NumberNoFireplace	3.50	35.00
tblFireplaces	NumberWood	1.75	0.00
tblLandUse	LandUseSquareFeet	35,000.00	57,300.00
tblLandUse	LotAcreage	2.19	0.64
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00

Holly Triangle Proposed Project - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	WD_TR	0.78	0.00
tblWoodstoves	NumberCatalytic	1.75	0.00
tblWoodstoves	NumberNoncatalytic	1.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

Holly Triangle Proposed Project - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**2.1 Overall Construction (Maximum Daily Emission)****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	2.2687	26.0891	17.0247	0.0337	8.2549	1.0386	9.2935	3.5689	0.9555	4.5244	0.0000	3,182.642 8	3,182.642 8	0.9682	0.0539	3,211.375 3
2023	36.6252	14.8632	16.7517	0.0334	0.6708	0.6529	1.3237	0.1799	0.6243	0.8042	0.0000	3,156.722 2	3,156.722 2	0.5452	0.0511	3,184.386 7
Maximum	36.6252	26.0891	17.0247	0.0337	8.2549	1.0386	9.2935	3.5689	0.9555	4.5244	0.0000	3,182.642 8	3,182.642 8	0.9682	0.0539	3,211.375 3

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	2.2687	26.0891	17.0247	0.0337	3.2876	1.0386	4.3262	1.4100	0.9555	2.3655	0.0000	3,182.642 8	3,182.642 8	0.9682	0.0539	3,211.375 3
2023	36.6252	14.8632	16.7517	0.0334	0.6708	0.6529	1.3237	0.1799	0.6243	0.8042	0.0000	3,156.722 2	3,156.722 2	0.5452	0.0511	3,184.386 7
Maximum	36.6252	26.0891	17.0247	0.0337	3.2876	1.0386	4.3262	1.4100	0.9555	2.3655	0.0000	3,182.642 8	3,182.642 8	0.9682	0.0539	3,211.375 3

Holly Triangle Proposed Project - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	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	55.65	0.00	46.79	57.59	0.00	40.52	0.00	0.00	0.00	0.00	0.00	0.00

Holly Triangle Proposed Project - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.3363	0.0333	2.8883	1.5000e-004		0.0160	0.0160		0.0160	0.0160	0.0000	5.1997	5.1997	5.0000e-003	0.0000	5.3247
Energy	0.0128	0.1098	0.0467	7.0000e-004		8.8700e-003	8.8700e-003		8.8700e-003	8.8700e-003		140.1031	140.1031	2.6900e-003	2.5700e-003	140.9357
Mobile	0.7944	0.8911	8.0775	0.0186	2.0513	0.0130	2.0643	0.5468	0.0121	0.5588		1,913.3284	1,913.3284	0.1173	0.0800	1,940.0861
Total	2.1436	1.0341	11.0125	0.0195	2.0513	0.0378	2.0891	0.5468	0.0369	0.5837	0.0000	2,058.6311	2,058.6311	0.1249	0.0825	2,086.3464

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.3350	0.0333	2.8883	1.5000e-004		0.0160	0.0160		0.0160	0.0160	0.0000	5.1997	5.1997	5.0000e-003	0.0000	5.3247
Energy	0.0128	0.1098	0.0467	7.0000e-004		8.8700e-003	8.8700e-003		8.8700e-003	8.8700e-003		140.1031	140.1031	2.6900e-003	2.5700e-003	140.9357
Mobile	0.7944	0.8911	8.0775	0.0186	2.0513	0.0130	2.0643	0.5468	0.0121	0.5588		1,913.3284	1,913.3284	0.1173	0.0800	1,940.0861
Total	2.1422	1.0341	11.0125	0.0195	2.0513	0.0378	2.0891	0.5468	0.0369	0.5837	0.0000	2,058.6311	2,058.6311	0.1249	0.0825	2,086.3464

