Appendix B: Air Quality Assumptions and Calculations

Air Quality

1. Assumptions
2. Unmitigated Construction Summary
3. Mitigated Construction Summary
4. Operational Summary
    a. Criteria Pollutants
    b. CO Hotspot
5. CalEEMod Output
    a. Construction
        1. Single Family Residential
        2. Multi-Family Residential
        3. Non Residential
    b. Operational
        1. Existing
        2. 2040 Buildout
6. EMFAC2017
    a. Construction
    b. Operational
        1. Existing
        2. 2040 Buildout

Air Quality

1. Assumptions

Diamond Bar
Assumptions

CalEEMod Inputs (Non-Default information only)

Project Location	
County	Los Angeles
Air District	SCAQMD
Climate Zone	9
Operational Year Existing	2016
Operational 1st year	2020
Operational Year Project	2040
Utility Provider	Southern California Edison
Source Receptor Area (SCAQMD)	10

	Base (2012)[1]	2016[2]	2040[3]
CO intensity	702	643.734	421.2
% renewable	20%	28.30%	60.00%

[1] Appendix D; Table 1.2, CalEEMod 2017 User Guide

[2] GHG Calcs.xls from Dyett & Bhatia

[3] 2018 SCE Annual Report. Pg 126

Land Use	**Building SQFT**	**Building KFS**	**Units/ Spaces**	**Acres**	
Existing (Operational Modeling)					
SFR			13,252		
MFR			5,661		
Retail	586,659	586.66			
Office	2,406,803	2406.80			
Industrial	1,052,869	1052.87			
Other	1,518,153	1518.15			
Office + Other		3,924.96			
Park				133	
golf course	32,000	32.00		168.33	
Private Recreation	7,337	7.34		17.65	Club

Diamond Bar
Assumptions

2040 (Operational Modeling)

Land Use	Building SQFT	Building KFS	Units/ Spaces	Acres
SFR			13,394	
MFR			9,273	
Retail	1,193,942	1,193.94		
Office	2,926,694	2,926.69		
Industrial	849,868	849.87		
Other	2,211,562	2,211.56		
Office + Other		5,138.26		283.98
Park				134
golf course	32,000	32.00		118
Private Recreation	7,337	7.34		15

New Development - Total (not Modeled)

Land Use	Building SQFT	Building KFS	Units/ Spaces	Acres
SFR			142	
MFR			3,612	
Retail	607,283			0.00
Office	519,892			0.00
Industrial				
Other	693,409			0.00
School				0
Park				1.23
Openspace				361
golf course				0
Private Recreation				0

New Development - Construction Modeling (Annual Growth of 10% worst case)

Land Use	Building SQFT	Building KFS	Units/ Spaces	Acres
SFR			12	
MFR			377	
Retail	60,728	60.73		
Office	51,989	51.99		
Industrial	0			
Other	69,341	69.34		
School				0.00
Park		182,058.40		1.23
Openspace				0.00
golf course				0.00
Private Recreation				0.00

Diamond Bar
Assumptions

Demolition (Construction modeling)

Industrial	-20,300	-20.30

Paving Acerage

Total Acres by Land use	Existing	Project	New	% total
Residential	5,112	5,147	35	
SFR		1.33	142	4%
MFR		33.83	3,612	96%
NR	6,432	6,405	26	
Paving Acres by Land Use	Acres			
SFR	0.13	non-asphalt		
MFR	3.38	asphalt		
NR	0.88	asphalt		

Construction

Construction Schedule Source: CalEEMod Defaults

CalEEMod Phase	Start	End	Days
SFR- Site Prep	1/1/2020	1/14/2020	10
SFR - Grading	1/15/2020	2/11/2020	20
SFR - Building Construction	2/12/2020	12/29/2020	230
SFR - Paving	11/30/2020	12/25/2020	20
SFR - Architectural Coating	11/30/2020	12/25/2020	20
MFR - Site Preparation	1/1/2020	1/14/2020	10
MFR - Grading	1/15/2020	2/25/2020	30
MFR - Building Construction	2/26/2020	12/20/2020	213
MFR - Paving	11/19/2020	12/16/2020	20
MFR - Architectural Coating	11/21/2020	12/18/2020	20
Demolition	1/1/2020	1/28/2020	20
NR - Site Preparation	1/29/2020	1/31/2020	3
NR - Grading	2/1/2020	2/10/2020	6
NR - Building Construction	2/11/2020	12/14/2020	220
NR - Paving	11/15/2020	11/27/2020	10
NR - Architectural Coating	11/29/2020	12/11/2020	10

Notes:

1. ***Phases where construction overlap occures***

* There is no set construction scenario therefore the following assumptions were made. Up to 3 non-residential construction projects, one single family residential, one multifamily residential, demolition of 10% of the industrial to be removed and one park could be built in any year.

Diamond Bar
Assumptions

* As a worst case scenario, maximum criteria pollutant emissions for each landuse type (regardless of construction phase) will be combined on the same day.

* For localized emissions the analysis assumes one project would be within 25 meters of any given construction project. But only one construction project would influence any one sensitive receptor.

2. Construction Activities are anticipated to occur 5 days per week

3. Cut and Fill amounts. Assumed balanced onsite

Construction Phases and Equipment Summary

The following provides the equipment estimated by CalEEMod to be used during each phase of site construction. The equipment is based on the size of the site and studies completed by SCAQMD. The following abbreviations are used in the following sections.

= number of each type of equipment that would operate on a max day.

Hrs/day = estimated hours per day each piece of equipment would operate (This is not representative of the total length of the construction day)

HP = horse power of the equipment.

LF = Load factor for the equipment

Construction By SubPhase

Notes: Source: *CalEEMod Defaults*

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
SFR- Site Prep	Rubber Tired Dozers	3	8	247	0.4
SFR- Site Prep	Tractors/Loaders/ Backhoes	4	8	97	0.37
SFR - Grading	Excavators	1	8	158	0.38
SFR - Grading	Graders	1	8	187	0.41
SFR - Grading	Rubber Tired Dozers	1	8	247	0.4
SFR - Grading	Tractors/Loaders/ Backhoes	3	8	97	0.37
SFR - Building Construction	Cranes	1	7	231	0.29
SFR - Building Construction	Forklifts	3	8	89	0.2
SFR - Building Construction	Generator Sets	1	8	84	0.74
SFR - Building Construction	Tractors/Loaders/ Backhoes	3	7	97	0.37
SFR - Building Construction	Welders	1	8	46	0.45
SFR - Paving	Pavers	2	8	130	0.42
SFR - Paving	Paving Equipment	2	8	132	0.36

Diamond Bar
Assumptions

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
SFR - Paving	Rollers	2	8	80	0.38
SFR - Architectural Coating	Air Compressors	1	6	78	0.48
MFR - Site Preparation	Rubber Tired Dozers	3	8	247	0.4
MFR - Site Preparation	Tractors/Loaders/ Backhoes	4	8	97	0.37
MFR - Grading	Excavators	2	8	158	0.38
MFR - Grading	Graders	1	8	187	0.41
MFR - Grading	Rubber Tired Dozers	1	8	247	0.4
MFR - Grading	Scrapers	2	8	367	0.48
MFR - Grading	Tractors/Loaders/ Backhoes	2	8	97	0.37
MFR - Building Construction	Cranes	1	7	231	0.29
MFR - Building Construction	Forklifts	3	8	89	0.2
MFR - Building Construction	Generator Sets	1	8	84	0.74
MFR - Building Construction	Tractors/Loaders/ Backhoes	3	7	97	0.37
MFR - Building Construction	Welders	1	8	46	0.45
MFR - Paving	Pavers	2	8	130	0.42
MFR - Paving	Paving Equipment	2	8	132	0.36
MFR - Paving	Rollers	2	8	80	0.38
MFR - Architectural Coating	Air Compressors	1	6	78	0.48
Demolition	Concrete/Industrial Saws	1	8	81	0.73
Demolition	Rubber Tired Dozers	1	8	247	0.4
NR - Site Preparation	Graders	1	8	187	0.41
NR - Site Preparation	Scrapers	1	8	367	0.48
Demolition	Tractors/Loaders/ Backhoes	3	8	97	0.37
NR - Site Preparation	Tractors/Loaders/ Backhoes	1	7	97	0.37
NR - Grading	Graders	1	8	187	0.41
NR - Grading	Rubber Tired Dozers	1	8	247	0.4
NR - Grading	Tractors/Loaders/ Backhoes	2	7	97	0.37
NR - Building Construction	Cranes	1	8	231	0.29
NR - Building Construction	Forklifts	2	7	89	0.2
NR - Building Construction	Generator Sets	1	8	84	0.74
NR - Building Construction	Tractors/Loaders/ Backhoes	1	6	97	0.37
NR - Building Construction	Welders	3	8	46	0.45
NR - Paving	Cement and Mortar Mixers	1	8	9	0.56
NR - Paving	Pavers	1	8	130	0.42

