

MEMORANDUM

DATE: October 5, 2021

To: Kevin Kent, TK Management Services, LLC

FROM: Jeffrey Haynes, Air Quality Specialist

SUBJECT: Air Quality and Greenhouse Gas Emission Estimate Tables for the TTM No. 38151 Madone Collections (TKM2101)

This Air Quality and Greenhouse Gas Emissions Analysis has been prepared to evaluate the impacts associated with the proposed TTM No. 38151 Madone Collections Project (project). The project was evaluated for using the latest version of the California Emissions Estimator Model (CalEEMod Version 2020.4.0). The project would develop a community consisting of 36 single-family homes each on 4,634 square foot (ft) lots with private streets, community parks, trails, gardens, walkways, and a dog park. The project would construct homes ranging from 1,354 sf to 2,375 sf depending on the future home owners selected specifications. As a conservative approach, the maximum square footage was modeled for all homes in CalEEMod. Solar panels would be installed on each home, capable of generating 2kW of energy.

The proposed project would tentatively begin construction in August 2022 and be completed in December of 2023, a duration of approximately 16 months. The model was conducted using assumptions on construction schedule, traffic volumes, building construction details, demolition estimates, and the others assumptions listed below were entered into CalEEMod. For information that was not available, CalEEMod defaults were assumed. The project emission results is provided in Attachment A. The proposed project's regional map and vicinity are shown in Figure 1, and the project Site Plan is shown in Figure 2 are provided in Attachment B. CalEEMod outputs are provided in Attachment C.

CalEEMod assumptions:

- Construction tentative schedule August 2022 to December 2022 (16 months).
- Demolition and removal of existing structures onsite (approximately 7,000 sf).
- Building construction and architectural coating phases extended.
- 36 Single-family homes with 4,634 sf lots, total project site 6.92 acres.
- Trip generation rate of 9.44 for 340 average daily trips (ADTs).
- No wood-burning stoves or wood-burning fireplaces.
- Water efficient landscaping and irrigation.
- Photo voltaic (PV) cells would be installed. PV cells would generate 2kW per home.
- SAFE Rule emission factors applied.

Standard conditions applied to the CalEEMod:

- SCAQMD Rule 403: Fugitive Dust Control Measure – Water exposed soil areas at least twice daily.
- SCQMD Rule 1113: Use of low VOC paints for interior paints.
- Construction equipment rated over 50 horsepower would utilize, at minimum, Tier 2 engines.

Attachments: A – Tables
B – Figures
C- CalEEMod Outputs

ATTACHMENT A

TABLES

Table A: Tentative Project Construction Schedule

Phase Name	Phase Start Date	Phase End Date	Number of Days
Demolition	8/1/2022	8/26/2022	20
Site Preparation	8/27/2022	9/9/2022	10
Grading	9/10/2022	10/7/2022	20
Building Construction	10/8/2022	10/6/2023	260
Paving	10/7/2023	11/3/2023	20
Architectural Coating	11/4/2023	12/1/2023	20

Source: Tentative construction schedule provided to LSA by the project applicant (September 2021).

Table B: Diesel Construction Equipment Used by Construction Phase

Construction Phase	Off-Road Equipment Type	Off-Road Equipment Unit Amount	Hours Used per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	1	8	81	0.73
	Rubber Tired Dozers	2	8	247	0.40
	Excavators	3	8	158	0.38
Site Preparation	Rubber Tired Dozers	3	8	247	0.40
	Tractors/Loaders/Backhoes	4	8	97	0.37
Grading	Graders	1	8	187	0.41
	Rubber Tired Dozers	1	8	247	0.40
	Tractors/Loaders/Backhoes	3	8	97	0.37
	Excavators	1	8	158	0.38
Building Construction	Cranes	1	7	231	0.29
	Forklifts	3	8	89	0.20
	Generator Sets	1	8	84	0.74
	Tractors/Loaders/Backhoes	3	7	97	0.37
	Welders	1	8	46	0.45
Paving	Pavers	1	8	130	0.42
	Paving Equipment	2	6	132	0.36
	Rollers	2	6	80	0.38
Architectural Coating	Air Compressors	1	6	78	0.48

Source: Construction equipment shown were compiled using CalEEMod Version 2020.4.0 defaults and additional equipment provided by the project applicant. (September 2021).

CalEEMod = California Emissions Estimator Model

Table C: Short-Term Regional Construction Emissions

Construction Phase	Total Regional Pollutant Emissions (lbs/day)							
	VOCs	NO _x	CO	SO _x	Fugitive PM ₁₀	Exhaust PM ₁₀	Fugitive PM _{2.5}	Exhaust PM _{2.5}
Demolition	1.3	33.0	25.3	<0.1	0.4	0.9	<0.1	0.9
Site Preparation	1.3	33.8	23.6	<0.1	9.0	0.9	4.6	0.9
Grading	1.1	26.3	19.6	<0.1	3.4	0.8	1.6	0.8
Building Construction	1.4	25.0	21.4	<0.1	1.1	0.9	0.3	0.9
Paving	1.1	20.1	17.8	<0.1	0.2	0.7	<0.1	0.7
Architectural Coating	26.6	2.4	2.4	<0.1	0.2	<0.1	<0.1	<0.1
Peak Daily	26.6	33.8	25.3	<0.1	10.0		5.5	
SCAQMD Threshold	75	100	550	150	150		55	
Exceeds Threshold?	No	No	No	No	No		No	

Source: Compiled by LSA Associates, Inc. (September 2021).

Note: Some values may not appear to add up correctly due to rounding.

CO = carbon monoxide

lbs/day = pounds per day

NO_x = nitrogen oxides

PM_{2.5} = particulate matter less than 2.5 microns in size

PM₁₀ = particulate matter less than 10 microns in size

SCAQMD = South Coast Air Quality Management District

SO_x = sulfur oxides

VOC = volatile organic compound

Table D: Long Term Regional Operational Emissions

Emissions Source	Pollutant Emissions (lbs/day)					
	VOCs	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Area	3.8	0.5	3.2	<0.1	<0.1	<0.1
Energy	<0.1	0.2	<0.1	<0.1	<0.1	<0.1
Mobile	1.0	1.2	10.7	<0.1	2.5	0.7
Total Daily Emissions	4.8	2.0	14.0	<0.1	2.5	0.7
SCAQMD Threshold	55	55	550	150	150	55
Exceeds Threshold?	No	No	No	No	No	No

Source: Compiled by LSA Associates, Inc. (September 2021).

Note: Some values may not appear to add up correctly due to rounding.

CO = carbon monoxide

lbs/day = pounds per day

NO_x = nitrogen oxides

PM_{2.5} = particulate matter less than 2.5 microns in size

PM₁₀ = particulate matter less than 10 microns in size

SCAQMD = South Coast Air Quality Management District

SO_x = sulfur oxides

VOC = volatile organic compound

Table E: SCAQMD Localized Significance Thresholds

Emissions Source Category	Pollutant Emissions (lbs/day)			
	NO _x	CO	PM ₁₀	PM _{2.5}
Construction (1.5 ac, 82 ft [25 m] distance)	144	743	6	4
Operational (5 ac, 82 ft [25 m] distance)	270	7,577	4	2

Source: Compiled by LSA Associates, Inc. (September 2021).

Notes: LSTs were evaluated based on SRA 23 (Metropolitan Riverside County), LST project area of 5 ac, distance based on SCAQMD's guidance for minimum sensitive receptor distance of 82 ft (25 m).

ac = acre

CO = carbon monoxide

ft = feet

lbs/day = pounds per day

NO_x = nitrogen oxides

PM_{2.5} = particulate matter less than 2.5 microns in size

PM₁₀ = particulate matter less than 10 microns in size

Table F: Construction Localized Impacts Analysis

Emissions Sources	Pollutant Emissions (lbs/day)			
	NO _x	CO	PM ₁₀	PM _{2.5}
On-Site Emissions	33.7	24.7	3.0	2.0
Localized Significance Threshold	144	743	6	4
Exceeds Threshold?	No	No	No	No

Source: Compiled by LSA Associates, Inc. (September 2021).

Note: LSTs were evaluated based on SRA 23 (Metropolitan Riverside County), LST project area of 1.5 ac, distance based on SCAQMD's guidance for minimum sensitive receptor distance of 82 ft (25 m).

ac = acre/acres

CO = carbon monoxide

ft = foot/feet

lbs/day = pounds per day

LST = localized significance thresholds

m = meters

NO_x = nitrogen oxides PM_{2.5} = particulate matter less than 2.5 microns in size

PM₁₀ = particulate matter less than 10 microns in size

SRA = source receptor area

Table G: Long-Term Operational Localized Impacts Analysis

Emissions Sources	Pollutant Emissions (lbs/day)			
	NO _x	CO	PM ₁₀	PM _{2.5}
On-Site Emissions	0.6	3.7	<0.1	0.2
Localized Significance Threshold	270	1,577	4	2
Exceeds Threshold?	No	No	No	No

Source: Compiled by LSA Associates, Inc. (September 2021).

Note: LSTs were evaluated based on SRA 23 (Metropolitan Riverside County), LST project area of 5 ac, distance based on SCAQMD's guidance for minimum sensitive receptor distance of 82 ft (25 m).

CO = carbon monoxide

ft = feet

lbs/day = pounds per day

m = meters

NO_x = nitrogen oxides

PM_{2.5} = particulate matter less than 2.5 microns in size

PM₁₀ = particulate matter less than 10 microns in size

SCAQMD = South Coast Air Quality Management District

SO_x = sulfur oxides

SRA = Sensitive Receptor Area

VOC = volatile organic compound

Table H: Construction Greenhouse Gas Emissions

Construction Phase	Total Emissions per Phase (MT)			Total Emissions per Phase (MT CO ₂ e)
	CO ₂	CH ₄	N ₂ O	
Demolition 2022	36.3	<0.1	<0.1	36.6
Site Preparation 2022	17.5	<0.1	<0.1	17.7
Grading 2022	27.4	<0.1	<0.1	27.6
Building Construction 2022	105.2	<0.1	<0.1	106.4
Building Construction 2023	312.0	<0.1	<0.1	315.6
Paving 2023	21.3	<0.1	<0.1	21.5
Architectural Coating 2023	7.9	<0.1	<0.1	7.9
Total Emissions for the Entire Construction Process				533.3 MT CO₂e
Total Construction Emissions Amortized over 30 Years				17.8 MT CO₂e

Source: Compiled by LSA Associates, Inc. (September 2021).

CH₄ = methane

CO₂ = carbon dioxide

CO₂e = carbon dioxide equivalent

MT CO₂e = metric tons of carbon dioxide equivalent

MT = metric tons

N₂O = nitrous oxide

Table I: Long-Term Operational Greenhouse Gas Emissions

Source	Pollutant Emissions (MT/yr)					
	Bio-CO ₂	NBio-CO ₂	Total CO ₂	CH ₄	N ₂ O	CO ₂ e
Construction Emissions Amortized over 30 Years	0.0	17.6	17.6	<0.1	<0.1	17.8
Operational Emissions						
Area	0.0	8.0	8.0	<0.1	<0.1	8.0
Energy	0.0	72.3	72.3	<0.1	<0.1	72.7
Mobile	0.0	392.8	392.8	<0.1	<0.1	398.6
Waste	3.4	0.0	3.4	0.2	0.0	8.4
Water	0.7	12.6	13.3	<0.1	<0.1	15.8
Total Project Emissions	4.1	503.2	507.4	0.2	<0.1	503.5
Total Construction Emissions Amortized over 30 years						521.3
Would the Project Exceed the Threshold?						3,000

Source: Compiled by LSA Associates, Inc. (September 2021).

Note: SCAQMD scaled threshold based on post-2020 AB 32 to SB 32 reduction of GHG's until 2030. Scaled threshold for 2023.