Holly Triangle Proposed Project - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	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	0.06	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	9/1/2022	9/28/2022	5	20	
2	Site Preparation	Site Preparation	9/29/2022	10/3/2022	5	3	
3	Grading	Grading	10/4/2022	10/11/2022	5	6	
4	Building Construction	Building Construction	10/12/2022	8/15/2023	5	220	
5	Paving	Paving	8/16/2023	8/29/2023	5	10	
6	Architectural Coating	Architectural Coating	8/30/2023	9/12/2023	5	10	

Acres of Grading (Site Preparation Phase): 6**Acres of Grading (Grading Phase): 12****Acres of Paving: 0.8****Residential Indoor: 116,033; Residential Outdoor: 38,678; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 2,091 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Crawler Tractors	1	8.00	212	0.43
Site Preparation	Graders	1	8.00	187	0.41

Holly Triangle Proposed Project - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Grading	Crawler Tractors	2	8.00	212	0.43
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	8.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	19.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	52.00	14.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Holly Triangle Proposed Project - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2022**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2067	0.0000	0.2067	0.0313	0.0000	0.0313			0.0000			0.0000
Off-Road	1.6889	16.6217	13.9605	0.0241		0.8379	0.8379		0.7829	0.7829		2,323.4168	2,323.4168	0.5921		2,338.2191
Total	1.6889	16.6217	13.9605	0.0241	0.2067	0.8379	1.0446	0.0313	0.7829	0.8142		2,323.4168	2,323.4168	0.5921		2,338.2191

Holly Triangle Proposed Project - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	3.7500e-003	0.1537	0.0422	5.7000e-004	0.0166	1.1200e-003	0.0177	4.5400e-003	1.0700e-003	5.6100e-003		64.2444	64.2444	6.1200e-003	0.0103	67.4637
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
Worker	0.0426	0.0289	0.3981	1.2100e-003	0.1453	7.8000e-004	0.1461	0.0385	7.2000e-004	0.0393		122.6631	122.6631	3.0800e-003	3.0600e-003	123.6524
Total	0.0464	0.1826	0.4403	1.7800e-003	0.1619	1.9000e-003	0.1638	0.0431	1.7900e-003	0.0449		186.9075	186.9075	9.2000e-003	0.0134	191.1162

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0806	0.0000	0.0806	0.0122	0.0000	0.0122			0.0000			0.0000
Off-Road	1.6889	16.6217	13.9605	0.0241		0.8379	0.8379		0.7829	0.7829	0.0000	2,323.4168	2,323.4168	0.5921		2,338.2191
Total	1.6889	16.6217	13.9605	0.0241	0.0806	0.8379	0.9185	0.0122	0.7829	0.7951	0.0000	2,323.4168	2,323.4168	0.5921		2,338.2191

Holly Triangle Proposed Project - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	3.7500e-003	0.1537	0.0422	5.7000e-004	0.0166	1.1200e-003	0.0177	4.5400e-003	1.0700e-003	5.6100e-003		64.2444	64.2444	6.1200e-003	0.0103	67.4637
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
Worker	0.0426	0.0289	0.3981	1.2100e-003	0.1453	7.8000e-004	0.1461	0.0385	7.2000e-004	0.0393		122.6631	122.6631	3.0800e-003	3.0600e-003	123.6524
Total	0.0464	0.1826	0.4403	1.7800e-003	0.1619	1.9000e-003	0.1638	0.0431	1.7900e-003	0.0449		186.9075	186.9075	9.2000e-003	0.0134	191.1162

3.3 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.1210	0.0000	2.1210	0.2290	0.0000	0.2290			0.0000			0.0000
Off-Road	1.7262	20.2089	10.4124	0.0296		0.7430	0.7430		0.6836	0.6836		2,870.6052	2,870.6052	0.9284		2,893.8155
Total	1.7262	20.2089	10.4124	0.0296	2.1210	0.7430	2.8640	0.2290	0.6836	0.9126		2,870.6052	2,870.6052	0.9284		2,893.8155

Holly Triangle Proposed Project - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
Worker	0.0262	0.0178	0.2450	7.4000e-004	0.0894	4.8000e-004	0.0899	0.0237	4.4000e-004	0.0242		75.4850	75.4850	1.8900e-003	1.8800e-003	76.0938
Total	0.0262	0.0178	0.2450	7.4000e-004	0.0894	4.8000e-004	0.0899	0.0237	4.4000e-004	0.0242		75.4850	75.4850	1.8900e-003	1.8800e-003	76.0938

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.8272	0.0000	0.8272	0.0893	0.0000	0.0893			0.0000			0.0000
Off-Road	1.7262	20.2089	10.4124	0.0296		0.7430	0.7430		0.6836	0.6836	0.0000	2,870.6052	2,870.6052	0.9284		2,893.8155
Total	1.7262	20.2089	10.4124	0.0296	0.8272	0.7430	1.5702	0.0893	0.6836	0.7729	0.0000	2,870.6052	2,870.6052	0.9284		2,893.8155

Holly Triangle Proposed Project - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
Worker	0.0262	0.0178	0.2450	7.4000e-004	0.0894	4.8000e-004	0.0899	0.0237	4.4000e-004	0.0242		75.4850	75.4850	1.8900e-003	1.8800e-003	76.0938
Total	0.0262	0.0178	0.2450	7.4000e-004	0.0894	4.8000e-004	0.0899	0.0237	4.4000e-004	0.0242		75.4850	75.4850	1.8900e-003	1.8800e-003	76.0938

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.1431	0.0000	8.1431	3.5393	0.0000	3.5393			0.0000			0.0000
Off-Road	2.2359	26.0669	9.9334	0.0308		1.0380	1.0380		0.9550	0.9550		2,986.3790	2,986.3790	0.9659		3,010.5254
Total	2.2359	26.0669	9.9334	0.0308	8.1431	1.0380	9.1811	3.5393	0.9550	4.4942		2,986.3790	2,986.3790	0.9659		3,010.5254

Holly Triangle Proposed Project - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.4 Grading - 2022****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
Worker	0.0328	0.0222	0.3062	9.3000e-004	0.1118	6.0000e-004	0.1124	0.0296	5.6000e-004	0.0302		94.3562	94.3562	2.3700e-003	2.3600e-003	95.1173
Total	0.0328	0.0222	0.3062	9.3000e-004	0.1118	6.0000e-004	0.1124	0.0296	5.6000e-004	0.0302		94.3562	94.3562	2.3700e-003	2.3600e-003	95.1173

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.1758	0.0000	3.1758	1.3803	0.0000	1.3803			0.0000			0.0000
Off-Road	2.2359	26.0669	9.9334	0.0308		1.0380	1.0380		0.9550	0.9550	0.0000	2,986.3790	2,986.3790	0.9659		3,010.5254
Total	2.2359	26.0669	9.9334	0.0308	3.1758	1.0380	4.2138	1.3803	0.9550	2.3353	0.0000	2,986.3790	2,986.3790	0.9659		3,010.5254

Holly Triangle Proposed Project - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.4 Grading - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
Worker	0.0328	0.0222	0.3062	9.3000e-004	0.1118	6.0000e-004	0.1124	0.0296	5.6000e-004	0.0302		94.3562	94.3562	2.3700e-003	2.3600e-003	95.1173
Total	0.0328	0.0222	0.3062	9.3000e-004	0.1118	6.0000e-004	0.1124	0.0296	5.6000e-004	0.0302		94.3562	94.3562	2.3700e-003	2.3600e-003	95.1173

3.5 Building Construction - 2022**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9251	15.2867	15.2012	0.0262		0.7422	0.7422		0.7099	0.7099		2,401.5987	2,401.5987	0.4780		2,413.5486
Total	1.9251	15.2867	15.2012	0.0262		0.7422	0.7422		0.7099	0.7099		2,401.5987	2,401.5987	0.4780		2,413.5486