Bio-CO₂ = biologically generated CO₂

CH₄ = methane

CO₂ = carbon dioxide

CO₂e = carbon dioxide equivalent

MT/yr = metric tons per year

N₂O = nitrous oxide

NBio-CO₂ = non-biologically generated CO₂

SCAQMD = South Coast Air Quality Management District

ATTACHMENT B

FIGURES

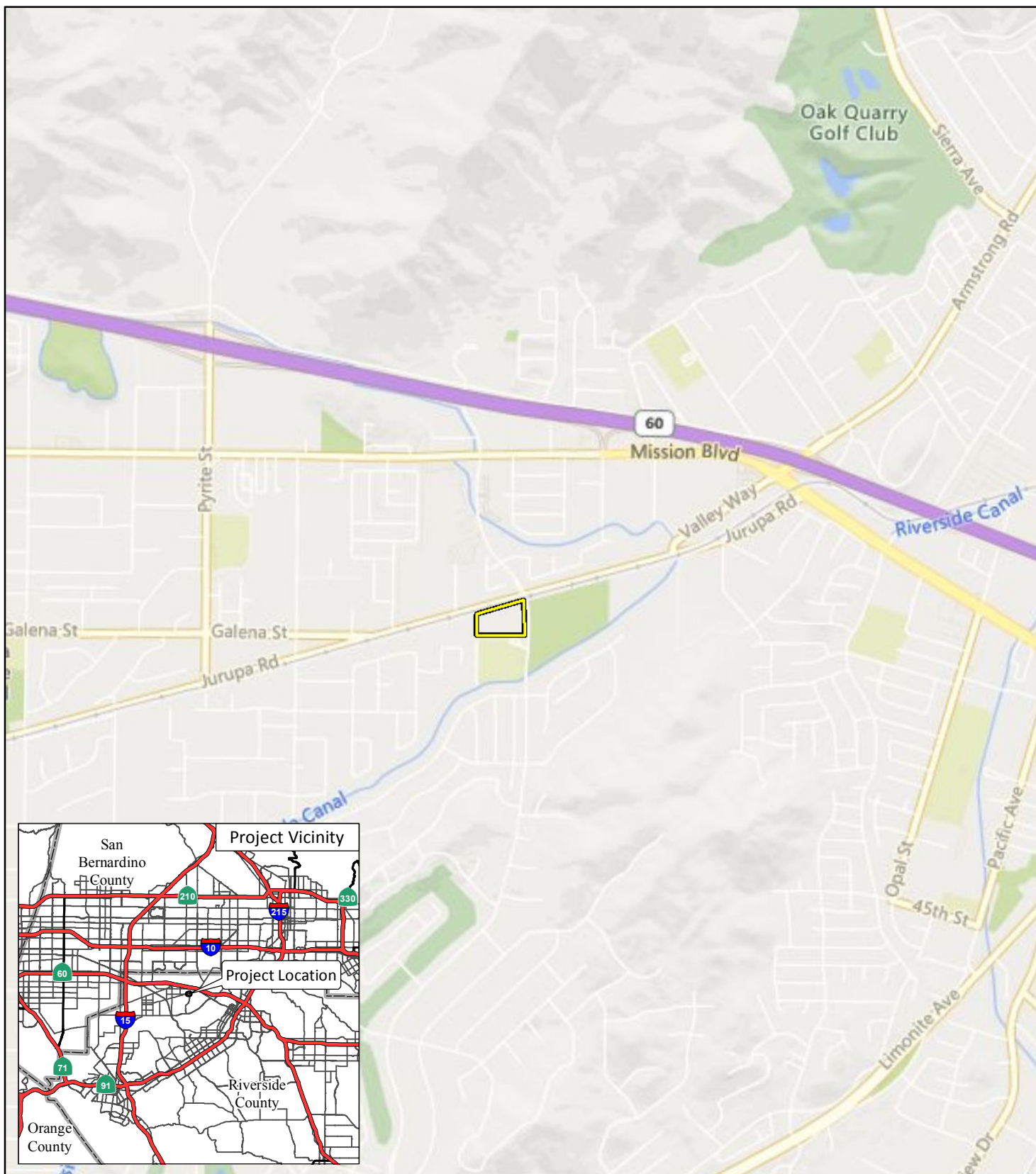


FIGURE 1

LSA

LEGEND

 Project Location

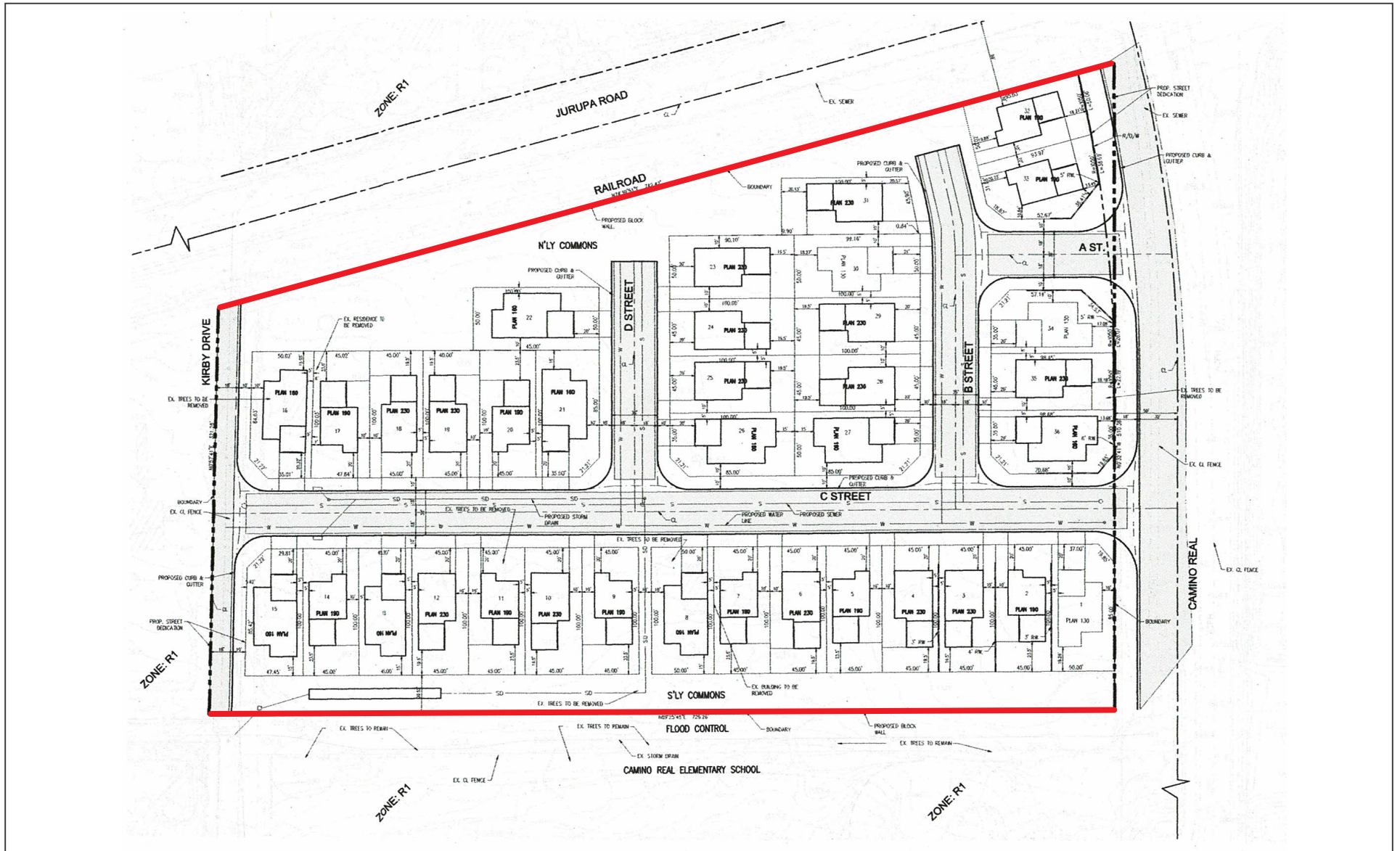


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SOURCE: Bing (2020)

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TTM No. 38151 Madone Collections
Regional and Project Location



LSA

LEGEND

— Proposed Block Wall



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SOURCE: Encompass Associates

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FIGURE 2

TTM No. 38151 Madone Collections
Site Plan

ATTACHMENT C

CALEEMOD OUTPUTS

TTM No. 38151 Madone Collections Project - South Coast AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**TTM No. 38151 Madone Collections Project**

South Coast AQMD Air District, Annual

1.0 Project Characteristics**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	1.00	Acre	1.02	43,560.00	0
City Park	2.00	Acre	2.00	87,120.00	0
Condo/Townhouse	36.00	Dwelling Unit	3.90	166,824.00	103

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10			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 - SAFE Rule Applied.

Land Use - 36 Detached Townhomes with Garages on 4,634 square foot lots. To include shared common areas. Total project area 6.92 acres.

Construction Phase - Building construction and architectural coating phases extended to match applicant's provided construction schedule.

Off-road Equipment - Defaults.

Off-road Equipment - Defaults.

Off-road Equipment - Defaults.

Off-road Equipment - Defaults.

Off-road Equipment - Defaults.

Off-road Equipment - Defaults.

Trips and VMT - Defaults.

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

Water Mitigation - Water efficient irrigation systems and controls would be implimented.

[illegible]

TTM No. 38151 Madone Collections Project - South Coast AQMD Air District, Annual

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

tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstructionPhase	NumDays	230.00	240.00
tblConstructionPhase	NumDays	20.00	40.00
tblFireplaces	NumberWood	1.80	0.00
tblLandUse	LandUseSquareFeet	36,000.00	166,824.00
tblLandUse	LotAcreage	1.00	1.02
tblLandUse	LotAcreage	2.25	3.90
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	8.14	9.44
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	6.28	9.44
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	7.32	9.44
tblWoodstoves	NumberCatalytic	1.80	0.00
tblWoodstoves	NumberNoncatalytic	1.80	0.00

2.0 Emissions Summary

TTM No. 38151 Madone Collections Project - South Coast AQMD Air District, 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	0.1238	1.1465	1.0609	2.1100e-003	0.2085	0.0547	0.2632	0.0949	0.0510	0.1459	0.0000	186.4203	186.4203	0.0413	2.8600e-003	188.3034
2023	0.7117	1.5269	1.9306	3.8500e-003	0.0993	0.0705	0.1698	0.0267	0.0663	0.0930	0.0000	341.2628	341.2628	0.0595	7.5200e-003	344.9893
Maximum	0.7117	1.5269	1.9306	3.8500e-003	0.2085	0.0705	0.2632	0.0949	0.0663	0.1459	0.0000	341.2628	341.2628	0.0595	7.5200e-003	344.9893

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	0.0721	1.5116	1.2005	2.1100e-003	0.1136	0.0493	0.1629	0.0480	0.0492	0.0973	0.0000	186.4202	186.4202	0.0413	2.8600e-003	188.3032
2023	0.6648	2.4724	2.1048	3.8500e-003	0.0993	0.0909	0.1902	0.0267	0.0908	0.1175	0.0000	341.2625	341.2625	0.0595	7.5200e-003	344.9890
Maximum	0.6648	2.4724	2.1048	3.8500e-003	0.1136	0.0909	0.1902	0.0480	0.0908	0.1175	0.0000	341.2625	341.2625	0.0595	7.5200e-003	344.9890

TTM No. 38151 Madone Collections Project - South Coast AQMD Air District, Annual

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	11.80	-49.02	-10.49	0.00	30.83	-11.92	18.47	38.56	-19.42	10.11	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	8-1-2022	10-31-2022	0.8409	0.9935
2	11-1-2022	1-31-2023	0.6085	0.8639
3	2-1-2023	4-30-2023	0.5523	0.8281
4	5-1-2023	7-31-2023	0.5693	0.8544
5	8-1-2023	9-30-2023	0.3312	0.5292
		Highest	0.8409	0.9935