Holly Triangle Proposed Project - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0230	0.6528	0.2310	2.6500e-003	0.0895	6.1300e-003	0.0957	0.0258	5.8700e-003	0.0316		290.3917	290.3917	0.0166	0.0417	303.2170
Worker	0.1704	0.1155	1.5925	4.8200e-003	0.5812	3.1400e-003	0.5844	0.1542	2.8900e-003	0.1570		490.6524	490.6524	0.0123	0.0123	494.6097
Total	0.1934	0.7683	1.8235	7.4700e-003	0.6708	9.2700e-003	0.6800	0.1799	8.7600e-003	0.1887		781.0441	781.0441	0.0289	0.0539	797.8267

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9251	15.2867	15.2012	0.0262		0.7422	0.7422		0.7099	0.7099	0.0000	2,401.5987	2,401.5987	0.4780		2,413.5486
Total	1.9251	15.2867	15.2012	0.0262		0.7422	0.7422		0.7099	0.7099	0.0000	2,401.5987	2,401.5987	0.4780		2,413.5486

Holly Triangle Proposed Project - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Building Construction - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0230	0.6528	0.2310	2.6500e-003	0.0895	6.1300e-003	0.0957	0.0258	5.8700e-003	0.0316		290.3917	290.3917	0.0166	0.0417	303.2170
Worker	0.1704	0.1155	1.5925	4.8200e-003	0.5812	3.1400e-003	0.5844	0.1542	2.8900e-003	0.1570		490.6524	490.6524	0.0123	0.0123	494.6097
Total	0.1934	0.7683	1.8235	7.4700e-003	0.6708	9.2700e-003	0.6800	0.1799	8.7600e-003	0.1887		781.0441	781.0441	0.0289	0.0539	797.8267

3.5 Building Construction - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7771	14.2478	15.0585	0.0262		0.6474	0.6474		0.6191	0.6191		2,401.9252	2,401.9252	0.4693		2,413.6585
Total	1.7771	14.2478	15.0585	0.0262		0.6474	0.6474		0.6191	0.6191		2,401.9252	2,401.9252	0.4693		2,413.6585

Holly Triangle Proposed Project - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0136	0.5125	0.2099	2.5200e-003	0.0895	2.5300e-003	0.0921	0.0258	2.4200e-003	0.0282		276.8357	276.8357	0.0164	0.0398	289.0923
Worker	0.1601	0.1029	1.4833	4.6700e-003	0.5812	2.9700e-003	0.5842	0.1542	2.7400e-003	0.1569		477.9614	477.9614	0.0112	0.0114	481.6359
Total	0.1738	0.6155	1.6932	7.1900e-003	0.6708	5.5000e-003	0.6763	0.1799	5.1600e-003	0.1851		754.7971	754.7971	0.0276	0.0511	770.7281

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7771	14.2478	15.0585	0.0262		0.6474	0.6474		0.6191	0.6191	0.0000	2,401.9252	2,401.9252	0.4693		2,413.6585
Total	1.7771	14.2478	15.0585	0.0262		0.6474	0.6474		0.6191	0.6191	0.0000	2,401.9252	2,401.9252	0.4693		2,413.6585

Holly Triangle Proposed Project - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0136	0.5125	0.2099	2.5200e-003	0.0895	2.5300e-003	0.0921	0.0258	2.4200e-003	0.0282		276.8357	276.8357	0.0164	0.0398	289.0923
Worker	0.1601	0.1029	1.4833	4.6700e-003	0.5812	2.9700e-003	0.5842	0.1542	2.7400e-003	0.1569		477.9614	477.9614	0.0112	0.0114	481.6359
Total	0.1738	0.6155	1.6932	7.1900e-003	0.6708	5.5000e-003	0.6763	0.1799	5.1600e-003	0.1851		754.7971	754.7971	0.0276	0.0511	770.7281

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8802	8.6098	11.6840	0.0179		0.4338	0.4338		0.4003	0.4003		1,709.9926	1,709.9926	0.5420		1,723.5414
Paving	0.2096					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0898	8.6098	11.6840	0.0179		0.4338	0.4338		0.4003	0.4003		1,709.9926	1,709.9926	0.5420		1,723.5414

Holly Triangle Proposed Project - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.6 Paving - 2023****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
Worker	0.0462	0.0297	0.4279	1.3500e-003	0.1677	8.6000e-004	0.1685	0.0445	7.9000e-004	0.0453		137.8735	137.8735	3.2200e-003	3.2900e-003	138.9334
Total	0.0462	0.0297	0.4279	1.3500e-003	0.1677	8.6000e-004	0.1685	0.0445	7.9000e-004	0.0453		137.8735	137.8735	3.2200e-003	3.2900e-003	138.9334

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8802	8.6098	11.6840	0.0179		0.4338	0.4338		0.4003	0.4003	0.0000	1,709.9926	1,709.9926	0.5420		1,723.5414
Paving	0.2096					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0898	8.6098	11.6840	0.0179		0.4338	0.4338		0.4003	0.4003	0.0000	1,709.9926	1,709.9926	0.5420		1,723.5414

Holly Triangle Proposed Project - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
Worker	0.0462	0.0297	0.4279	1.3500e-003	0.1677	8.6000e-004	0.1685	0.0445	7.9000e-004	0.0453		137.8735	137.8735	3.2200e-003	3.2900e-003	138.9334
Total	0.0462	0.0297	0.4279	1.3500e-003	0.1677	8.6000e-004	0.1685	0.0445	7.9000e-004	0.0453		137.8735	137.8735	3.2200e-003	3.2900e-003	138.9334

3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	36.3389					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2556	1.7373	2.4148	3.9600e-003		0.0944	0.0944		0.0944	0.0944		375.2641	375.2641	0.0225		375.8253
Total	36.5944	1.7373	2.4148	3.9600e-003		0.0944	0.0944		0.0944	0.0944		375.2641	375.2641	0.0225		375.8253

Holly Triangle Proposed Project - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.7 Architectural Coating - 2023****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
Worker	0.0308	0.0198	0.2853	9.0000e-004	0.1118	5.7000e-004	0.1124	0.0296	5.3000e-004	0.0302		91.9157	91.9157	2.1500e-003	2.1900e-003	92.6223
Total	0.0308	0.0198	0.2853	9.0000e-004	0.1118	5.7000e-004	0.1124	0.0296	5.3000e-004	0.0302		91.9157	91.9157	2.1500e-003	2.1900e-003	92.6223

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	36.3389					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2556	1.7373	2.4148	3.9600e-003		0.0944	0.0944		0.0944	0.0944	0.0000	375.2641	375.2641	0.0225		375.8253
Total	36.5944	1.7373	2.4148	3.9600e-003		0.0944	0.0944		0.0944	0.0944	0.0000	375.2641	375.2641	0.0225		375.8253

Holly Triangle Proposed Project - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.7 Architectural Coating - 2023****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
Worker	0.0308	0.0198	0.2853	9.0000e-004	0.1118	5.7000e-004	0.1124	0.0296	5.3000e-004	0.0302		91.9157	91.9157	2.1500e-003	2.1900e-003	92.6223
Total	0.0308	0.0198	0.2853	9.0000e-004	0.1118	5.7000e-004	0.1124	0.0296	5.3000e-004	0.0302		91.9157	91.9157	2.1500e-003	2.1900e-003	92.6223

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

Holly Triangle Proposed Project - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.7944	0.8911	8.0775	0.0186	2.0513	0.0130	2.0643	0.5468	0.0121	0.5588		1,913.328 4	1,913.328 4	0.1173	0.0800	1,940.086 1
Unmitigated	0.7944	0.8911	8.0775	0.0186	2.0513	0.0130	2.0643	0.5468	0.0121	0.5588		1,913.328 4	1,913.328 4	0.1173	0.0800	1,940.086 1