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	0.6712	0.0106	0.3741	6.0000e-005		2.5700e-003	2.5700e-003		2.5700e-003	2.5700e-003	0.0000	7.9547	7.9547	7.2000e-004	1.3000e-004	8.0130
Energy	4.1000e-003	0.0350	0.0149	2.2000e-004		2.8300e-003	2.8300e-003		2.8300e-003	2.8300e-003	0.0000	72.2898	72.2898	3.4600e-003	1.0700e-003	72.6945
Mobile	0.1796	0.2248	1.8942	4.2000e-003	0.4372	3.0900e-003	0.4402	0.1167	2.8700e-003	0.1195	0.0000	392.8201	392.8201	0.0250	0.0173	398.6082
Waste						0.0000	0.0000		0.0000	0.0000	3.3960	0.0000	3.3960	0.2007	0.0000	8.4135
Water						0.0000	0.0000		0.0000	0.0000	0.7441	13.0251	13.7692	0.0775	1.9400e-003	16.2849
Total	0.8548	0.2704	2.2832	4.4800e-003	0.4372	8.4900e-003	0.4456	0.1167	8.2700e-003	0.1249	4.1402	486.0897	490.2298	0.3074	0.0205	504.0141

TTM No. 38151 Madone Collections Project - South Coast AQMD Air District, Annual

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	0.6712	0.0106	0.3741	6.0000e-005		2.5700e-003	2.5700e-003		2.5700e-003	2.5700e-003	0.0000	7.9547	7.9547	7.2000e-004	1.3000e-004	8.0130
Energy	4.1000e-003	0.0350	0.0149	2.2000e-004		2.8300e-003	2.8300e-003		2.8300e-003	2.8300e-003	0.0000	72.2894	72.2894	3.4600e-003	1.0700e-003	72.6941
Mobile	0.1796	0.2248	1.8942	4.2000e-003	0.4372	3.0900e-003	0.4402	0.1167	2.8700e-003	0.1195	0.0000	392.8201	392.8201	0.0250	0.0173	398.6082
Waste						0.0000	0.0000		0.0000	0.0000	3.3960	0.0000	3.3960	0.2007	0.0000	8.4135
Water						0.0000	0.0000		0.0000	0.0000	0.7441	12.5609	13.3051	0.0775	1.9300e-003	15.8184
Total	0.8548	0.2704	2.2832	4.4800e-003	0.4372	8.4900e-003	0.4456	0.1167	8.2700e-003	0.1249	4.1402	485.6252	489.7654	0.3074	0.0205	503.5472

	ROG	NOx	CO	SO2	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	0.10	0.09	0.01	0.05	0.09

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	8/1/2022	8/26/2022	5	20	
2	Site Preparation	Site Preparation	8/27/2022	9/9/2022	5	10	
3	Grading	Grading	9/10/2022	10/7/2022	5	20	

TTM No. 38151 Madone Collections Project - South Coast AQMD Air District, Annual

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

4	Building Construction	Building Construction	10/8/2022	9/8/2023	5	240
5	Paving	Paving	9/9/2023	10/6/2023	5	20
6	Architectural Coating	Architectural Coating	10/7/2023	12/1/2023	5	40

Acres of Grading (Site Preparation Phase): 15**Acres of Grading (Grading Phase): 20****Acres of Paving: 1.02****Residential Indoor: 337,819; Residential Outdoor: 112,606; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 2,614 (Architectural Coating – sqft)****OffRoad Equipment**

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

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Architectural Coating	Air Compressors	1	6.00	78	0.48
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Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	32.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	81.00	25.00	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	16.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

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					3.4500e-003	0.0000	3.4500e-003	5.2000e-004	0.0000	5.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0264	0.2572	0.2059	3.9000e-004		0.0124	0.0124		0.0116	0.0116	0.0000	33.9902	33.9902	9.5500e-003	0.0000	34.2289
Total	0.0264	0.2572	0.2059	3.9000e-004	3.4500e-003	0.0124	0.0159	5.2000e-004	0.0116	0.0121	0.0000	33.9902	33.9902	9.5500e-003	0.0000	34.2289

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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 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	7.0000e-005	2.6300e-003	6.0000e-004	1.0000e-005	2.8000e-004	2.0000e-005	3.0000e-004	8.0000e-005	2.0000e-005	1.0000e-004	0.0000	0.9637	0.9637	5.0000e-005	1.5000e-004	1.0106
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e-004	4.1000e-004	5.3200e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3393	1.3393	4.0000e-005	4.0000e-005	1.3509
Total	5.7000e-004	3.0400e-003	5.9200e-003	2.0000e-005	1.9300e-003	3.0000e-005	1.9600e-003	5.2000e-004	3.0000e-005	5.5000e-004	0.0000	2.3030	2.3030	9.0000e-005	1.9000e-004	2.3615

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					1.5500e-003	0.0000	1.5500e-003	2.3000e-004	0.0000	2.3000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0126	0.3266	0.2467	3.9000e-004		9.1400e-003	9.1400e-003		9.1400e-003	9.1400e-003	0.0000	33.9902	33.9902	9.5500e-003	0.0000	34.2289
Total	0.0126	0.3266	0.2467	3.9000e-004	1.5500e-003	9.1400e-003	0.0107	2.3000e-004	9.1400e-003	9.3700e-003	0.0000	33.9902	33.9902	9.5500e-003	0.0000	34.2289

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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

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	7.0000e-005	2.6300e-003	6.0000e-004	1.0000e-005	2.8000e-004	2.0000e-005	3.0000e-004	8.0000e-005	2.0000e-005	1.0000e-004	0.0000	0.9637	0.9637	5.0000e-005	1.5000e-004	1.0106
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e-004	4.1000e-004	5.3200e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3393	1.3393	4.0000e-005	4.0000e-005	1.3509
Total	5.7000e-004	3.0400e-003	5.9200e-003	2.0000e-005	1.9300e-003	3.0000e-005	1.9600e-003	5.2000e-004	3.0000e-005	5.5000e-004	0.0000	2.3030	2.3030	9.0000e-005	1.9000e-004	2.3615

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					0.0983	0.0000	0.0983	0.0505	0.0000	0.0505	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0159	0.1654	0.0985	1.9000e-004		8.0600e-003	8.0600e-003		7.4200e-003	7.4200e-003	0.0000	16.7197	16.7197	5.4100e-003	0.0000	16.8549
Total	0.0159	0.1654	0.0985	1.9000e-004	0.0983	8.0600e-003	0.1064	0.0505	7.4200e-003	0.0579	0.0000	16.7197	16.7197	5.4100e-003	0.0000	16.8549

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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	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	3.0000e-004	2.4000e-004	3.1900e-003	1.0000e-005	9.9000e-004	1.0000e-005	9.9000e-004	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8036	0.8036	2.0000e-005	2.0000e-005	0.8105
Total	3.0000e-004	2.4000e-004	3.1900e-003	1.0000e-005	9.9000e-004	1.0000e-005	9.9000e-004	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8036	0.8036	2.0000e-005	2.0000e-005	0.8105

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0442	0.0000	0.0442	0.0227	0.0000	0.0227	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.0500e-003	0.1686	0.1148	1.9000e-004		4.7300e-003	4.7300e-003		4.7300e-003	4.7300e-003	0.0000	16.7197	16.7197	5.4100e-003	0.0000	16.8549
Total	6.0500e-003	0.1686	0.1148	1.9000e-004	0.0442	4.7300e-003	0.0490	0.0227	4.7300e-003	0.0275	0.0000	16.7197	16.7197	5.4100e-003	0.0000	16.8549

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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	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	3.0000e-004	2.4000e-004	3.1900e-003	1.0000e-005	9.9000e-004	1.0000e-005	9.9000e-004	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8036	0.8036	2.0000e-005	2.0000e-005	0.8105
Total	3.0000e-004	2.4000e-004	3.1900e-003	1.0000e-005	9.9000e-004	1.0000e-005	9.9000e-004	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8036	0.8036	2.0000e-005	2.0000e-005	0.8105

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					0.0708	0.0000	0.0708	0.0343	0.0000	0.0343	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0195	0.2086	0.1527	3.0000e-004		9.4100e-003	9.4100e-003		8.6600e-003	8.6600e-003	0.0000	26.0548	26.0548	8.4300e-003	0.0000	26.2654
Total	0.0195	0.2086	0.1527	3.0000e-004	0.0708	9.4100e-003	0.0802	0.0343	8.6600e-003	0.0429	0.0000	26.0548	26.0548	8.4300e-003	0.0000	26.2654

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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****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e-004	4.1000e-004	5.3200e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3393	1.3393	4.0000e-005	4.0000e-005	1.3509
Total	5.0000e-004	4.1000e-004	5.3200e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3393	1.3393	4.0000e-005	4.0000e-005	1.3509

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0319	0.0000	0.0319	0.0154	0.0000	0.0154	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0101	0.2628	0.1899	3.0000e-004		7.7200e-003	7.7200e-003		7.7200e-003	7.7200e-003	0.0000	26.0547	26.0547	8.4300e-003	0.0000	26.2654
Total	0.0101	0.2628	0.1899	3.0000e-004	0.0319	7.7200e-003	0.0396	0.0154	7.7200e-003	0.0231	0.0000	26.0547	26.0547	8.4300e-003	0.0000	26.2654

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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 Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e-004	4.1000e-004	5.3200e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3393	1.3393	4.0000e-005	4.0000e-005	1.3509
Total	5.0000e-004	4.1000e-004	5.3200e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3393	1.3393	4.0000e-005	4.0000e-005	1.3509

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	0.0512	0.4685	0.4909	8.1000e-004		0.0243	0.0243		0.0228	0.0228	0.0000	69.5176	69.5176	0.0167	0.0000	69.9339
Total	0.0512	0.4685	0.4909	8.1000e-004		0.0243	0.0243		0.0228	0.0228	0.0000	69.5176	69.5176	0.0167	0.0000	69.9339

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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 - 2022****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.3500e-003	0.0366	0.0122	1.4000e-004	4.7300e-003	3.7000e-004	5.1000e-003	1.3600e-003	3.5000e-004	1.7100e-003	0.0000	13.9965	13.9965	4.7000e-004	2.0300e-003	14.6134
Worker	8.1600e-003	6.5900e-003	0.0862	2.4000e-004	0.0267	1.6000e-004	0.0268	7.0800e-003	1.5000e-004	7.2300e-003	0.0000	21.6958	21.6958	6.0000e-004	5.8000e-004	21.8840
Total	9.5100e-003	0.0432	0.0984	3.8000e-004	0.0314	5.3000e-004	0.0319	8.4400e-003	5.0000e-004	8.9400e-003	0.0000	35.6923	35.6923	1.0700e-003	2.6100e-003	36.4974

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	0.0324	0.7066	0.5362	8.1000e-004		0.0271	0.0271		0.0271	0.0271	0.0000	69.5175	69.5175	0.0167	0.0000	69.9339
Total	0.0324	0.7066	0.5362	8.1000e-004		0.0271	0.0271		0.0271	0.0271	0.0000	69.5175	69.5175	0.0167	0.0000	69.9339

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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 - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.3500e-003	0.0366	0.0122	1.4000e-004	4.7300e-003	3.7000e-004	5.1000e-003	1.3600e-003	3.5000e-004	1.7100e-003	0.0000	13.9965	13.9965	4.7000e-004	2.0300e-003	14.6134
Worker	8.1600e-003	6.5900e-003	0.0862	2.4000e-004	0.0267	1.6000e-004	0.0268	7.0800e-003	1.5000e-004	7.2300e-003	0.0000	21.6958	21.6958	6.0000e-004	5.8000e-004	21.8840
Total	9.5100e-003	0.0432	0.0984	3.8000e-004	0.0314	5.3000e-004	0.0319	8.4400e-003	5.0000e-004	8.9400e-003	0.0000	35.6923	35.6923	1.0700e-003	2.6100e-003	36.4974