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	256.20	284.90	219.80	871,715	871,715
City Park	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	256.20	284.90	219.80	871,715	871,715

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Other Asphalt Surfaces	16.60	8.40	6.90	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
Apartments Low Rise	0.544795	0.058861	0.186903	0.129401	0.024381	0.006522	0.014242	0.004855	0.000656	0.000385	0.024332	0.000723	0.003942
City Park	0.544795	0.058861	0.186903	0.129401	0.024381	0.006522	0.014242	0.004855	0.000656	0.000385	0.024332	0.000723	0.003942

Holly Triangle Proposed Project - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Other Asphalt Surfaces	0.544795	0.058861	0.186903	0.129401	0.024381	0.006522	0.014242	0.004855	0.000656	0.000385	0.024332	0.000723	0.003942
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5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0128	0.1098	0.0467	7.0000e-004		8.8700e-003	8.8700e-003		8.8700e-003	8.8700e-003		140.1031	140.1031	2.6900e-003	2.5700e-003	140.9357
NaturalGas Unmitigated	0.0128	0.1098	0.0467	7.0000e-004		8.8700e-003	8.8700e-003		8.8700e-003	8.8700e-003		140.1031	140.1031	2.6900e-003	2.5700e-003	140.9357

Holly Triangle Proposed Project - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**5.2 Energy by Land Use - NaturalGas****Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1190.88	0.0128	0.1098	0.0467	7.0000e-004		8.8700e-003	8.8700e-003		8.8700e-003	8.8700e-003		140.1031	140.1031	2.6900e-003	2.5700e-003	140.9357
City Park	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
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
Total		0.0128	0.1098	0.0467	7.0000e-004		8.8700e-003	8.8700e-003		8.8700e-003	8.8700e-003		140.1031	140.1031	2.6900e-003	2.5700e-003	140.9357

Holly Triangle Proposed Project - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1.19088	0.0128	0.1098	0.0467	7.0000e-004		8.8700e-003	8.8700e-003		8.8700e-003	8.8700e-003		140.1031	140.1031	2.6900e-003	2.5700e-003	140.9357
City Park	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
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
Total		0.0128	0.1098	0.0467	7.0000e-004		8.8700e-003	8.8700e-003		8.8700e-003	8.8700e-003		140.1031	140.1031	2.6900e-003	2.5700e-003	140.9357

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Holly Triangle Proposed Project - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.3350	0.0333	2.8883	1.5000e-004		0.0160	0.0160		0.0160	0.0160	0.0000	5.1997	5.1997	5.0000e-003	0.0000	5.3247
Unmitigated	1.3363	0.0333	2.8883	1.5000e-004		0.0160	0.0160		0.0160	0.0160	0.0000	5.1997	5.1997	5.0000e-003	0.0000	5.3247

6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1009					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.1484					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	0.0870	0.0333	2.8883	1.5000e-004		0.0160	0.0160		0.0160	0.0160		5.1997	5.1997	5.0000e-003		5.3247
Total	1.3363	0.0333	2.8883	1.5000e-004		0.0160	0.0160		0.0160	0.0160	0.0000	5.1997	5.1997	5.0000e-003	0.0000	5.3247

Holly Triangle Proposed Project - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0996					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.1484					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	0.0870	0.0333	2.8883	1.5000e-004		0.0160	0.0160		0.0160	0.0160		5.1997	5.1997	5.0000e-003		5.3247
Total	1.3350	0.0333	2.8883	1.5000e-004		0.0160	0.0160		0.0160	0.0160	0.0000	5.1997	5.1997	5.0000e-003	0.0000	5.3247

7.0 Water Detail

7.1 Mitigation Measures Water

Holly Triangle Proposed Project - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**8.0 Waste Detail**

8.1 Mitigation Measures Waste**9.0 Operational Offroad**

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation