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	0.1416	1.2946	1.4620	2.4300e-003		0.0630	0.0630		0.0593	0.0593	0.0000	208.6243	208.6243	0.0496	0.0000	209.8650
Total	0.1416	1.2946	1.4620	2.4300e-003		0.0630	0.0630		0.0593	0.0593	0.0000	208.6243	208.6243	0.0496	0.0000	209.8650

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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****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	2.4300e-003	0.0857	0.0326	4.1000e-004	0.0142	4.8000e-004	0.0147	4.0900e-003	4.6000e-004	4.5500e-003	0.0000	40.0436	40.0436	1.3400e-003	5.8000e-003	41.8062
Worker	0.0227	0.0175	0.2385	6.8000e-004	0.0800	4.6000e-004	0.0804	0.0212	4.2000e-004	0.0217	0.0000	63.3756	63.3756	1.6100e-003	1.6100e-003	63.8957
Total	0.0252	0.1032	0.2712	1.0900e-003	0.0942	9.4000e-004	0.0951	0.0253	8.8000e-004	0.0262	0.0000	103.4192	103.4192	2.9500e-003	7.4100e-003	105.7019

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	0.0973	2.1199	1.6086	2.4300e-003		0.0813	0.0813		0.0813	0.0813	0.0000	208.6240	208.6240	0.0496	0.0000	209.8647
Total	0.0973	2.1199	1.6086	2.4300e-003		0.0813	0.0813		0.0813	0.0813	0.0000	208.6240	208.6240	0.0496	0.0000	209.8647

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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 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	2.4300e-003	0.0857	0.0326	4.1000e-004	0.0142	4.8000e-004	0.0147	4.0900e-003	4.6000e-004	4.5500e-003	0.0000	40.0436	40.0436	1.3400e-003	5.8000e-003	41.8062
Worker	0.0227	0.0175	0.2385	6.8000e-004	0.0800	4.6000e-004	0.0804	0.0212	4.2000e-004	0.0217	0.0000	63.3756	63.3756	1.6100e-003	1.6100e-003	63.8957
Total	0.0252	0.1032	0.2712	1.0900e-003	0.0942	9.4000e-004	0.0951	0.0253	8.8000e-004	0.0262	0.0000	103.4192	103.4192	2.9500e-003	7.4100e-003	105.7019

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	0.0103	0.1019	0.1458	2.3000e-004		5.1000e-003	5.1000e-003		4.6900e-003	4.6900e-003	0.0000	20.0269	20.0269	6.4800e-003	0.0000	20.1888
Paving	1.3400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0117	0.1019	0.1458	2.3000e-004		5.1000e-003	5.1000e-003		4.6900e-003	4.6900e-003	0.0000	20.0269	20.0269	6.4800e-003	0.0000	20.1888

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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	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	4.7000e-004	3.6000e-004	4.9100e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3040	1.3040	3.0000e-005	3.0000e-005	1.3147
Total	4.7000e-004	3.6000e-004	4.9100e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3040	1.3040	3.0000e-005	3.0000e-005	1.3147

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	9.3100e-003	0.2012	0.1730	2.3000e-004		6.6700e-003	6.6700e-003		6.6700e-003	6.6700e-003	0.0000	20.0268	20.0268	6.4800e-003	0.0000	20.1888
Paving	1.3400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0107	0.2012	0.1730	2.3000e-004		6.6700e-003	6.6700e-003		6.6700e-003	6.6700e-003	0.0000	20.0268	20.0268	6.4800e-003	0.0000	20.1888

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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	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	4.7000e-004	3.6000e-004	4.9100e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3040	1.3040	3.0000e-005	3.0000e-005	1.3147
Total	4.7000e-004	3.6000e-004	4.9100e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3040	1.3040	3.0000e-005	3.0000e-005	1.3147

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	0.5280					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.8300e-003	0.0261	0.0362	6.0000e-005		1.4200e-003	1.4200e-003		1.4200e-003	1.4200e-003	0.0000	5.1065	5.1065	3.1000e-004	0.0000	5.1142
Total	0.5318	0.0261	0.0362	6.0000e-005		1.4200e-003	1.4200e-003		1.4200e-003	1.4200e-003	0.0000	5.1065	5.1065	3.1000e-004	0.0000	5.1142

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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	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	1.0000e-003	7.7000e-004	0.0105	3.0000e-005	3.5100e-003	2.0000e-005	3.5300e-003	9.3000e-004	2.0000e-005	9.5000e-004	0.0000	2.7819	2.7819	7.0000e-005	7.0000e-005	2.8048
Total	1.0000e-003	7.7000e-004	0.0105	3.0000e-005	3.5100e-003	2.0000e-005	3.5300e-003	9.3000e-004	2.0000e-005	9.5000e-004	0.0000	2.7819	2.7819	7.0000e-005	7.0000e-005	2.8048

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	0.5280					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.2800e-003	0.0471	0.0367	6.0000e-005		1.9000e-003	1.9000e-003		1.9000e-003	1.9000e-003	0.0000	5.1065	5.1065	3.1000e-004	0.0000	5.1141
Total	0.5303	0.0471	0.0367	6.0000e-005		1.9000e-003	1.9000e-003		1.9000e-003	1.9000e-003	0.0000	5.1065	5.1065	3.1000e-004	0.0000	5.1141

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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	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	1.0000e-003	7.7000e-004	0.0105	3.0000e-005	3.5100e-003	2.0000e-005	3.5300e-003	9.3000e-004	2.0000e-005	9.5000e-004	0.0000	2.7819	2.7819	7.0000e-005	7.0000e-005	2.8048
Total	1.0000e-003	7.7000e-004	0.0105	3.0000e-005	3.5100e-003	2.0000e-005	3.5300e-003	9.3000e-004	2.0000e-005	9.5000e-004	0.0000	2.7819	2.7819	7.0000e-005	7.0000e-005	2.8048

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	0.1796	0.2248	1.8942	4.2000e-003	0.4372	3.0900e-003	0.4402	0.1167	2.8700e-003	0.1195	0.0000	392.8201	392.8201	0.0250	0.0173	398.6082
Unmitigated	0.1796	0.2248	1.8942	4.2000e-003	0.4372	3.0900e-003	0.4402	0.1167	2.8700e-003	0.1195	0.0000	392.8201	392.8201	0.0250	0.0173	398.6082

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Condo/Townhouse	339.84	339.84	339.84	1,161,285	1,161,285
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	339.84	339.84	339.84	1,161,285	1,161,285

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
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Condo/Townhouse	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
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
City Park	0.543139	0.060749	0.184760	0.130258	0.023830	0.006353	0.011718	0.009137	0.000812	0.000509	0.024193	0.000750	0.003791
Condo/Townhouse	0.543139	0.060749	0.184760	0.130258	0.023830	0.006353	0.011718	0.009137	0.000812	0.000509	0.024193	0.000750	0.003791

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

Other Asphalt Surfaces	0.543139	0.060749	0.184760	0.130258	0.023830	0.006353	0.011718	0.009137	0.000812	0.000509	0.024193	0.000750	0.003791
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5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Kilowatt Hours of Renewable Electricity Generated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	31.7543	31.7543	2.6800e-003	3.2000e-004	31.9181
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	31.7547	31.7547	2.6800e-003	3.2000e-004	31.9185
NaturalGas Mitigated	4.1000e-003	0.0350	0.0149	2.2000e-004		2.8300e-003	2.8300e-003		2.8300e-003	2.8300e-003	0.0000	40.5351	40.5351	7.8000e-004	7.4000e-004	40.7760
NaturalGas Unmitigated	4.1000e-003	0.0350	0.0149	2.2000e-004		2.8300e-003	2.8300e-003		2.8300e-003	2.8300e-003	0.0000	40.5351	40.5351	7.8000e-004	7.4000e-004	40.7760

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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					
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
Condo/Townhouse	759599	4.1000e-003	0.0350	0.0149	2.2000e-004		2.8300e-003	2.8300e-003		2.8300e-003	2.8300e-003	0.0000	40.5351	40.5351	7.8000e-004	7.4000e-004	40.7760
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		4.1000e-003	0.0350	0.0149	2.2000e-004		2.8300e-003	2.8300e-003		2.8300e-003	2.8300e-003	0.0000	40.5351	40.5351	7.8000e-004	7.4000e-004	40.7760

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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****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					
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
Condo/Townhouse	759599	4.1000e-003	0.0350	0.0149	2.2000e-004		2.8300e-003	2.8300e-003		2.8300e-003	2.8300e-003	0.0000	40.5351	40.5351	7.8000e-004	7.4000e-004	40.7760
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		4.1000e-003	0.0350	0.0149	2.2000e-004		2.8300e-003	2.8300e-003		2.8300e-003	2.8300e-003	0.0000	40.5351	40.5351	7.8000e-004	7.4000e-004	40.7760

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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			
City Park	0	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	179055	31.7547	2.6800e-003	3.2000e-004	31.9185
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		31.7547	2.6800e-003	3.2000e-004	31.9185

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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			
City Park	-0.666667	-0.0001	0.0000	0.0000	-0.0001
Condo/Townhouse	179055	31.7546	2.6800e-003	3.2000e-004	31.9184
Other Asphalt Surfaces	-0.666667	-0.0001	0.0000	0.0000	-0.0001
Total		31.7543	2.6800e-003	3.2000e-004	31.9181

6.0 Area Detail**6.1 Mitigation Measures Area**

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

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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	0.6712	0.0106	0.3741	6.0000e-005		2.5700e-003	2.5700e-003		2.5700e-003	2.5700e-003	0.0000	7.9547	7.9547	7.2000e-004	1.3000e-004	8.0130
Unmitigated	0.6712	0.0106	0.3741	6.0000e-005		2.5700e-003	2.5700e-003		2.5700e-003	2.5700e-003	0.0000	7.9547	7.9547	7.2000e-004	1.3000e-004	8.0130

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	0.0528					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.6065					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	7.4000e-004	6.3400e-003	2.7000e-003	4.0000e-005		5.1000e-004	5.1000e-004		5.1000e-004	5.1000e-004	0.0000	7.3482	7.3482	1.4000e-004	1.3000e-004	7.3919
Landscaping	0.0112	4.2800e-003	0.3714	2.0000e-005		2.0600e-003	2.0600e-003		2.0600e-003	2.0600e-003	0.0000	0.6065	0.6065	5.8000e-004	0.0000	0.6211
Total	0.6712	0.0106	0.3741	6.0000e-005		2.5700e-003	2.5700e-003		2.5700e-003	2.5700e-003	0.0000	7.9547	7.9547	7.2000e-004	1.3000e-004	8.0130

TTM No. 38151 Madone Collections Project - South Coast AQMD Air District, Annual

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	0.0528					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.6065					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	7.4000e-004	6.3400e-003	2.7000e-003	4.0000e-005		5.1000e-004	5.1000e-004		5.1000e-004	5.1000e-004	0.0000	7.3482	7.3482	1.4000e-004	1.3000e-004	7.3919
Landscaping	0.0112	4.2800e-003	0.3714	2.0000e-005		2.0600e-003	2.0600e-003		2.0600e-003	2.0600e-003	0.0000	0.6065	0.6065	5.8000e-004	0.0000	0.6211
Total	0.6712	0.0106	0.3741	6.0000e-005		2.5700e-003	2.5700e-003		2.5700e-003	2.5700e-003	0.0000	7.9547	7.9547	7.2000e-004	1.3000e-004	8.0130

7.0 Water Detail**7.1 Mitigation Measures Water**

Use Water Efficient Irrigation System

TTM No. 38151 Madone Collections Project - South Coast AQMD Air District, Annual

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	13.3051	0.0775	1.9300e-003	15.8184
Unmitigated	13.7692	0.0775	1.9400e-003	16.2849

7.2 Water by Land Use**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 2.38296	4.6952	4.0000e-004	5.0000e-005	4.7194
Condo/Townhouse	2.34554 / 1.47871	9.0740	0.0771	1.8900e-003	11.5655
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		13.7692	0.0775	1.9400e-003	16.2849

TTM No. 38151 Madone Collections Project - South Coast AQMD Air District, 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			
City Park	0 / 2.2376	4.4088	3.7000e-004	5.0000e-005	4.4315
Condo/Townhouse	2.34554 / 1.38851	8.8963	0.0771	1.8900e-003	11.3869
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		13.3051	0.0775	1.9400e-003	15.8184

8.0 Waste Detail

8.1 Mitigation Measures Waste

TTM No. 38151 Madone Collections Project - South Coast AQMD Air District, 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	3.3960	0.2007	0.0000	8.4135
Unmitigated	3.3960	0.2007	0.0000	8.4135

8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.17	0.0345	2.0400e-003	0.0000	0.0855
Condo/Townhouse	16.56	3.3615	0.1987	0.0000	8.3281
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		3.3960	0.2007	0.0000	8.4135

TTM No. 38151 Madone Collections Project - South Coast AQMD Air District, 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			
City Park	0.17	0.0345	2.0400e-003	0.0000	0.0855
Condo/Townhouse	16.56	3.3615	0.1987	0.0000	8.3281
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		3.3960	0.2007	0.0000	8.4135

9.0 Operational Offroad

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

10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

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

Boilers

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

User Defined Equipment

Equipment Type	Number
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TTM No. 38151 Madone Collections Project - South Coast AQMD Air District, Annual

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

11.0 Vegetation

TTM No. 38151 Madone Collections Project - South Coast AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**TTM No. 38151 Madone Collections Project****South Coast AQMD Air District, Summer****1.0 Project Characteristics****1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	1.00	Acre	1.02	43,560.00	0
City Park	2.00	Acre	2.00	87,120.00	0
Condo/Townhouse	36.00	Dwelling Unit	3.90	166,824.00	103

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10			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 - SAFE Rule Applied.

Land Use - 36 Detached Townhomes with Garages on 4,634 square foot lots. To include shared common areas. Total project area 6.92 acres.

Construction Phase - Building construction and architectural coating phases extended to match applicant's provided construction schedule.

Off-road Equipment - Defaults.

Off-road Equipment - Defaults.

Off-road Equipment - Defaults.

Off-road Equipment - Defaults.

Off-road Equipment - Defaults.

Off-road Equipment - Defaults.

Trips and VMT - Defaults.

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

Water Mitigation - Water efficient irrigation systems and controls would be implimented.

[illegible]

TTM No. 38151 Madone Collections Project - South Coast AQMD Air District, Summer

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

tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstructionPhase	NumDays	230.00	240.00
tblConstructionPhase	NumDays	20.00	40.00
tblFireplaces	NumberWood	1.80	0.00
tblLandUse	LandUseSquareFeet	36,000.00	166,824.00
tblLandUse	LotAcreage	1.00	1.02
tblLandUse	LotAcreage	2.25	3.90
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	8.14	9.44
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	6.28	9.44
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	7.32	9.44
tblWoodstoves	NumberCatalytic	1.80	0.00
tblWoodstoves	NumberNoncatalytic	1.80	0.00

2.0 Emissions Summary

TTM No. 38151 Madone Collections Project - South Coast AQMD Air District, 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	3.2321	33.1271	21.2263	0.0413	19.8582	1.6138	21.4720	10.1558	1.4847	11.6405	0.0000	4,007.367 8	4,007.367 8	1.1970	0.0944	4,040.039 7
2023	26.6422	15.4661	19.4503	0.0394	1.0655	0.7101	1.7756	0.2862	0.6682	0.9544	0.0000	3,856.906 5	3,856.906 5	0.7176	0.0893	3,899.598 5
Maximum	26.6422	33.1271	21.2263	0.0413	19.8582	1.6138	21.4720	10.1558	1.4847	11.6405	0.0000	4,007.367 8	4,007.367 8	1.1970	0.0944	4,040.039 7

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	1.4054	33.7650	25.3061	0.0413	9.0469	0.9474	9.9942	4.5995	0.9473	5.5467	0.0000	4,007.367 8	4,007.367 8	1.1970	0.0944	4,040.039 7
2023	26.5644	24.6356	21.0801	0.0394	1.0655	0.9139	1.9794	0.2862	0.9133	1.1995	0.0000	3,856.906 5	3,856.906 5	0.7176	0.0893	3,899.598 5
Maximum	26.5644	33.7650	25.3061	0.0413	9.0469	0.9474	9.9942	4.5995	0.9473	5.5467	0.0000	4,007.367 8	4,007.367 8	1.1970	0.0944	4,040.039 7

TTM No. 38151 Madone Collections Project - South Coast AQMD Air District, 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	6.37	-20.18	-14.04	0.00	51.67	19.91	48.50	53.21	13.58	46.44	0.00	0.00	0.00	0.00	0.00	0.00

TTM No. 38151 Madone Collections Project - South Coast AQMD Air District, 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	3.7613	0.5419	3.1870	3.4000e-003		0.0575	0.0575		0.0575	0.0575	0.0000	653.3485	653.3485	0.0176	0.0119	657.3279
Energy	0.0224	0.1918	0.0816	1.2200e-003		0.0155	0.0155		0.0155	0.0155		244.8345	244.8345	4.6900e-003	4.4900e-003	246.2894
Mobile	1.0378	1.1337	10.6833	0.0240	2.4467	0.0170	2.4637	0.6520	0.0158	0.6678		2,468.6938	2,468.6938	0.1480	0.1003	2,502.2741
Total	4.8215	1.8674	13.9519	0.0286	2.4467	0.0900	2.5367	0.6520	0.0888	0.7408	0.0000	3,366.8768	3,366.8768	0.1703	0.1166	3,405.8914

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	3.7613	0.5419	3.1870	3.4000e-003		0.0575	0.0575		0.0575	0.0575	0.0000	653.3485	653.3485	0.0176	0.0119	657.3279
Energy	0.0224	0.1918	0.0816	1.2200e-003		0.0155	0.0155		0.0155	0.0155		244.8345	244.8345	4.6900e-003	4.4900e-003	246.2894
Mobile	1.0378	1.1337	10.6833	0.0240	2.4467	0.0170	2.4637	0.6520	0.0158	0.6678		2,468.6938	2,468.6938	0.1480	0.1003	2,502.2741
Total	4.8215	1.8674	13.9519	0.0286	2.4467	0.0900	2.5367	0.6520	0.0888	0.7408	0.0000	3,366.8768	3,366.8768	0.1703	0.1166	3,405.8914

TTM No. 38151 Madone Collections Project - South Coast AQMD Air District, 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	Demolition	Demolition	8/1/2022	8/26/2022	5	20	
2	Site Preparation	Site Preparation	8/27/2022	9/9/2022	5	10	
3	Grading	Grading	9/10/2022	10/7/2022	5	20	
4	Building Construction	Building Construction	10/8/2022	9/8/2023	5	240	
5	Paving	Paving	9/9/2023	10/6/2023	5	20	
6	Architectural Coating	Architectural Coating	10/7/2023	12/1/2023	5	40	

Acres of Grading (Site Preparation Phase): 15**Acres of Grading (Grading Phase): 20****Acres of Paving: 1.02****Residential Indoor: 337,819; Residential Outdoor: 112,606; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 2,614 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37

TTM No. 38151 Madone Collections Project - South Coast AQMD Air District, Summer

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

Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	32.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	81.00	25.00	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	16.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

TTM No. 38151 Madone Collections Project - South Coast AQMD Air District, 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 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					0.3445	0.0000	0.3445	0.0522	0.0000	0.0522			0.0000			0.0000
Off-Road	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427		1.1553	1.1553		3,746.781 2	3,746.781 2	1.0524		3,773.092 0
Total	2.6392	25.7194	20.5941	0.0388	0.3445	1.2427	1.5872	0.0522	1.1553	1.2074		3,746.781 2	3,746.781 2	1.0524		3,773.092 0

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	6.7600e-003	0.2496	0.0597	9.7000e-004	0.0280	2.0900e-003	0.0301	7.6700e-003	2.0000e-003	9.6700e-003		106.2145	106.2145	5.7100e-003	0.0169	111.3818
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	0.0517	0.0363	0.5726	1.5200e-003	0.1677	1.0000e-003	0.1687	0.0445	9.2000e-004	0.0454		154.3721	154.3721	4.0100e-003	3.6700e-003	155.5659
Total	0.0584	0.2860	0.6322	2.4900e-003	0.1957	3.0900e-003	0.1987	0.0521	2.9200e-003	0.0551		260.5866	260.5866	9.7200e-003	0.0205	266.9477

TTM No. 38151 Madone Collections Project - South Coast AQMD Air District, 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 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					0.1550	0.0000	0.1550	0.0235	0.0000	0.0235			0.0000			0.0000
Off-Road	1.2617	32.6638	24.6739	0.0388		0.9135	0.9135		0.9135	0.9135	0.0000	3,746.781 2	3,746.781 2	1.0524		3,773.092 0
Total	1.2617	32.6638	24.6739	0.0388	0.1550	0.9135	1.0686	0.0235	0.9135	0.9370	0.0000	3,746.781 2	3,746.781 2	1.0524		3,773.092 0

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	6.7600e-003	0.2496	0.0597	9.7000e-004	0.0280	2.0900e-003	0.0301	7.6700e-003	2.0000e-003	9.6700e-003		106.2145	106.2145	5.7100e-003	0.0169	111.3818
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	0.0517	0.0363	0.5726	1.5200e-003	0.1677	1.0000e-003	0.1687	0.0445	9.2000e-004	0.0454		154.3721	154.3721	4.0100e-003	3.6700e-003	155.5659
Total	0.0584	0.2860	0.6322	2.4900e-003	0.1957	3.0900e-003	0.1987	0.0521	2.9200e-003	0.0551		260.5866	260.5866	9.7200e-003	0.0205	266.9477

TTM No. 38151 Madone Collections Project - South Coast AQMD Air District, 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 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					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836		3,686.061 9	3,686.061 9	1.1922		3,715.865 5
Total	3.1701	33.0835	19.6978	0.0380	19.6570	1.6126	21.2696	10.1025	1.4836	11.5860		3,686.061 9	3,686.061 9	1.1922		3,715.865 5

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	0.0620	0.0436	0.6871	1.8200e-003	0.2012	1.2000e-003	0.2024	0.0534	1.1100e-003	0.0545		185.2465	185.2465	4.8100e-003	4.4000e-003	186.6790
Total	0.0620	0.0436	0.6871	1.8200e-003	0.2012	1.2000e-003	0.2024	0.0534	1.1100e-003	0.0545		185.2465	185.2465	4.8100e-003	4.4000e-003	186.6790

TTM No. 38151 Madone Collections Project - South Coast AQMD Air District, 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 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					8.8457	0.0000	8.8457	4.5461	0.0000	4.5461			0.0000			0.0000
Off-Road	1.2097	33.7214	22.9600	0.0380		0.9462	0.9462		0.9462	0.9462	0.0000	3,686.061 9	3,686.061 9	1.1922		3,715.865 5
Total	1.2097	33.7214	22.9600	0.0380	8.8457	0.9462	9.7918	4.5461	0.9462	5.4923	0.0000	3,686.061 9	3,686.061 9	1.1922		3,715.865 5

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	0.0620	0.0436	0.6871	1.8200e-003	0.2012	1.2000e-003	0.2024	0.0534	1.1100e-003	0.0545		185.2465	185.2465	4.8100e-003	4.4000e-003	186.6790
Total	0.0620	0.0436	0.6871	1.8200e-003	0.2012	1.2000e-003	0.2024	0.0534	1.1100e-003	0.0545		185.2465	185.2465	4.8100e-003	4.4000e-003	186.6790

TTM No. 38151 Madone Collections Project - South Coast AQMD Air District, 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 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					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297		0.9409	0.9409		0.8656	0.8656		2,872.046 4	2,872.046 4	0.9289		2,895.268 4
Total	1.9486	20.8551	15.2727	0.0297	7.0826	0.9409	8.0234	3.4247	0.8656	4.2903		2,872.046 4	2,872.046 4	0.9289		2,895.268 4

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	0.0517	0.0363	0.5726	1.5200e-003	0.1677	1.0000e-003	0.1687	0.0445	9.2000e-004	0.0454		154.3721	154.3721	4.0100e-003	3.6700e-003	155.5659
Total	0.0517	0.0363	0.5726	1.5200e-003	0.1677	1.0000e-003	0.1687	0.0445	9.2000e-004	0.0454		154.3721	154.3721	4.0100e-003	3.6700e-003	155.5659

TTM No. 38151 Madone Collections Project - South Coast AQMD Air District, 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 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					3.1872	0.0000	3.1872	1.5411	0.0000	1.5411			0.0000			0.0000
Off-Road	1.0093	26.2791	18.9906	0.0297		0.7725	0.7725		0.7725	0.7725	0.0000	2,872.046 4	2,872.046 4	0.9289		2,895.268 4
Total	1.0093	26.2791	18.9906	0.0297	3.1872	0.7725	3.9596	1.5411	0.7725	2.3136	0.0000	2,872.046 4	2,872.046 4	0.9289		2,895.268 4

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	0.0517	0.0363	0.5726	1.5200e-003	0.1677	1.0000e-003	0.1687	0.0445	9.2000e-004	0.0454		154.3721	154.3721	4.0100e-003	3.6700e-003	155.5659
Total	0.0517	0.0363	0.5726	1.5200e-003	0.1677	1.0000e-003	0.1687	0.0445	9.2000e-004	0.0454		154.3721	154.3721	4.0100e-003	3.6700e-003	155.5659

TTM No. 38151 Madone Collections Project - South Coast AQMD Air District, 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 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	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322

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	0.0456	1.1633	0.3988	4.7800e-003	0.1601	0.0122	0.1723	0.0461	0.0116	0.0577		514.1734	514.1734	0.0172	0.0745	536.8183
Worker	0.2790	0.1963	3.0918	8.1900e-003	0.9054	5.4100e-003	0.9108	0.2401	4.9800e-003	0.2451		833.6092	833.6092	0.0217	0.0198	840.0556
Total	0.3246	1.3595	3.4906	0.0130	1.0655	0.0176	1.0831	0.2862	0.0166	0.3028		1,347.7826	1,347.7826	0.0389	0.0944	1,376.8739

TTM No. 38151 Madone Collections Project - South Coast AQMD Air District, 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 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	1.0809	23.5544	17.8738	0.0269		0.9036	0.9036		0.9036	0.9036	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	1.0809	23.5544	17.8738	0.0269		0.9036	0.9036		0.9036	0.9036	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322

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	0.0456	1.1633	0.3988	4.7800e-003	0.1601	0.0122	0.1723	0.0461	0.0116	0.0577		514.1734	514.1734	0.0172	0.0745	536.8183
Worker	0.2790	0.1963	3.0918	8.1900e-003	0.9054	5.4100e-003	0.9108	0.2401	4.9800e-003	0.2451		833.6092	833.6092	0.0217	0.0198	840.0556
Total	0.3246	1.3595	3.4906	0.0130	1.0655	0.0176	1.0831	0.2862	0.0166	0.3028		1,347.7826	1,347.7826	0.0389	0.0944	1,376.8739

TTM No. 38151 Madone Collections Project - South Coast AQMD Air District, 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 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	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061

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	0.0276	0.9075	0.3573	4.5500e-003	0.1601	5.2800e-003	0.1654	0.0461	5.0500e-003	0.0511		490.0773	490.0773	0.0165	0.0710	511.6316
Worker	0.2588	0.1737	2.8490	7.9300e-003	0.9054	5.1000e-003	0.9105	0.2401	4.6900e-003	0.2448		811.6193	811.6193	0.0194	0.0183	817.5609
Total	0.2864	1.0812	3.2063	0.0125	1.0655	0.0104	1.0759	0.2862	9.7400e-003	0.2960		1,301.6966	1,301.6966	0.0359	0.0893	1,329.1925

TTM No. 38151 Madone Collections Project - South Coast AQMD Air District, 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 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	1.0809	23.5544	17.8738	0.0269		0.9036	0.9036		0.9036	0.9036	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.0809	23.5544	17.8738	0.0269		0.9036	0.9036		0.9036	0.9036	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061

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	0.0276	0.9075	0.3573	4.5500e-003	0.1601	5.2800e-003	0.1654	0.0461	5.0500e-003	0.0511		490.0773	490.0773	0.0165	0.0710	511.6316
Worker	0.2588	0.1737	2.8490	7.9300e-003	0.9054	5.1000e-003	0.9105	0.2401	4.6900e-003	0.2448		811.6193	811.6193	0.0194	0.0183	817.5609
Total	0.2864	1.0812	3.2063	0.0125	1.0655	0.0104	1.0759	0.2862	9.7400e-003	0.2960		1,301.6966	1,301.6966	0.0359	0.0893	1,329.1925

TTM No. 38151 Madone Collections Project - South Coast AQMD Air District, 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 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	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.584 1	2,207.584 1	0.7140		2,225.433 6
Paving	0.1336					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.1664	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.584 1	2,207.584 1	0.7140		2,225.433 6

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	0.0479	0.0322	0.5276	1.4700e-003	0.1677	9.4000e-004	0.1686	0.0445	8.7000e-004	0.0453		150.2999	150.2999	3.6000e-003	3.3900e-003	151.4002
Total	0.0479	0.0322	0.5276	1.4700e-003	0.1677	9.4000e-004	0.1686	0.0445	8.7000e-004	0.0453		150.2999	150.2999	3.6000e-003	3.3900e-003	151.4002

TTM No. 38151 Madone Collections Project - South Coast AQMD Air District, 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 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	0.9311	20.1146	17.2957	0.0228		0.6670	0.6670		0.6670	0.6670	0.0000	2,207.584 1	2,207.584 1	0.7140		2,225.433 6
Paving	0.1336					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0647	20.1146	17.2957	0.0228		0.6670	0.6670		0.6670	0.6670	0.0000	2,207.584 1	2,207.584 1	0.7140		2,225.433 6

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	0.0479	0.0322	0.5276	1.4700e-003	0.1677	9.4000e-004	0.1686	0.0445	8.7000e-004	0.0453		150.2999	150.2999	3.6000e-003	3.3900e-003	151.4002
Total	0.0479	0.0322	0.5276	1.4700e-003	0.1677	9.4000e-004	0.1686	0.0445	8.7000e-004	0.0453		150.2999	150.2999	3.6000e-003	3.3900e-003	151.4002

TTM No. 38151 Madone Collections Project - South Coast AQMD Air District, 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 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	26.3994					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	26.5911	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690

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	0.0511	0.0343	0.5628	1.5700e-003	0.1788	1.0100e-003	0.1799	0.0474	9.3000e-004	0.0484		160.3199	160.3199	3.8400e-003	3.6200e-003	161.4935
Total	0.0511	0.0343	0.5628	1.5700e-003	0.1788	1.0100e-003	0.1799	0.0474	9.3000e-004	0.0484		160.3199	160.3199	3.8400e-003	3.6200e-003	161.4935

TTM No. 38151 Madone Collections Project - South Coast AQMD Air District, 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 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	26.3994					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1139	2.3524	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0168		281.8690
Total	26.5133	2.3524	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0168		281.8690

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	0.0511	0.0343	0.5628	1.5700e-003	0.1788	1.0100e-003	0.1799	0.0474	9.3000e-004	0.0484		160.3199	160.3199	3.8400e-003	3.6200e-003	161.4935
Total	0.0511	0.0343	0.5628	1.5700e-003	0.1788	1.0100e-003	0.1799	0.0474	9.3000e-004	0.0484		160.3199	160.3199	3.8400e-003	3.6200e-003	161.4935

TTM No. 38151 Madone Collections Project - South Coast AQMD Air District, 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	1.0378	1.1337	10.6833	0.0240	2.4467	0.0170	2.4637	0.6520	0.0158	0.6678		2,468.6938	2,468.6938	0.1480	0.1003	2,502.2741
Unmitigated	1.0378	1.1337	10.6833	0.0240	2.4467	0.0170	2.4637	0.6520	0.0158	0.6678		2,468.6938	2,468.6938	0.1480	0.1003	2,502.2741

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Condo/Townhouse	339.84	339.84	339.84	1,161,285	1,161,285
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	339.84	339.84	339.84	1,161,285	1,161,285

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
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Condo/Townhouse	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

TTM No. 38151 Madone Collections Project - South Coast AQMD Air District, 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
City Park	0.543139	0.060749	0.184760	0.130258	0.023830	0.006353	0.011718	0.009137	0.000812	0.000509	0.024193	0.000750	0.003791
Condo/Townhouse	0.543139	0.060749	0.184760	0.130258	0.023830	0.006353	0.011718	0.009137	0.000812	0.000509	0.024193	0.000750	0.003791
Other Asphalt Surfaces	0.543139	0.060749	0.184760	0.130258	0.023830	0.006353	0.011718	0.009137	0.000812	0.000509	0.024193	0.000750	0.003791

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Kilowatt Hours of Renewable Electricity Generated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0224	0.1918	0.0816	1.2200e-003		0.0155	0.0155		0.0155	0.0155		244.8345	244.8345	4.6900e-003	4.4900e-003	246.2894
NaturalGas Unmitigated	0.0224	0.1918	0.0816	1.2200e-003		0.0155	0.0155		0.0155	0.0155		244.8345	244.8345	4.6900e-003	4.4900e-003	246.2894

TTM No. 38151 Madone Collections Project - South Coast AQMD Air District, 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					
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
Condo/Townhouse	2081.09	0.0224	0.1918	0.0816	1.2200e-003		0.0155	0.0155		0.0155	0.0155		244.8345	244.8345	4.6900e-003	4.4900e-003	246.2894
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		0.0224	0.1918	0.0816	1.2200e-003		0.0155	0.0155		0.0155	0.0155		244.8345	244.8345	4.6900e-003	4.4900e-003	246.2894

TTM No. 38151 Madone Collections Project - South Coast AQMD Air District, 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					
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
Condo/Townhouse	2.08109	0.0224	0.1918	0.0816	1.2200e-003		0.0155	0.0155		0.0155	0.0155		244.8345	244.8345	4.6900e-003	4.4900e-003	246.2894
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		0.0224	0.1918	0.0816	1.2200e-003		0.0155	0.0155		0.0155	0.0155		244.8345	244.8345	4.6900e-003	4.4900e-003	246.2894

6.0 Area Detail**6.1 Mitigation Measures Area**

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

TTM No. 38151 Madone Collections Project - South Coast AQMD Air District, 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	3.7613	0.5419	3.1870	3.4000e-003		0.0575	0.0575		0.0575	0.0575	0.0000	653.3485	653.3485	0.0176	0.0119	657.3279
Unmitigated	3.7613	0.5419	3.1870	3.4000e-003		0.0575	0.0575		0.0575	0.0575	0.0000	653.3485	653.3485	0.0176	0.0119	657.3279

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	0.2893					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.3230					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0594	0.5076	0.2160	3.2400e-003		0.0410	0.0410		0.0410	0.0410	0.0000	648.0000	648.0000	0.0124	0.0119	651.8507
Landscaping	0.0895	0.0343	2.9710	1.6000e-004		0.0164	0.0164		0.0164	0.0164		5.3485	5.3485	5.1400e-003		5.4772
Total	3.7613	0.5419	3.1870	3.4000e-003		0.0575	0.0575		0.0575	0.0575	0.0000	653.3485	653.3485	0.0176	0.0119	657.3279

TTM No. 38151 Madone Collections Project - South Coast AQMD Air District, 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	0.2893					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.3230					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0594	0.5076	0.2160	3.2400e-003		0.0410	0.0410		0.0410	0.0410	0.0000	648.0000	648.0000	0.0124	0.0119	651.8507
Landscaping	0.0895	0.0343	2.9710	1.6000e-004		0.0164	0.0164		0.0164	0.0164		5.3485	5.3485	5.1400e-003		5.4772
Total	3.7613	0.5419	3.1870	3.4000e-003		0.0575	0.0575		0.0575	0.0575	0.0000	653.3485	653.3485	0.0176	0.0119	657.3279

7.0 Water Detail**7.1 Mitigation Measures Water**

Use Water Efficient Irrigation System

TTM No. 38151 Madone Collections Project - South Coast AQMD Air District, 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
----------------	--------	-----------	-----------	-------------	-------------	-----------

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

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

11.0 Vegetation

TTM No. 38151 Madone Collections Project - South Coast AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**TTM No. 38151 Madone Collections Project**

South Coast AQMD Air District, Winter

1.0 Project Characteristics**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	1.00	Acre	1.02	43,560.00	0
City Park	2.00	Acre	2.00	87,120.00	0
Condo/Townhouse	36.00	Dwelling Unit	3.90	166,824.00	103

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10			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 - SAFE Rule Applied.

Land Use - 36 Detached Townhomes with Garages on 4,634 square foot lots. To include shared common areas. Total project area 6.92 acres.

Construction Phase - Building construction and architectural coating phases extended to match applicant's provided construction schedule.

Off-road Equipment - Defaults.

Off-road Equipment - Defaults.

Off-road Equipment - Defaults.

Off-road Equipment - Defaults.

Off-road Equipment - Defaults.

Off-road Equipment - Defaults.

Trips and VMT - Defaults.

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

Water Mitigation - Water efficient irrigation systems and controls would be implimented.

[illegible]

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

tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstructionPhase	NumDays	230.00	240.00
tblConstructionPhase	NumDays	20.00	40.00
tblFireplaces	NumberWood	1.80	0.00
tblLandUse	LandUseSquareFeet	36,000.00	166,824.00
tblLandUse	LotAcreage	1.00	1.02
tblLandUse	LotAcreage	2.25	3.90
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	8.14	9.44
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	6.28	9.44
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	7.32	9.44
tblWoodstoves	NumberCatalytic	1.80	0.00
tblWoodstoves	NumberNoncatalytic	1.80	0.00

2.0 Emissions Summary

TTM No. 38151 Madone Collections Project - South Coast AQMD Air District, 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	3.2354	33.1312	21.1724	0.0412	19.8582	1.6138	21.4720	10.1558	1.4847	11.6405	0.0000	3,998.4306	3,998.4306	1.1970	0.0957	4,031.1723
2023	26.6450	15.5273	19.1911	0.0390	1.0655	0.7101	1.7756	0.2862	0.6682	0.9544	0.0000	3,810.6910	3,810.6910	0.7176	0.0906	3,853.7755
Maximum	26.6450	33.1312	21.1724	0.0412	19.8582	1.6138	21.4720	10.1558	1.4847	11.6405	0.0000	3,998.4306	3,998.4306	1.1970	0.0957	4,031.1723

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	1.4191	33.7691	25.2522	0.0412	9.0469	0.9474	9.9942	4.5995	0.9473	5.5467	0.0000	3,998.4306	3,998.4306	1.1970	0.0957	4,031.1723
2023	26.5673	24.6968	20.8209	0.0390	1.0655	0.9140	1.9794	0.2862	0.9133	1.1995	0.0000	3,810.6910	3,810.6910	0.7176	0.0906	3,853.7755
Maximum	26.5673	33.7691	25.2522	0.0412	9.0469	0.9474	9.9942	4.5995	0.9473	5.5467	0.0000	3,998.4306	3,998.4306	1.1970	0.0957	4,031.1723

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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	6.34	-20.16	-14.15	0.00	51.67	19.91	48.50	53.21	13.58	46.44	0.00	0.00	0.00	0.00	0.00	0.00

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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****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	3.7613	0.5419	3.1870	3.4000e-003		0.0575	0.0575		0.0575	0.0575	0.0000	653.3485	653.3485	0.0176	0.0119	657.3279
Energy	0.0224	0.1918	0.0816	1.2200e-003		0.0155	0.0155		0.0155	0.0155		244.8345	244.8345	4.6900e-003	4.4900e-003	246.2894
Mobile	1.0010	1.2188	10.2822	0.0229	2.4467	0.0170	2.4637	0.6520	0.0158	0.6678		2,353.5505	2,353.5505	0.1522	0.1043	2,388.4281
Total	4.7847	1.9524	13.5508	0.0275	2.4467	0.0900	2.5367	0.6520	0.0888	0.7408	0.0000	3,251.7335	3,251.7335	0.1744	0.1206	3,292.0454

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	3.7613	0.5419	3.1870	3.4000e-003		0.0575	0.0575		0.0575	0.0575	0.0000	653.3485	653.3485	0.0176	0.0119	657.3279
Energy	0.0224	0.1918	0.0816	1.2200e-003		0.0155	0.0155		0.0155	0.0155		244.8345	244.8345	4.6900e-003	4.4900e-003	246.2894
Mobile	1.0010	1.2188	10.2822	0.0229	2.4467	0.0170	2.4637	0.6520	0.0158	0.6678		2,353.5505	2,353.5505	0.1522	0.1043	2,388.4281
Total	4.7847	1.9524	13.5508	0.0275	2.4467	0.0900	2.5367	0.6520	0.0888	0.7408	0.0000	3,251.7335	3,251.7335	0.1744	0.1206	3,292.0454

TTM No. 38151 Madone Collections Project - South Coast AQMD Air District, 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	Demolition	Demolition	8/1/2022	8/26/2022	5	20	
2	Site Preparation	Site Preparation	8/27/2022	9/9/2022	5	10	
3	Grading	Grading	9/10/2022	10/7/2022	5	20	
4	Building Construction	Building Construction	10/8/2022	9/8/2023	5	240	
5	Paving	Paving	9/9/2023	10/6/2023	5	20	
6	Architectural Coating	Architectural Coating	10/7/2023	12/1/2023	5	40	

Acres of Grading (Site Preparation Phase): 15**Acres of Grading (Grading Phase): 20****Acres of Paving: 1.02****Residential Indoor: 337,819; Residential Outdoor: 112,606; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 2,614 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37

TTM No. 38151 Madone Collections Project - South Coast AQMD Air District, Winter

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

Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	32.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	81.00	25.00	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	16.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

TTM No. 38151 Madone Collections Project - South Coast AQMD Air District, 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 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					0.3445	0.0000	0.3445	0.0522	0.0000	0.0522			0.0000			0.0000
Off-Road	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427		1.1553	1.1553		3,746.781 2	3,746.781 2	1.0524		3,773.092 0
Total	2.6392	25.7194	20.5941	0.0388	0.3445	1.2427	1.5872	0.0522	1.1553	1.2074		3,746.781 2	3,746.781 2	1.0524		3,773.092 0

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	6.5700e-003	0.2606	0.0608	9.7000e-004	0.0280	2.0900e-003	0.0301	7.6700e-003	2.0000e-003	9.6700e-003		106.2536	106.2536	5.7000e-003	0.0169	111.4226
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	0.0544	0.0398	0.5176	1.4300e-003	0.1677	1.0000e-003	0.1687	0.0445	9.2000e-004	0.0454		145.3958	145.3958	4.0600e-003	3.8900e-003	146.6576
Total	0.0609	0.3004	0.5784	2.4000e-003	0.1957	3.0900e-003	0.1988	0.0521	2.9200e-003	0.0551		251.6495	251.6495	9.7600e-003	0.0208	258.0802

TTM No. 38151 Madone Collections Project - South Coast AQMD Air District, 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 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					0.1550	0.0000	0.1550	0.0235	0.0000	0.0235			0.0000			0.0000
Off-Road	1.2617	32.6638	24.6739	0.0388		0.9135	0.9135		0.9135	0.9135	0.0000	3,746.781 2	3,746.781 2	1.0524		3,773.092 0
Total	1.2617	32.6638	24.6739	0.0388	0.1550	0.9135	1.0686	0.0235	0.9135	0.9370	0.0000	3,746.781 2	3,746.781 2	1.0524		3,773.092 0

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	6.5700e-003	0.2606	0.0608	9.7000e-004	0.0280	2.0900e-003	0.0301	7.6700e-003	2.0000e-003	9.6700e-003		106.2536	106.2536	5.7000e-003	0.0169	111.4226
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	0.0544	0.0398	0.5176	1.4300e-003	0.1677	1.0000e-003	0.1687	0.0445	9.2000e-004	0.0454		145.3958	145.3958	4.0600e-003	3.8900e-003	146.6576
Total	0.0609	0.3004	0.5784	2.4000e-003	0.1957	3.0900e-003	0.1988	0.0521	2.9200e-003	0.0551		251.6495	251.6495	9.7600e-003	0.0208	258.0802

TTM No. 38151 Madone Collections Project - South Coast AQMD Air District, 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 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					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836		3,686.061 9	3,686.061 9	1.1922		3,715.865 5
Total	3.1701	33.0835	19.6978	0.0380	19.6570	1.6126	21.2696	10.1025	1.4836	11.5860		3,686.061 9	3,686.061 9	1.1922		3,715.865 5

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	0.0652	0.0477	0.6211	1.7200e-003	0.2012	1.2000e-003	0.2024	0.0534	1.1100e-003	0.0545		174.4750	174.4750	4.8700e-003	4.6700e-003	175.9891
Total	0.0652	0.0477	0.6211	1.7200e-003	0.2012	1.2000e-003	0.2024	0.0534	1.1100e-003	0.0545		174.4750	174.4750	4.8700e-003	4.6700e-003	175.9891

TTM No. 38151 Madone Collections Project - South Coast AQMD Air District, 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 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					8.8457	0.0000	8.8457	4.5461	0.0000	4.5461			0.0000			0.0000
Off-Road	1.2097	33.7214	22.9600	0.0380		0.9462	0.9462		0.9462	0.9462	0.0000	3,686.061 9	3,686.061 9	1.1922		3,715.865 5
Total	1.2097	33.7214	22.9600	0.0380	8.8457	0.9462	9.7918	4.5461	0.9462	5.4923	0.0000	3,686.061 9	3,686.061 9	1.1922		3,715.865 5

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	0.0652	0.0477	0.6211	1.7200e-003	0.2012	1.2000e-003	0.2024	0.0534	1.1100e-003	0.0545		174.4750	174.4750	4.8700e-003	4.6700e-003	175.9891
Total	0.0652	0.0477	0.6211	1.7200e-003	0.2012	1.2000e-003	0.2024	0.0534	1.1100e-003	0.0545		174.4750	174.4750	4.8700e-003	4.6700e-003	175.9891

TTM No. 38151 Madone Collections Project - South Coast AQMD Air District, 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 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					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297		0.9409	0.9409		0.8656	0.8656		2,872.046 4	2,872.046 4	0.9289		2,895.268 4
Total	1.9486	20.8551	15.2727	0.0297	7.0826	0.9409	8.0234	3.4247	0.8656	4.2903		2,872.046 4	2,872.046 4	0.9289		2,895.268 4

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	0.0544	0.0398	0.5176	1.4300e-003	0.1677	1.0000e-003	0.1687	0.0445	9.2000e-004	0.0454		145.3958	145.3958	4.0600e-003	3.8900e-003	146.6576
Total	0.0544	0.0398	0.5176	1.4300e-003	0.1677	1.0000e-003	0.1687	0.0445	9.2000e-004	0.0454		145.3958	145.3958	4.0600e-003	3.8900e-003	146.6576

TTM No. 38151 Madone Collections Project - South Coast AQMD Air District, 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 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					3.1872	0.0000	3.1872	1.5411	0.0000	1.5411			0.0000			0.0000
Off-Road	1.0093	26.2791	18.9906	0.0297		0.7725	0.7725		0.7725	0.7725	0.0000	2,872.046 4	2,872.046 4	0.9289		2,895.268 4
Total	1.0093	26.2791	18.9906	0.0297	3.1872	0.7725	3.9596	1.5411	0.7725	2.3136	0.0000	2,872.046 4	2,872.046 4	0.9289		2,895.268 4

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	0.0544	0.0398	0.5176	1.4300e-003	0.1677	1.0000e-003	0.1687	0.0445	9.2000e-004	0.0454		145.3958	145.3958	4.0600e-003	3.8900e-003	146.6576
Total	0.0544	0.0398	0.5176	1.4300e-003	0.1677	1.0000e-003	0.1687	0.0445	9.2000e-004	0.0454		145.3958	145.3958	4.0600e-003	3.8900e-003	146.6576

TTM No. 38151 Madone Collections Project - South Coast AQMD Air District, 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 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	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322

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	0.0448	1.2141	0.4132	4.7800e-003	0.1601	0.0122	0.1723	0.0461	0.0117	0.0578		514.4308	514.4308	0.0172	0.0746	537.1032
Worker	0.2935	0.2147	2.7950	7.7200e-003	0.9054	5.4100e-003	0.9108	0.2401	4.9800e-003	0.2451		785.1374	785.1374	0.0219	0.0210	791.9510
Total	0.3383	1.4288	3.2081	0.0125	1.0655	0.0176	1.0831	0.2862	0.0167	0.3029		1,299.5681	1,299.5681	0.0391	0.0957	1,329.0542

TTM No. 38151 Madone Collections Project - South Coast AQMD Air District, 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 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	1.0809	23.5544	17.8738	0.0269		0.9036	0.9036		0.9036	0.9036	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	1.0809	23.5544	17.8738	0.0269		0.9036	0.9036		0.9036	0.9036	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322

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	0.0448	1.2141	0.4132	4.7800e-003	0.1601	0.0122	0.1723	0.0461	0.0117	0.0578		514.4308	514.4308	0.0172	0.0746	537.1032
Worker	0.2935	0.2147	2.7950	7.7200e-003	0.9054	5.4100e-003	0.9108	0.2401	4.9800e-003	0.2451		785.1374	785.1374	0.0219	0.0210	791.9510
Total	0.3383	1.4288	3.2081	0.0125	1.0655	0.0176	1.0831	0.2862	0.0167	0.3029		1,299.5681	1,299.5681	0.0391	0.0957	1,329.0542

TTM No. 38151 Madone Collections Project - South Coast AQMD Air District, 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 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	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061

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	0.0265	0.9525	0.3688	4.5600e-003	0.1601	5.3100e-003	0.1654	0.0461	5.0800e-003	0.0512		490.9634	490.9634	0.0164	0.0711	512.5724
Worker	0.2731	0.1899	2.5783	7.4700e-003	0.9054	5.1000e-003	0.9105	0.2401	4.6900e-003	0.2448		764.5177	764.5177	0.0197	0.0194	770.7971
Total	0.2996	1.1424	2.9471	0.0120	1.0655	0.0104	1.0759	0.2862	9.7700e-003	0.2960		1,255.4810	1,255.4810	0.0361	0.0906	1,283.3695

TTM No. 38151 Madone Collections Project - South Coast AQMD Air District, 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 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	1.0809	23.5544	17.8738	0.0269		0.9036	0.9036		0.9036	0.9036	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.0809	23.5544	17.8738	0.0269		0.9036	0.9036		0.9036	0.9036	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061

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	0.0265	0.9525	0.3688	4.5600e-003	0.1601	5.3100e-003	0.1654	0.0461	5.0800e-003	0.0512		490.9634	490.9634	0.0164	0.0711	512.5724
Worker	0.2731	0.1899	2.5783	7.4700e-003	0.9054	5.1000e-003	0.9105	0.2401	4.6900e-003	0.2448		764.5177	764.5177	0.0197	0.0194	770.7971
Total	0.2996	1.1424	2.9471	0.0120	1.0655	0.0104	1.0759	0.2862	9.7700e-003	0.2960		1,255.4810	1,255.4810	0.0361	0.0906	1,283.3695

TTM No. 38151 Madone Collections Project - South Coast AQMD Air District, 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 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	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.584 1	2,207.584 1	0.7140		2,225.433 6
Paving	0.1336					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.1664	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.584 1	2,207.584 1	0.7140		2,225.433 6

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	0.0506	0.0352	0.4775	1.3800e-003	0.1677	9.4000e-004	0.1686	0.0445	8.7000e-004	0.0453		141.5774	141.5774	3.6500e-003	3.6000e-003	142.7402
Total	0.0506	0.0352	0.4775	1.3800e-003	0.1677	9.4000e-004	0.1686	0.0445	8.7000e-004	0.0453		141.5774	141.5774	3.6500e-003	3.6000e-003	142.7402

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**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	lb/day										lb/day					
Off-Road	0.9311	20.1146	17.2957	0.0228		0.6670	0.6670		0.6670	0.6670	0.0000	2,207.584 1	2,207.584 1	0.7140		2,225.433 6
Paving	0.1336					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0647	20.1146	17.2957	0.0228		0.6670	0.6670		0.6670	0.6670	0.0000	2,207.584 1	2,207.584 1	0.7140		2,225.433 6

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	0.0506	0.0352	0.4775	1.3800e-003	0.1677	9.4000e-004	0.1686	0.0445	8.7000e-004	0.0453		141.5774	141.5774	3.6500e-003	3.6000e-003	142.7402
Total	0.0506	0.0352	0.4775	1.3800e-003	0.1677	9.4000e-004	0.1686	0.0445	8.7000e-004	0.0453		141.5774	141.5774	3.6500e-003	3.6000e-003	142.7402

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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 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	26.3994					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	26.5911	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690

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	0.0540	0.0375	0.5093	1.4800e-003	0.1788	1.0100e-003	0.1799	0.0474	9.3000e-004	0.0484		151.0158	151.0158	3.8900e-003	3.8400e-003	152.2562
Total	0.0540	0.0375	0.5093	1.4800e-003	0.1788	1.0100e-003	0.1799	0.0474	9.3000e-004	0.0484		151.0158	151.0158	3.8900e-003	3.8400e-003	152.2562

TTM No. 38151 Madone Collections Project - South Coast AQMD Air District, 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 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	26.3994					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1139	2.3524	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0168		281.8690
Total	26.5133	2.3524	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0168		281.8690

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	0.0540	0.0375	0.5093	1.4800e-003	0.1788	1.0100e-003	0.1799	0.0474	9.3000e-004	0.0484		151.0158	151.0158	3.8900e-003	3.8400e-003	152.2562
Total	0.0540	0.0375	0.5093	1.4800e-003	0.1788	1.0100e-003	0.1799	0.0474	9.3000e-004	0.0484		151.0158	151.0158	3.8900e-003	3.8400e-003	152.2562

TTM No. 38151 Madone Collections Project - South Coast AQMD Air District, 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	1.0010	1.2188	10.2822	0.0229	2.4467	0.0170	2.4637	0.6520	0.0158	0.6678		2,353.5505	2,353.5505	0.1522	0.1043	2,388.4281
Unmitigated	1.0010	1.2188	10.2822	0.0229	2.4467	0.0170	2.4637	0.6520	0.0158	0.6678		2,353.5505	2,353.5505	0.1522	0.1043	2,388.4281

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Condo/Townhouse	339.84	339.84	339.84	1,161,285	1,161,285
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	339.84	339.84	339.84	1,161,285	1,161,285

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
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Condo/Townhouse	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

TTM No. 38151 Madone Collections Project - South Coast AQMD Air District, 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
City Park	0.543139	0.060749	0.184760	0.130258	0.023830	0.006353	0.011718	0.009137	0.000812	0.000509	0.024193	0.000750	0.003791
Condo/Townhouse	0.543139	0.060749	0.184760	0.130258	0.023830	0.006353	0.011718	0.009137	0.000812	0.000509	0.024193	0.000750	0.003791
Other Asphalt Surfaces	0.543139	0.060749	0.184760	0.130258	0.023830	0.006353	0.011718	0.009137	0.000812	0.000509	0.024193	0.000750	0.003791

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Kilowatt Hours of Renewable Electricity Generated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0224	0.1918	0.0816	1.2200e-003		0.0155	0.0155		0.0155	0.0155		244.8345	244.8345	4.6900e-003	4.4900e-003	246.2894
NaturalGas Unmitigated	0.0224	0.1918	0.0816	1.2200e-003		0.0155	0.0155		0.0155	0.0155		244.8345	244.8345	4.6900e-003	4.4900e-003	246.2894

TTM No. 38151 Madone Collections Project - South Coast AQMD Air District, 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					
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
Condo/Townhouse	2081.09	0.0224	0.1918	0.0816	1.2200e-003		0.0155	0.0155		0.0155	0.0155		244.8345	244.8345	4.6900e-003	4.4900e-003	246.2894
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		0.0224	0.1918	0.0816	1.2200e-003		0.0155	0.0155		0.0155	0.0155		244.8345	244.8345	4.6900e-003	4.4900e-003	246.2894

TTM No. 38151 Madone Collections Project - South Coast AQMD Air District, 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					
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
Condo/Townhouse	2.08109	0.0224	0.1918	0.0816	1.2200e-003		0.0155	0.0155		0.0155	0.0155		244.8345	244.8345	4.6900e-003	4.4900e-003	246.2894
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		0.0224	0.1918	0.0816	1.2200e-003		0.0155	0.0155		0.0155	0.0155		244.8345	244.8345	4.6900e-003	4.4900e-003	246.2894

6.0 Area Detail**6.1 Mitigation Measures Area**

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

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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	lb/day										lb/day					
Mitigated	3.7613	0.5419	3.1870	3.4000e-003		0.0575	0.0575		0.0575	0.0575	0.0000	653.3485	653.3485	0.0176	0.0119	657.3279
Unmitigated	3.7613	0.5419	3.1870	3.4000e-003		0.0575	0.0575		0.0575	0.0575	0.0000	653.3485	653.3485	0.0176	0.0119	657.3279

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	0.2893					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.3230					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0594	0.5076	0.2160	3.2400e-003		0.0410	0.0410		0.0410	0.0410	0.0000	648.0000	648.0000	0.0124	0.0119	651.8507
Landscaping	0.0895	0.0343	2.9710	1.6000e-004		0.0164	0.0164		0.0164	0.0164		5.3485	5.3485	5.1400e-003		5.4772
Total	3.7613	0.5419	3.1870	3.4000e-003		0.0575	0.0575		0.0575	0.0575	0.0000	653.3485	653.3485	0.0176	0.0119	657.3279

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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	lb/day										lb/day					
Architectural Coating	0.2893					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.3230					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0594	0.5076	0.2160	3.2400e-003		0.0410	0.0410		0.0410	0.0410	0.0000	648.0000	648.0000	0.0124	0.0119	651.8507
Landscaping	0.0895	0.0343	2.9710	1.6000e-004		0.0164	0.0164		0.0164	0.0164		5.3485	5.3485	5.1400e-003		5.4772
Total	3.7613	0.5419	3.1870	3.4000e-003		0.0575	0.0575		0.0575	0.0575	0.0000	653.3485	653.3485	0.0176	0.0119	657.3279

7.0 Water Detail**7.1 Mitigation Measures Water**

Use Water Efficient Irrigation System

TTM No. 38151 Madone Collections Project - South Coast AQMD Air District, 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