Diamond Bar
Assumptions

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
NR - Paving	Paving Equipment	1	8	132	0.36
NR - Paving	Rollers	2	8	80	0.38
NR - Paving	Tractors/Loaders/ Backhoes	1	8	97	0.37
NR - Architectural Coating	Air Compressors	1	6	78	0.48

Trips and VMT

CalEEMod Phase	Worker Trips	Vendor Trips	Haul Trucks
SFR- Site Prep	18	0	0
SFR - Grading	15	0	0
SFR - Building Construction	27	10	0
SFR - Paving	15	0	0
SFR - Architectural Coating	5	0	0
MFR - Site Preparation	18	0	0
MFR - Grading	20	0	0
MFR - Building Construction	333	64	0
MFR - Paving	15	0	0
MFR - Architectural Coating	67	0	0
Demolition	13	0	92
NR - Site Preparation	8	0	0
NR - Grading	10	0	0
NR - Building Construction	38	18	0
NR - Paving	15	0	0
NR - Architectural Coating	8	0	0
Trip Length	14.7	6.9	20

Diamond Bar
Operational Assumptions

Mobile source emissions (Modeled outside of CalEEMod)

Source: *GHG Calcs.xls from Dyett & Bhatia*

	Diesel	Gasoline		
Existing	31,413,579	477,712,477	annual VMT	
	4,211,239	78,151,429	Trips	
2040 Buildout	50,331,196	490,679,754	annual VMT	.
	5,771,465	97,813,959	Trips	

Trips	Weekday	Saturday	Sunday	Total annual
Existing	241,778	207,368	167640.720	82,362,668
2040 Buildout	305,780	259,833	203294.540	103,585,424

Based on EMFAC2017 5.15% of trips are HHD or MHD and 94.89% of trips are LDA, LDT1 and LDT2 in 2016. Number of Trips are based on CalEEMod Defaults.

Based on EMFAC2017 5.57% of trips are HHD or MHD and 94.43% of trips are LDA, LDT1 and LDT2 in 2040. Number of Trips are based on CalEEMod Defaults

Area source emissions

Hearths: No fire palces in the apartments, and defaults for fire places in the single family residents.
Defaults for all non-hearth categories

Energy Use *Source:* *GHG Calcs.xls from Dyett & Bhatia*

Electricity

Existing	KWh	Adjusted	Units/Ksf	kWh/Unit or KSF
Residential	131,937,635	131,937,635	18,913	6,976
Commercial	92,692,412	92,692,412	4,512	20,545
Industrial	972,126	972,126	1,053	923
Total	225,602,173	225,602,173		

Project	KWh	Adjusted	Units/Ksf	kWh/Unit or KSF
Residential	158,125,648	117,452,011	22,667	5,182
Commercial	128,777,959	126,338,467	6,332	19,952
Industrial	784,717	748,493	850	881
Total	287,688,325	244,538,971		

* Electricity is not modeled as it does not result in criteria pollutant emissions. GHG Emissions are modeled as part of the CAP process.

Public Lighting	3,231,978

Diamond Bar
Operational Assumptions

Natural Gas (Modeled outside of CalEEMod)

Existing	Therms	Adjusted	MBTU
Residential	6,115,192	6,115,192	611,519
Commercial	1,939,083	1,939,083	193,908
Industrial	2,192	2,192	219
Total	8,056,467	8,056,467	

Project	Therms	Adjusted	MBTU
Residential	7,328,983	4,798,708	479,871
Commercial	2,721,249	2,709,095	270,909
Industrial	1,769	1,769	177
Total	10,052,001	7,509,572	

Note: Adjusted is adjusted electrical usage and Natural Gas Usage based on implementation of 2019 title 24 Standards

100,000 BTU/Therm

Water and Wastewater

Source: *GHG Calcs.xls from Dyett & Bhatia*

	Acre feet/yr	gallons/year	Waste Water	Outdoor Use
Existing	9,282	3,024,553,001	911,000,000	2,113,553,001
Project	12,153	3,960,072,465	1,402,000,000	2,558,072,465

	Default	% Default	Septic dist.	Revised
Septic	10.33			
Aerobic	87.46	0.98	10.08	97.54
Lagoon	2.21	0.02	0.25	2.46

*water and wastewater are not modeled as it does not generate criteria pollutant emissions. GHG Emissions were modeled as part of the CAP process.

325,851 gallons/acre foot

Diamond Bar
Operational Assumptions

Solid Waste

Source: *GHG Calcs.xls from Dyett & Bhatia*

Existing	**tons/year**	Project	**tons/year**
Residential	14,166	Residential	16,328
Commercial/Industrial	7,770	Commercial/Industrial	8,875

*Solidwaste was not modeled as it does not generate criteria pollutant emissions. GHG Emissions were modeled as part of the CAP process.

Operational Off-road equipment/Stationary Sources (modeled outside of CalEEMod)

Gallons of Fuel/day		**Diesel**	**Gasoline**	**CNG**
	Existing	189,551	9,187	3,934
	Project	262,241	18,684	7,975

Gallons of Fuel/year		**Diesel**	**Gasoline**	**CNG**
	Existing	69,186,225	3,353,182	1,436,056
	Project	95,717,965	6,819,551	2,910,948

gallons/mile					
	2016	0.0009725	0.0005449	0.0260423	From EMFAC 2017
	2040	0.0008552	0.0005571	0.0186498	From EMFAC 2017

VMT per year		**Diesel**	**Gasoline**	**CNG**
	Existing	67,280	1,827	37,398
	Project	81,856	3,799	54,289

VMT/Trip					
	2016	12.11	2.82	10.38	From EMFAC 2017
	2040	13.20	5.96	10.45	From EMFAC 2017

Trips/year		**Diesel**	**Gasoline**	**CNG**
	Existing	5,556	648	3,603
	Project	6,201	638	5,194

Diamond Bar GPU
Comparison Tables

Housing and Jobs Projection

	Existing Estimate (current) based on 2016 data	*Preferred Plan 2040*	*No Project 2040*
Housing Units	18,913	22,667	19,643
Households	18,308	21,533	18,661
Population	57,853	66,685	57,790
Jobs	14,702	21,744	18,855

Housing and Jobs Projection Rounded

	Existing Estimate (current) based on 2016 data	*Preferred Plan 2040*	*No Project 2040*
Housing Units	18,910	22,670	19,640
Households	18,310	21,530	18,660
Population	57,900	66,700	57,800
Jobs	14,700	21,700	18,900

Hus and HHs are rounded to the nearest 10
Pop and Jobs are rounded to the nearest 100

Diamond Bar GPU
Comparison Tables

Housing Unit Comparison

	Preferred Plan		
	Single-Family Units	*Multi-Family Units*	*Total Units*
Existing	13,252	5,661	18,913
Total at Buildout	13,394	9,273	22,667
Net New Units	142	3,612	3,754

Housing Unit Comparison Rounded

	Preferred Plan		
	Single-Family Units	*Multi-Family Units*	*Total Units*
Existing	13,250	5,660	18,910
Total at Buildout	13,390	9,270	22,670
Net New Units	140	3,610	3,750

HUs are rounded to the nearest 10

Diamond Bar GPU
Comparison Tables

Non-Residential Comparison

	Preferred Plan									
	Retail		*Office*		*Industrial*		*Other Commercial*		*Total*	
	SQFT	*Jobs*	*SQFT*	*Jobs*	*SQFT*	*Jobs*	*SQFT*	*Jobs*	*SQFT*	*Jobs*
Existing	586,659	1,467	2,406,803	7,334	1,052,869	2,106	1,518,153	3,795	5,564,484	14,702
Total at Buildout	1,193,942	3,079	2,926,694	11,436	849,868	1,700	2,211,562	5,529	7,182,066	21,744
Net New	607,283	1,613	519,892	4,102	(203,001)	(406)	693,409	1,734	1,617,583	7,042

Non-Residential Comparison Rounded

	Preferred Plan									
	Retail		*Office*		*Industrial*		*Other Commercial*		*Total*	
	SQFT	*Jobs*	*SQFT*	*Jobs*	*SQFT*	*Jobs*	*SQFT*	*Jobs*	*SQFT*	*Jobs*
Existing	587,000	1,500	2,407,000	7,300	1,053,000	2,100	1,518,000	3,800	5,564,000	14,700
Total at Buildout	1,194,000	3,100	2,927,000	11,400	850,000	1,700	2,212,000	5,500	7,182,000	21,700
Net New	607,000	1,600	520,000	4,100	(203,000)	(400)	693,000	1,700	1,618,000	7,000

Jobs are rounded to the nearest 100
SQFT is rounded to the nearest 1,000

Diamond Bar GPU
Land Use Designation Summary

		Existing												
Code	*Land Use Designation*	*Acres*	*Units*	*SF Units*	*MF Units*	*Pop*	*RetailSqft*	*OfficeSqft*	*IndSqft*	*Other Sqft*	*RetailJob*	*OfficeJob*	*IndJob*	*Other Jobs*
	Residential	5,112	18,270	12,924	5,346	55,886	-	88,004	-	-	-	269	-	-
RR	Rural Residential	1,401	815	815	-	2,493	-	-	-	-	-	-	-	-
RL	Low Density Residential	2,495	9,258	8,947	311	28,319	-	19,777	-	-	-	59	-	-
RLM	Low-Medium Residential	644	3,162	3,162	-	9,672	-	-	-	-	-	-	-	-
RM	Medium Density Residential	274	2,434	-	2,434	7,445	-	7,540	-	-	-	23	-	-
RMH	Medium High Residential	182	2,101	-	2,101	6,427	-	44,371	-	-	-	137	-	-
RH	High Density Residential	34	500	-	500	1,529	-	16,316	-	-	-	50	-	-
PA-1/SP, PA	High Density Residential-30	82	-	-	-	-	-	-	-	-	-	-	-	-
RH-30	High Density Residential-30	-	-	-	-	-	-	-	-	-	-	-	-	-
	Non-Residential	5,205	154	11	143	471	300,132	2,170,589	1,052,869	1,401,403	750	6,623	2,106	3,504
C	General Commercial	155	-	-	-	-	227,633	207,725	13,137	1,050,639	569	639	26	2,627
CO	Commercial/Office	59	45	1	44	138	53,998	367,713	-	229,492	135	1,131	-	574
OP	Professional/Office	161	-	-	-	-	8,715	1,500,380	-	121,272	22	4,590	-	303
I	Light Industrial	88	-	-	-	-	-	77,648	910,553	-	-	220	1,821	-
S	School	278	109	10	99	333	-	-	-	-	-	-	-	-
GC	Golf Course	168	-	-	-	-	9,786	9,786	129,179	-	24	24	258	-
PK	Park	133	-	-	-	-	-	-	-	-	-	-	-	-
OS	Open Space	632	-	-	-	-	-	-	-	-	-	-	-	-
PR	Private Recreation	18	-	-	-	-	-	7,337	-	-	-	18	-	-
AG/SP	Agriculture	3,513	-	-	-	-	-	-	-	-	-	-	-	-
	New Designations	-	-	-	-	-	-	-	-	-	-	-	-	-
MU-TC	Town Center Mixed Use	-	-	-	-	-	-	-	-	-	-	-	-	-
MU-N	Neighborhood Mixed Use	-	-	-	-	-	-	-	-	-	-	-	-	-
MU-TOD	Transit Oriented Mixed Use	-	-	-	-	-	-	-	-	-	-	-	-	-
PF	Public Facility	-	-	-	-	-	-	-	-	-	-	-	-	-
O	Office	-	-	-	-	-	-	-	-	-	-	-	-	-
CC	Community Core Overlay	-	-	-	-	-	-	-	-	-	-	-	-	-
GC/PK	Golf Course/Park	-	-	-	-	-	-	-	-	-	-	-	-	-
	Planning Areas	1,226	489	317	172	1,496	286,527	148,210	-	116,750	716	442	-	292
PA-1/SP	Planning Area 1	638	-	-	-	-	-	-	-	-	-	-	-	-
PA-2/SP	Planning Area 2	430	127	127	-	388	-	-	-	-	-	-	-	-
PA-3/SP	Planning Area 3	48	180	70	110	551	286,527	148,210	-	116,750	716	442	-	292
PA-4/SP	Planning Area 4	81	-	-	-	-	-	-	-	-	-	-	-	-
PA-5/SP	Planning Area 5	-	-	-	-	-	-	-	-	-	-	-	-	-
SP	Willow Heights	29	182	120	62	557	-	-	-	-	-	-	-	-
	Other	26	-	-	-	-	-	-	-	-	-	-	-	-
ROW		-	-	-	-	-	-	-	-	-	-	-	-	-
F		1	-	-	-	-	-	-	-	-	-	-	-	-
W		17	-	-	-	-	-	-	-	-	-	-	-	-
Blank	Trail Easement	7	-	-	-	-	-	-	-	-	-	-	-	-
Totals		**11,569**	**18,913**	**13,252**	**5,661**	**57,853**	**586,659**	**2,406,803**	**1,052,869**	**1,518,153**	**1,467**	**7,334**	**2,106**	**3,795**

Diamond Bar GPU
Land Use Designation Summary

		Proposed Plan Buildout												
Code	*Land Use Designation*	*Acres*	*Units*	*SF Units*	*MF Units*	*Pop*	*RetailSqft*	*OfficeSqft*	*IndSqft*	*Other Sqft*	*RetailJob*	*OfficeJob*	*IndJob*	*Other Job*
	Residential	5,147	19,194	13,181	6,013	56,468	-	188,771	-	-	-	579	-	-
RR	Rural Residential	1,409	978	930	48	2,876	-	-	-	-	-	-	-	-
RL	Low Density Residential	2,414	8,610	8,498	113	25,330	-	19,777	-	-	-	59	-	-
RLM	Low-Medium Residential	779	3,760	3,753	7	11,063	-	47,593	-	-	-	146	-	-
RM	Medium Density Residential	281	2,478	-	2,478	7,290	-	60,714	-	-	-	187	-	-
RMH	Medium High Residential	199	2,369	-	2,369	6,970	-	44,371	-	-	-	137	-	-
RH	High Density Residential	34	509	-	509	1,497	-	16,316	-	-	-	50	-	-
PA-1/SP, PA	High Density Residential-30	-	-	-	-	-	-	-	-	-	-	-	-	-
RH-30	High Density Residential-30	32	490	-	490	1,442	-	-	-	-	-	-	-	-
	Non-Residential	5,100	-	-	-	-	239,436	164,413	651,028	1,076,943	599	495	1,302	2,692
C	General Commercial	123	-	-	-	-	239,436	100,418	-	1,076,943	599	309	-	2,692
CO	Commercial/Office	-	-	-	-	-	-	-	-	-	-	-	-	-
OP	Professional/Office	-	-	-	-	-	-	-	-	-	-	-	-	-
I	Light Industrial	38	-	-	-	-	-	26,848	651,028	-	-	83	1,302	-
S	School	284	-	-	-	-	-	29,811	-	-	-	85	-	-
GC	Golf Course	-	-	-	-	-	-	-	-	-	-	-	-	-
PK	Park	134	-	-	-	-	-	-	-	-	-	-	-	-
OS	Open Space	993	-	-	-	-	-	-	-	-	-	-	-	-
PR	Private Recreation	15	-	-	-	-	-	7,337	-	-	-	18	-	-
AG/SP	Agriculture	3,513	-	-	-	-	-	-	-	-	-	-	-	-
	New Designations	521	3,012	24	2,988	8,861	695,450	2,425,300	198,840	1,134,619	1,833	9,920	398	2,837
MU-TC	Town Center Mixed Use	45	900	-	900	2,647	353,921	53,224	-	246,400	885	245	-	616
MU-N	Neighborhood Mixed Use	38	643	24	619	1,891	34,877	85,077	-	150,416	87	338	-	376
MU-TOD	Transit Oriented Mixed Use	33	509	-	509	1,498	26,030	178,348	69,661	44,962	65	906	139	112
PF	Public Facility	63	-	-	-	-	-	-	-	-	-	-	-	-
O	Office	174	-	-	-	-	6,230	1,887,181	-	110,710	16	7,292	-	277
CC	Community Core Overlay	50	960	-	960	2,824	264,605	211,684	-	582,132	756	1,114	-	1,455
GC/PK	Golf Course/Park	118	-	-	-	-	9,786	9,786	129,179	-	24	24	258	-
	Planning Areas	784	461	190	271	1,356	259,056	148,210	-	-	648	442	-	-
PA-1/SP	Planning Area 1	688	-	-	-	-	-	-	-	-	-	-	-	-
PA-2/SP	Planning Area 2	-	-	-	-	-	-	-	-	-	-	-	-	-
PA-3/SP	Planning Area 3	17	-	-	-	-	-	83,446	-	-	-	257	-	-
PA-4/SP	Planning Area 4	1	-	-	-	-	-	-	-	-	-	-	-	-
PA-5/SP	Planning Area 5	-	-	-	-	-	-	-	-	-	-	-	-	-
SP	Willow Heights	77	461	190	271	1,356	259,056	64,764	-	-	648	185	-	-
	Other	17	-	-	-	-	-	-	-	-	-	-	-	-
ROW		-	-	-	-	-	-	-	-	-	-	-	-	-
F		-	-	-	-	-	-	-	-	-	-	-	-	-
W		17	-	-	-	-	-	-	-	-	-	-	-	-
Blank	Trail Easement	-	-	-	-	-	-	-	-	-	-	-	-	-
Totals		**11,569**	**22,667**	**13,394**	**9,273**	**66,685**	**1,193,942**	**2,926,694**	**849,868**	**2,211,562**	**3,079**	**11,436**	**1,700**	**5,529**

Diamond Bar GPU
Land Use Designation Summary

		No Project Buildout												
Code	*Land Use Designation*	*Acres*	*Units*	*SF Units*	*MF Units*	*Pop*	*RetailSqft*	*OfficeSqft*	*IndSqft*	*Other Sqft*	*RetailJob*	*OfficeJob*	*IndJob*	*Other Job*
	Residential	5,112	19,000	12,986	6,015	55,898	-	88,004	-	-	-	269	-	-
RR	Rural Residential	1,401	960	869	91	2,824	-	-	-	-	-	-	-	-
RL	Low Density Residential	2,495	9,342	8,953	389	27,484	-	19,777	-	-	-	59	-	-
RLM	Low-Medium Residential	644	3,164	3,164	-	9,309	-	-	-	-	-	-	-	-
RM	Medium Density Residential	274	2,434	-	2,434	7,161	-	7,540	-	-	-	23	-	-
RMH	Medium High Residential	182	2,101	-	2,101	6,181	-	44,371	-	-	-	137	-	-
RH	High Density Residential	34	509	-	509	1,497	-	16,316	-	-	-	50	-	-
PA-1/SP, PA	High Density Residential-30	82	490	-	490	1,442	-	-	-	-	-	-	-	-
RH-30	High Density Residential-30	-	-	-	-	-	-	-	-	-	-	-	-	-
	Non-Residential	5,205	154	11	143	453	332,741	2,706,625	1,058,032	1,539,991	832	10,338	2,116	3,850
C	General Commercial	155	-	-	-	-	289,718	163,566	3,284	1,314,500	724	503	7	3,286
CO	Commercial/Office	59	45	1	44	132	25,136	643,266	-	106,826	63	2,739	-	267
OP	Professional/Office	161	-	-	-	-	8,102	1,775,211	-	118,666	20	6,748	-	297
I	Light Industrial	88	-	-	-	-	-	77,648	925,569	-	-	220	1,851	-
S	School	278	109	10	99	321	-	29,811	-	-	-	85	-	-
GC	Golf Course	168	-	-	-	-	9,786	9,786	129,179	-	24	24	258	-
PK	Park	133	-	-	-	-	-	-	-	-	-	-	-	-
OS	Open Space	632	-	-	-	-	-	-	-	-	-	-	-	-
PR	Private Recreation	18	-	-	-	-	-	7,337	-	-	-	18	-	-
AG/SP	Agriculture	3,513	-	-	-	-	-	-	-	-	-	-	-	-
	New Designations	-	-	-	-	-	-	-	-	-	-	-	-	-
MU-TC	Town Center Mixed Use	-	-	-	-	-	-	-	-	-	-	-	-	-
MU-N	Neighborhood Mixed Use	-	-	-	-	-	-	-	-	-	-	-	-	-
MU-TOD	Transit Oriented Mixed Use	-	-	-	-	-	-	-	-	-	-	-	-	-
PF	Public Facility	-	-	-	-	-	-	-	-	-	-	-	-	-
O	Office	-	-	-	-	-	-	-	-	-	-	-	-	-
CC	Community Core Overlay	-	-	-	-	-	-	-	-	-	-	-	-	-
GC/PK	Golf Course/Park	-	-	-	-	-	-	-	-	-	-	-	-	-
	Planning Areas	1,226	489	317	172	1,439	286,527	148,210	-	116,750	716	442	-	292
PA-1/SP	Planning Area 1	638	-	-	-	-	-	-	-	-	-	-	-	-
PA-2/SP	Planning Area 2	430	127	127	-	374	-	-	-	-	-	-	-	-
PA-3/SP	Planning Area 3	48	180	70	110	530	286,527	148,210	-	116,750	716	442	-	292
PA-4/SP	Planning Area 4	81	-	-	-	-	-	-	-	-	-	-	-	-
PA-5/SP	Planning Area 5	-	-	-	-	-	-	-	-	-	-	-	-	-
SP	Willow Heights	29	182	120	62	535	-	-	-	-	-	-	-	-
	Other	26	-	-	-	-	-	-	-	-	-	-	-	-
ROW		-	-	-	-	-	-	-	-	-	-	-	-	-
F		1	-	-	-	-	-	-	-	-	-	-	-	-
W		17	-	-	-	-	-	-	-	-	-	-	-	-
Blank	Trail Easement	7	-	-	-	-	-	-	-	-	-	-	-	-
Totals		**11,569**	**19,643**	**13,314**	**6,330**	**57,790**	**619,268**	**2,942,839**	**1,058,032**	**1,656,741**	**1,548**	**11,049**	**2,116**	**4,142**

Air Quality

2. Unmitigated Construction Summary

Diamond Bar GPU
Maximum Daily Unmitigated Construction Emissions

CalEEMod	2016.3.2	Title:	Diamond Bar GPU - Construction Only - 10% - SFR & Park	Date:	7/17/2019
			Diamond Bar GPU - Construction Only - 10% - MFR		7/17/2019
			Diamond Bar GPU - Construction Only - Demo and Non Residential		7/17/2019
EMFAC	2017		Mobile Construction Emissions Spreadsheet	Date:	7/17/2019

Unmitigated - Construction

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
	Max Daily (lbs/day)					
Demolition	2	24	16	0	2	1
SFR- Site Prep	4	42	22	0	12	7
SFR - Grading	2	26	17	0	4	2
SFR - Building Construction	2	20	18	0	1	1
SFR - Paving	1	14	15	0	1	1
SFR - Architectural Coating	7	2	2	0	0	0
MFR - Site Preparation	4	42	22	0	9	6
MFR - Grading	4	50	33	0	6	3
MFR - Building Construction	3	24	31	0	5	2
MFR - Paving	2	14	15	0	1	1
MFR - Architectural Coating	120	2	4	0	1	0
NR - Site Preparation	2	20	12	0	1	1
NR - Grading	2	21	10	0	4	2
NR - Building Construction	2	19	17	0	2	1
NR - Paving	1	12	12	0	1	1
NR - Architectural Coating	66	2	2	0	0	0
Max SFR	11	42	35	0	12	7
Max MFR	125	50	51	0	9	6
Max NR	69	33	31	0	4	2
Max Daily	346	215	194	0	33	21
Threshold	75	100	550	150	150	55
Exceed Threshold?	Yes	Yes	No	No	No	No

Diamond Bar GPU
Maximum Daily Unmitigated Construction Emissions

Unmitigated - Construction

		ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
		(lbs/day)									
Demolition	Fugitive Dust					0.3702	0	0.3702	0.0561	0	0.0561
	Off-Road	2.1262	20.9463	14.6573	0.0241		1.1525	1.1525		1.0761	1.0761
	Hauling	0.102684912	2.950451932	0.583616855	0.008974936	0.244737347	0.03723047	0.281967818	0.067071466	0.031557694	0.09862916
	Vendor	0	0	0	0	0	0	0	0	0	0
	Worker	0.011221936	0.040486362	0.507473357	0.001331602	0.145181102	0.000997227	0.146178329	0.038485862	0.000918318	0.039404181
SFR- Site Prep	Fugitive Dust					6.6936	0	6.6936	3.6793	0	3.6793
	Off-Road	4.0765	42.4173	21.5136	0.038		2.1974	2.1974		2.0216	2.0216
	Hauling	0	0	0	0	0	0	0	0	0	0
	Vendor	0	0	0	0	0	0	0	0	0	0
	Worker	0.015538066	0.05605804	0.702655417	0.001843756	0.201019987	0.001380775	0.202400763	0.053288117	0.001271518	0.054559635
SFR - Grading	Fugitive Dust					2.4276	0	2.4276	1.2477	0	1.2477
	Off-Road	2.4288	26.3859	16.053	0.0297		1.2734	1.2734		1.1716	1.1716
	Hauling	0	0	0	0	0	0	0	0	0	0
	Vendor	0	0	0	0	0	0	0	0	0	0
	Worker	0.012948388	0.046715034	0.585546181	0.001536464	0.167516656	0.001150646	0.168667302	0.044406764	0.001059598	0.045466362
SFR - Building Construction	Fugitive Dust										
	Off-Road	2.1198	19.186	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503
	Hauling	0	0	0	0	0	0	0	0	0	0
	Vendor	0.026164202	0.604109574	0.165300985	0.001978155	0.063787873	0.010363596	0.074151469	0.018338966	0.009414213	0.027753179
	Worker	0.023307099	0.08408706	1.053983126	0.002765635	0.301529981	0.002071163	0.303601144	0.079932176	0.001907276	0.081839452
SFR - Paving	Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926
	Paving	0					0	0		0	0
	Hauling	0	0	0	0	0	0	0	0	0	0
	Vendor	0	0	0	0	0	0	0	0	0	0
	Worker	0.012948388	0.046715034	0.585546181	0.001536464	0.167516656	0.001150646	0.168667302	0.044406764	0.001059598	0.045466362

Diamond Bar GPU
Maximum Daily Unmitigated Construction Emissions

		ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
		(lbs/day)									
SFR - Architectural Coating	Arch Coating	6.7578					0	0		0	0
	Off-Road	0.2422	1.6838	1.8314	2.97E-03		0.1109	0.1109		0.1109	0.1109
	Hauling	0	0	0	0	0	0	0	0	0	0
	Vendor	0	0	0	0	0	0	0	0	0	0
	Worker	0.004316129	0.015571678	0.19518206	0.000512155	0.055838885	0.000383549	0.056222434	0.014802255	0.000353199	0.015155454
MFR - Site Preparation	Fugitive Dust					6.6936	0	6.6936	3.6793	0	3.6793
	Off-Road	4.0765	42.4173	21.5136	0.038		2.1974	2.1974		2.0216	2.0216
	Hauling	0	0	0	0	0	0	0	0	0	0
	Vendor	0	0	0	0	0	0	0	0	0	0
	Worker	0.015538066	0.05605804	0.702655417	0.001843756	0.201019987	0.001380775	0.202400763	0.053288117	0.001271518	0.054559635
MFR - Grading	Fugitive Dust					3.2135	0	3.2135	1.3325	0	1.3325
	Off-Road	4.4501	50.1975	31.9583	0.062		2.1739	2.1739		2	2
	Hauling	0	0	0	0	0	0	0	0	0	0
	Vendor	0	0	0	0	0	0	0	0	0	0
	Worker	0.017264517	0.062286711	0.780728241	0.002048618	0.223355541	0.001534195	0.224889736	0.059209019	0.001412797	0.060621816
MFR - Building Construction	Fugitive Dust										
	Off-Road	2.1198	19.186	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503
	Hauling	0	0	0	0	0	0	0	0	0	0
	Vendor	0.167450895	3.866301271	1.057926306	0.012660191	0.408242386	0.066327016	0.474569402	0.117369382	0.060250964	0.177620346
	Worker	0.287454216	1.037073744	12.99912522	0.034109493	3.718869764	0.025544344	3.744414107	0.985830167	0.023523076	1.009353243
MFR - Paving	Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926
	Paving	0.4428					0	0		0	0
	Hauling	0	0	0	0	0	0	0	0	0	0
	Vendor	0	0	0	0	0	0	0	0	0	0
	Worker	0.012948388	0.046715034	0.585546181	0.001536464	0.167516656	0.001150646	0.168667302	0.044406764	0.001059598	0.045466362
MFR - Architectural Coating	Arch Coating	119.9964					0	0		0	0
	Off-Road	0.2422	1.6838	1.8314	2.97E-03		0.1109	0.1109		0.1109	0.1109
	Hauling	0	0	0	0	0	0	0	0	0	0
	Vendor	0	0	0	0	0	0	0	0	0	0
	Worker	0.057836133	0.208660483	2.615439609	0.006862871	0.748241064	0.005139553	0.753380616	0.198350214	0.004732871	0.203083085

Diamond Bar GPU
Maximum Daily Unmitigated Construction Emissions

		ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
		(lbs/day)									
NR - Site Preparation	Fugitive Dust					0.5894	0	0.5894	0.0636	0	0.0636
	Off-Road	1.6521	19.9196	11.2678	0.0245		0.7771	0.7771		0.7149	0.7149
	Hauling	0	0	0	0	0	0	0	0	0	0
	Vendor	0	0	0	0	0	0	0	0	0	0
	Worker	0.006905807	0.024914685	0.312291297	0.000819447	0.089342217	0.000613678	0.089955894	0.023683608	0.000565119	0.024248727
NR - Grading	Fugitive Dust					2.4276	0	2.4276	1.2477	0	1.2477
	Off-Road	1.9219	21.3418	9.9355	0.0206		0.9902	0.9902		0.911	0.911
	Hauling	0	0	0	0	0	0	0	0	0	0
	Vendor	0	0	0	0	0	0	0	0	0	0
	Worker	0.008632259	0.031143356	0.390364121	0.001024309	0.111677771	0.000767097	0.112444868	0.02960451	0.000706399	0.030310908
NR - Building Construction	Fugitive Dust										
	Off-Road	2.2879	17.4336	14.8972	0.025		0.9482	0.9482		0.9089	0.9089
	Hauling	0	0	0	0	0	0	0	0	0	0
	Vendor	0.047095564	1.087397232	0.297541774	0.003560679	0.114818171	0.018654473	0.133472644	0.033010139	0.016945584	0.049955722
	Worker	0.032802583	0.118344752	1.483383659	0.003892375	0.424375529	0.00291497	0.427290499	0.112497136	0.002684315	0.115181451
NR - Paving	Off-Road	1.1547	11.5873	11.8076	0.0178		0.6565	0.6565		0.6051	0.6051
	Paving	0.2306					0	0		0	0
	Hauling	0	0	0	0	0	0	0	0	0	0
	Vendor	0.039246303	0.90616436	0.247951478	0.002967232	0.095681809	0.015545394	0.111227204	0.027508449	0.01412132	0.041629769
	Worker	0	0	0	0	0	0	0	0	0	0
NR - Architectural Coating	Arch Coating	65.3442					0	0		0	0
	Off-Road	0.2422	1.6838	1.8314	2.97E-03		0.1109	0.1109		0.1109	0.1109
	Hauling	0	0	0	0	0	0	0	0	0	0
	Vendor	0	0	0	0	0	0	0	0	0	0
	Worker	0.006905807	0.024914685	0.312291297	0.000819447	0.089342217	0.000613678	0.089955894	0.023683608	0.000565119	0.024248727

Diamond Bar GPU
Maximum Daily Unmitigated Construction Emissions

LST

		NOx	CO	PM10	PM2.5	Acres
	Max SFR	42	33	9	6	5
	Max MFR	50	33	9	6	13
	Max LST	50	33	9	6	
	Threshold	131	1,556	12	7	
	Exceed Threshold?	No	No	No	No	
SRA 10	5 acre site			3	2	Operational

		NOx	CO	PM10	PM2.5	
	Demoliton	21	15	2	1	2.5
	Max NR	31	29	3	2	2.5
	Max LST	31	29	3	2	
	Threshold	83	885	6	4	
	Exceed Threshold?	No	No	No	No	
SRA 10	2 acre site			2	1	Operational

Air Quality

3. Mitigated Construction Summary

Diamond Bar GPU
Maximum Daily Mitigated Construction Emissions

CalEEMod	2016.3.2	Title:	Diamond Bar GPU - Construction Only - 10% - SFR & Park	Date:	7/17/2019
			Diamond Bar GPU - Construction Only - 10% - MFR		7/17/2019
			Diamond Bar GPU - Construction Only - Demo and Non Residential		7/17/2019
EMFAC	2017		Mobile Construction Emissions Spreadsheet	Date:	7/17/2019

Mitigated - Construction

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
	Max Daily (lbs/day)					
Demolition	0	4	16	0	1	0
SFR- Site Prep	0	2	22	0	9	5
SFR - Grading	0	2	18	0	3	1
SFR - Building Construction	1	3	19	0	1	0
SFR - Paving	0	1	18	0	0	0
SFR - Architectural Coating	7	0	2	0	0	0
MFR - Site Preparation	0	2	22	0	7	4
MFR - Grading	1	3	34	0	4	1
MFR - Building Construction	1	8	32	0	4	1
MFR - Paving	1	1	18	0	0	0
MFR - Architectural Coating	120	0	4	0	1	0
NR - Site Preparation	0	1	12	0	1	0
NR - Grading	0	1	11	0	3	1
NR - Building Construction	1	7	18	0	1	0
NR - Paving	0	2	13	0	0	0
NR - Architectural Coating	65	0	2	0	0	0
Max SFR	8	5	39	0	9	5
Max MFR	122	9	54	0	7	4
Max NR	67	9	33	0	3	1
Max Daily	332	45	207	0	25	13
Threshold	75	100	550	150	150	55
Exceed Threshold?	Yes	No	No	No	No	No

Diamond Bar GPU
Maximum Daily Mitigated Construction Emissions

Mitigated - Construction

		ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
		(lbs/day)									
Demolition	Fugitive Dust	0	0	0	0	0.3702	0	0.3702	0.0561	0	0.0561
	Off-Road	0.2811	1.2179	14.7184	0.0241		0.0375	0.0375		0.0375	0.0375
	Hauling	0.102684912	2.950451932	0.583616855	0.008974936	0.244737347	0.03723047	0.281967818	0.067071466	0.031557694	0.09862916
	Vendor	0	0	0	0	0	0	0	0	0	0
	Worker	0.011221936	0.040486362	0.507473357	0.001331602	0.145181102	0.000997227	0.146178329	0.038485862	0.000918318	0.039404181
SFR- Site Prep	Fugitive Dust	0	0	0	0	6.6936	0	6.6936	3.6793	0	3.6793
	Off-Road	0.4656	2.0175	20.869	0.038		0.0621	0.0621		0.0621	0.0621
	Hauling	0	0	0	0	0	0	0	0	0	0
	Vendor	0	0	0	0	0	0	0	0	0	0
	Worker	0.015538066	0.05605804	0.702655417	0.001843756	0.201019987	0.001380775	0.202400763	0.053288117	0.001271518	0.054559635
SFR - Grading	Fugitive Dust	0	0	0	0	2.4276	0	2.4276	1.2477	0	1.2477
	Off-Road	0.3632	1.5737	17.7527	0.0297		0.0484	0.0484		0.0484	0.0484
	Hauling	0	0	0	0	0	0	0	0	0	0
	Vendor	0	0	0	0	0	0	0	0	0	0
	Worker	0.012948388	0.046715034	0.585546181	0.001536464	0.167516656	0.001150646	0.168667302	0.044406764	0.001059598	0.045466362
SFR - Building Construction	Fugitive Dust	0	0	0	0	0	0	0	0	0	0
	Off-Road	0.6261	2.8021	17.7304	0.0269		0.1248	0.1248		0.1248	0.1248
	Hauling	0	0	0	0	0	0	0	0	0	0
	Vendor	0.026164202	0.604109574	0.165300985	0.001978155	0.063787873	0.010363596	0.074151469	0.018338966	0.009414213	0.027753179
	Worker	0.023307099	0.08408706	1.053983126	0.002765635	0.301529981	0.002071163	0.303601144	0.079932176	0.001907276	0.081839452
SFR - Paving	Off-Road	0.2805	1.2154	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374
	Paving	0	0	0	0	0	0	0	0	0	0
	Hauling	0	0	0	0	0	0	0	0	0	0
	Vendor	0	0	0	0	0	0	0	0	0	0
	Worker	0.012948388	0.046715034	0.585546181	0.001536464	0.167516656	0.001150646	0.168667302	0.044406764	0.001059598	0.045466362

Diamond Bar GPU
Maximum Daily Mitigated Construction Emissions

		ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
		(lbs/day)									
SFR - Architectural Coating	Arch Coating	6.7578	0	0	0	0	0	0	0	0	0
	Off-Road	0.0297	0.1288	1.8324	2.97E-03		3.96E-03	3.96E-03		3.96E-03	3.96E-03
	Hauling	0	0	0	0	0	0	0	0	0	0
	Vendor	0	0	0	0	0	0	0	0	0	0
	Worker	0.004316129	0.015571678	0.19518206	0.000512155	0.055838885	0.000383549	0.056222434	0.014802255	0.000353199	0.015155454
MFR - Site Preparation	Fugitive Dust	0	0	0	0	6.6936	0	6.6936	3.6793	0	3.6793
	Off-Road	0.4656	2.0175	20.869	0.038		0.0621	0.0621		0.0621	0.0621
	Hauling	0	0	0	0	0	0	0	0	0	0
	Vendor	0	0	0	0	0	0	0	0	0	0
	Worker	0.015538066	0.05605804	0.702655417	0.001843756	0.201019987	0.001380775	0.202400763	0.053288117	0.001271518	0.054559635
MFR - Grading	Fugitive Dust	0	0	0	0	3.2135	0	3.2135	1.3325	0	1.3325
	Off-Road	0.7616	3.3	32.9991	0.062		0.1015	0.1015		0.1015	0.1015
	Hauling	0	0	0	0	0	0	0	0	0	0
	Vendor	0	0	0	0	0	0	0	0	0	0
	Worker	0.017264517	0.062286711	0.780728241	0.002048618	0.223355541	0.001534195	0.224889736	0.059209019	0.001412797	0.060621816
MFR - Building Construction	Fugitive Dust	0	0	0	0	0	0	0	0	0	0
	Off-Road	0.6261	2.8021	17.7304	0.0269		0.1248	0.1248		0.1248	0.1248
	Hauling	0	0	0	0	0	0	0	0	0	0
	Vendor	0.167450895	3.866301271	1.057926306	0.012660191	0.408242386	0.066327016	0.474569402	0.117369382	0.060250964	0.177620346
	Worker	0.287454216	1.037073744	12.99912522	0.034109493	3.718869764	0.025544344	3.744414107	0.985830167	0.023523076	1.009353243
MFR - Paving	Off-Road	0.2805	1.2154	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374
	Paving	0.4428	0	0	0	0	0	0	0	0	0
	Hauling	0	0	0	0	0	0	0	0	0	0
	Vendor	0	0	0	0	0	0	0	0	0	0
	Worker	0.012948388	0.046715034	0.585546181	0.001536464	0.167516656	0.001150646	0.168667302	0.044406764	0.001059598	0.045466362
MFR - Architectural Coating	Arch Coating	119.9964	0	0	0	0	0	0	0	0	0
	Off-Road	0.0297	0.1288	1.8324	2.97E-03		3.96E-03	3.96E-03		3.96E-03	3.96E-03
	Hauling	0	0	0	0	0	0	0	0	0	0
	Vendor	0	0	0	0	0	0	0	0	0	0
	Worker	0.057836133	0.208660483	2.615439609	0.006862871	0.748241064	0.005139553	0.753380616	0.198350214	0.004732871	0.203083085

Diamond Bar GPU
Maximum Daily Mitigated Construction Emissions

		ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
		(lbs/day)									
NR - Site Preparation	Fugitive Dust	0	0	0	0	0.5894	0	0.5894	0.0636	0	0.0636
	Off-Road	0.3008	1.3034	11.8595	0.0245		0.0401	0.0401		0.0401	0.0401
	Hauling	0	0	0	0	0	0	0	0	0	0
	Vendor	0	0	0	0	0	0	0	0	0	0
	Worker	0.006905807	0.024914685	0.312291297	0.000819447	0.089342217	0.000613678	0.089955894	0.023683608	0.000565119	0.024248727
NR - Grading	Fugitive Dust	0	0	0	0	2.4276	0	2.4276	1.2477	0	1.2477
	Off-Road	0.2522	1.0927	10.9071	0.0206		0.0336	0.0336		0.0336	0.0336
	Hauling	0	0	0	0	0	0	0	0	0	0
	Vendor	0	0	0	0	0	0	0	0	0	0
	Worker	0.008632259	0.031143356	0.390364121	0.001024309	0.111677771	0.000767097	0.112444868	0.02960451	0.000706399	0.030310908
NR - Building Construction	Fugitive Dust	0	0	0	0	0	0	0	0	0	0
	Off-Road	1.2244	5.5725	15.746	0.025		0.2871	0.2871		0.2871	0.2871
	Hauling	0	0	0	0	0	0	0	0	0	0
	Vendor	0.047095564	1.087397232	0.297541774	0.003560679	0.114818171	0.018654473	0.133472644	0.033010139	0.016945584	0.049955722
	Worker	0.032802583	0.118344752	1.483383659	0.003892375	0.424375529	0.00291497	0.427290499	0.112497136	0.002684315	0.115181451
NR - Paving	Off-Road	0.2104	0.9117	12.9737	0.0178		0.0281	0.0281		0.0281	0.0281
	Paving	0.2306	0	0	0	0	0	0	0	0	0
	Hauling	0	0	0	0	0	0	0	0	0	0
	Vendor	0.039246303	0.90616436	0.247951478	0.002967232	0.095681809	0.015545394	0.111227204	0.027508449	0.01412132	0.041629769
	Worker	0	0	0	0	0	0	0	0	0	0
NR - Architectural Coating	Arch Coating	65.3442	0	0	0	0	0	0	0	0	0
	Off-Road	0.0297	0.1288	1.8324	2.97E-03		3.96E-03	3.96E-03		3.96E-03	3.96E-03
	Hauling	0	0	0	0	0	0	0	0	0	0
	Vendor	0	0	0	0	0	0	0	0	0	0
	Worker	0.006905807	0.024914685	0.312291297	0.000819447	0.089342217	0.000613678	0.089955894	0.023683608	0.000565119	0.024248727

Diamond Bar GPU
Maximum Daily Mitigated Construction Emissions

LST

		NOx	CO	PM10	PM2.5	Acres
	Max SFR	4	37	7	4	5
	Max MFR	4	37	7	4	13
	Max LST	4	37	7	4	
	Threshold	131	1,556	12	7	
	Exceed Threshold?	No	No	No	No	
SRA 10	5 acre site			3	2	Operational

		NOx	CO	PM10	PM2.5	
	Demoliton	1	15	0	0	2.5
	Max NR	7	31	2	1	2.5
	Max LST	7	31	2	1	
	Threshold	83	885	6	4	
	Exceed Threshold?	No	No	No	No	
SRA 10	2 acre site			2	1	Operational

Air Quality

4. Operational Summary

a. Criteria Pollutants

Diamond Bar
Unmitigated Operational Impacts

CalEEMod	2016.3.2		
Title:	Diamond Bar GPU - Existing Operational	Date:	7/21/2019
	Diamond Bar GPU - 2040 Buildout Emissions		7/10/2019
EMFAC 2017	2016 Mobile Construction Emissions Spreadsheet	Date:	7/17/2019
	2040 Mobile Construction Emissions Spreadsheet	Date:	7/17/2019

Unmitigated Emissions - Net Emissions (Project minus Existing)

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
			Existing			
Area	*832*	*205*	*1,662*	*1*	*24*	*24*
Energy	*24*	*207*	*110*	*1*	*16*	*16*
Mobile	*303*	*2,743*	*6,749*	*14*	*1,121*	*318*
Total	***1,158***	***3,155***	***8,521***	***17***	***1,161***	***358***
			Project			
Area	*957*	*210*	*1,943*	*1*	*26*	*26*
Energy	*22*	*194*	*113*	*1*	*15*	*15*
Mobile	*103*	*1,729*	*2,774*	*11*	*1,155*	*311*
Total	***1,082***	***2,134***	***4,829***	***13***	***1,196***	***352***
			Net Daily (Lbs/day)			
Area	*125*	*5*	*281*	*0*	*2*	*2*
Energy	*-2*	*-13*	*3*	*0*	*-1*	*-1*
Mobile	*-200*	*-1,014*	*-3,976*	*-3*	*35*	*-7*
Total	***-76***	***-1,022***	***-3,692***	***-3***	***36***	***-6***
Thresholds	**55**	**55**	**550**	**150**	**150**	**55**
Exceeds Thresholds?	**No**	**No**	**No**	**No**	**No**	**No**
	856	412	1,772	3	40	40

Diamond Bar
Unmitigated Operational Impacts - Existing

Unmitigated Emissions - Max Existing

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
	Max (Lbs/day)					
Area	*831.89*	*205.37*	*1,662.22*	*1.28*	*23.64*	*23.64*
Energy	*23.80*	*206.54*	*109.50*	*1.30*	*16.45*	*16.45*
Mobile	*303*	*2,743*	*6,749*	*14*	*1,121*	*318*
Total	***1,158***	***3,155***	***8,521***	***17***	***1,161***	***358***

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
	Winter (lbs/day)									
Area	831.8856	2.05E+02	1.66E+03	1.2751		2.36E+01	2.36E+01		2.36E+01	2.36E+01
Energy	23.80	206.54	109.50	1.30			16.45			16.45
Mobile	302.653528	2743.393694	6749.23484	14.08767462	1074.13647	46.6396211	1120.776087	286.52856	31.4526433	317.981206
Total	**0.9834**	**0.065**	**0.0582**	**3.90E-04**	**0**	**4.95E-03**	**4.95E-03**	**0**	**4.95E-03**	**4.95E-03**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
	Summer (lbs/day)									
Area	831.8856	2.05E+02	1.66E+03	1.2751		2.36E+01	2.36E+01		2.36E+01	2.36E+01
Energy	23.80	206.54	109.50	1.30	0.00	0.00	16.45	0.00	0.00	16.45
Mobile	302.653528	2743.393694	6749.23484	14.08767462	1074.13647	46.6396211	1120.776087	286.52856	31.4526433	317.981206
Total	**0.9834**	**0.065**	**0.0582**	**3.90E-04**	**0**	**4.95E-03**	**4.95E-03**	**0**	**4.95E-03**	**4.95E-03**

Diamond Bar
Unmitigated Operational Impacts - Existing

Energy Emissions

Natural Gas Emission Factors (CalEEMod User Guide, Appendix D, Table 8.2)

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
	lbs/MMBTU					
Residential	0.0107843	0.0921569	0.039216	0.000588	0.007451	0.007451
Non-Residential	0.0107843	0.0980392	0.082353	0.000588	0.007451	0.007451

Natural Gas Emissions

	MMBTU	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
		lbs/year					
Residential	611,519	6,594.81	56,355.69	23,981.15	359.72	4,556.42	4,556.36
Non-Residential	194,128	2,093.53	19,032.11	15,986.97	114.19	1,446.44	1,446.44
		lbs/day					
Residential		18.07	154.40	65.70	0.99	12.48	12.48
Non-Residential		5.74	52.14	43.80	0.31	3.96	3.96

Diamond Bar
Unmitigated Operational Impacts - Project

Unmitigated Emissions - Max Project

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
	Max (Lbs/day)					
Area	*957*	*210*	*1,943*	*1*	*26*	*26*
Energy	*22*	*194*	*113*	*1*	*15*	*15*
Mobile	*103*	*1,729*	*2,774*	*11*	*1,155*	*311*
Total	***1,082***	***2,134***	***4,829***	***13***	***1,196***	***352***

Note:

Modernization emissions are taken from the "Mitigated" Scenario to account for increased energy efficiency.

New Builsing

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
	Winter (lbs/day)									
Area	957.2262	2.10E+02	1.94E+03	1.3043		2.56E+01	2.56E+01		2.56E+01	2.56E+01
Energy	22.19	193.97	112.72	1.21			15.33			15.33
Mobile	103	1,729	2,774	11	1,149	6	1,155	307	3	311
Total	**0.7683**	**0.0307**	**0.0286**	**1.80E-04**	**0**	**2.34E-03**	**2.34E-03**	**0**	**2.34E-03**	**2.34E-03**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
	Summer (lbs/day)									
Area	957.2262	2.10E+02	1.94E+03	1.3043		2.56E+01	2.56E+01		2.56E+01	2.56E+01
Energy	22.19	193.97	112.72	1.21	0.00	0.00	15.33	0.00	0.00	15.33
Mobile	102.50043	1729.29598	2773.731827	10.79777783	1149.14831	6.32597151	1155.4743	307.4907983	3.47259055	310.963389
Total	**0.7683**	**0.0307**	**0.0286**	**1.80E-04**	**0**	**2.34E-03**	**2.34E-03**	**0**	**2.34E-03**	**2.34E-03**

Diamond Bar
Unmitigated Operational Impacts - Project

Energy Emissions

Natural Gas Emission Factors (CalEEMod User Guide, Appendix D, Table 8.2)

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
	lbs/MMBTU					
Residential	0.01078431	0.09215686	0.039216	0.0005882	0.007451	0.0074509
Non-Residential	0.01078431	0.09803922	0.082353	0.0005882	0.007451	0.007451

Natural Gas Emissions

	MMBTU	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
		lbs/year					
Residential	479,871	5,175.08	44,223.39	18,818.46	282.28	3,575.51	3,575.46
Non-Residential	271,086	2,923.48	26,577.10	22,324.77	159.46	2,019.86	2,019.86
		lbs/day					
Residential		14.18	121.16	51.56	0.77	9.80	9.80
Non-Residential		8.01	72.81	61.16	0.44	5.53	5.53

Air Quality

4. Operational Summary

b. CO Hotspot

Diamond Bar
CO Hotspot Data

Source: Fehr & Peers, 2019 - Project Specific Traffic Study

Existing Intersection ADT

Intersection #	North/South	East/West	Total ADT	Total	NBL	NBT	NBR	WBL	WBT	WBR	SBL	SBT	SBR	EBL	EBT	EBR
1	Diamond Bar Blvd	Temple Ave	39,060	3,906	173	270	34	18	415	225	165	240	285	722	1,136	223
2	Diamond Bar Blvd	Sunset Crossing Rd	30,530	3,053	120	997	56	119	47	37	18	426	68	112	61	992
3	Diamond Bar Blvd	Golden Springs Dr	35,480	3,548	94	733	253	145	144	82	150	595	236	444	528	144
4	Chino Hill Parkway	Diamond Ranch Road	16,890	1,689	7	488	12	8	2	27	90	805	108	122	0	20
5	Diamond Bar Blvd	Goldrush Rd	21,070	2,107	2	980	124	59	2	76	155	663	24	14	3	5
6	Chino Hills Parkway	Chino Ave	18,840	1,884	0	395	115	174	0	368	225	607	0	0	0	0
7	Racquet Club Dr	Golden Springs Drive	18,450	1,845	42	0	18	28	430	0	0	0	0	0	1,236	91
8	Brea Canyon Rd	Washington Ave	25,740	2,574	2	953	64	39	0	56	60	1,357	2	22	2	17
9	Grand Ave	Golden Springs Drive	49,740	4,974	188	571	113	110	222	205	393	941	107	682	868	574
10	Lavender Dr	Grand Ave	27,390	2,739	15	0	219	66	822	6	2	1	5	31	1,552	20
11	Brea Canyon Rd	Lycoming St	31,120	3,112	131	971	104	121	23	17	31	1,370	72	52	43	177
12	Copely Dr	Golden Springs Dr	30,730	3,073	163	0	683	66	493	0	0	0	0	0	1,639	29
13	**Diamond Bar B lvd**	**Grand Ave**	**50,070**	5,007	212	945	767	349	448	108	219	481	77	210	1,027	164
14	Brea Canyon Rd	Golden Springs Dr	48,840	4,884	248	608	382	313	466	336	290	500	557	205	830	149
15	Lemon Ave	Golden Springs Dr	29,470	2,947	18	21	13	17	476	182	522	23	431	317	899	28
16	Diamond Bar Blvd	Quail Summit Dr	30,510	3,051	33	1,756	97	18	8	68	88	924	20	14	6	19
17	Summit Ridge Dr	Grand Ave	26,270	2,627	30	1	3	4	564	28	23	1	118	225	1,581	49
18	Longview Dr	Grand Ave	23,270	2,327	3	2	5	14	565	63	39	0	21	27	1,585	3
19	Diamond Bar Blvd	Kiow Crest Dr	31,050	3,105	61	2,046	21	18	0	4	17	798	56	41	0	43
20	Brea Canyon Rd	Pathfinder Rd	28,110	2,811	0	0	0	0	255	707	758	0	142	414	535	0
21	Brea Canyon Rd	Pathfinder Rd	23,120	2,312	627	28	73	34	416	10	5	13	48	88	739	231
22	Diamond Bar Blvd	Pathfinder Rd	32,070	3,207	94	1,518	4	2	6	4	5	446	353	653	10	112
23	Brea Canyon Cutoff Rd	Oak Crest Dr	22,680	2,268	5	0	25	32	1,139	0	0	0	0	0	1,063	4
24	Diamond Bar Blvd	Cold Springs Ln	22,560	2,256	71	1,490	46	18	20	45	60	340	29	46	34	57
25	Brea Canyon Rd	Diamond Bar Blvd	32,180	3,218	350	503	717	89	325	44	63	42	68	182	761	74
26	Brea Canyon Rd	Silver Bullet Dr	28,180	2,818	0	1,476	56	14	0	2	5	1,265	0	0	0	0
27	Diamond Bar Blvd	SR-57 NB Ramps	17,130	1,713	617	513	9	16	14	8	6	512	18	0	0	0
28	SB-57 SB Ramps	Sunset Crossing Rd	0	0												
29	Diamond Bar Blvd	SR-60 WB Ramps	31,600	3,160	0	747	152	322	0	422	134	1,383	0	0	0	0
30	Diamond Bar Blvd	SR-60 EB Ramps	34,480	3,448	0	769	717	0	0	0	706	1,068	0	89	1	98
31	Grand Ave	SR-57 SB Ramps	36,460	3,646	4	704	275	228	2	429	631	1,362	1	0	4	6
32	Grand Ave	SR-57 NB Ramps	34,070	3,407	0	837	638	0	0	0	347	1,221	0	166	0	198
33	Brea Canyon Rd	SR-60 SB Ramps	36,170	3,617	341	848	0	204	0	461	0	1,255	508	0	0	0
34	SR-60 EB Ramps	Golden Springs Dr	31,540	3,154	58	43	39	22	604	752	251	21	36	372	921	35
35	SR 57 SB Ramps	Pathfinder Rd	28,010	2,801	0	0	0	121	936	0	258	12	116	0	954	404
36	SR-57 NB Ramps	Pathfinder Rd	30,360	3,036	293	108	88	0	750	557	0	0	0	159	1,081	0
37	SR-57 SB Ramps	Brea Canyon Cutoff	25,690	2,569	0	0	0	232	1,141	0	88	0	36	0	356	716
38	SR-57 NB Ramps	S Diamond Bar Blvd	24,930	2,493	677	6	612	0	691	73	0	0	0	0	8	426
39	NI		0	0												
40	NI		0	0												
41	Diamond Bar Blvd	Mountain Laurel Way	31,040	3,104	32	1,831	91	29	3	3	8	798	143	118	7	41
		Max:	50,070													

Diamond Bar
CO Hotspot Data

Source: Fehr & Peers, 2019 - Project Specific Traffic Study

2040 Horizon Year

Intersection #	North/South	East/West	Total ADT	Total	NBL	NBT	NBR	WBL	WBT	WBR	SBL	SBT	SBR	EBL	EBT	EBR
1	Diamond Bar Blvd	Temple Ave	46,100	4,610	430	330	170	240	470	30	40	360	200	230	1,140	970
2	Diamond Bar Blvd	Sunset Crossing Rd	32,800	3,280	100	500	20	40	50	130	120	1,030	100	1,000	70	120
3	Diamond Bar Blvd	Golden Springs Dr	39,600	3,960	240	700	150	110	270	150	260	850	100	150	530	450
4	Chino Hill Parkway	Diamond Ranch Road	18,900	1,890	110	860	90	30	10	10	20	590	10	20	10	130
5	Diamond Bar Blvd	Goldrush Rd	23,000	2,300	30	720	160	80	10	60	130	1,060	10	10	10	20
6	Chino Hills Parkway	Chino Ave	17,200	1,720	0	660	230	170	0	90	120	450	0	0	0	0
7	Racquet Club Dr	Golden Springs Drive	21,300	2,130	0	0	0	0	580	30	20	0	50	100	1,350	0
8	Brea Canyon Rd	Washington Ave	26,420	2,642	10	1,360	60	67	0	45	70	960	10	20	10	30
9	**Grand Ave**	**Golden Springs Drive**	**62,500**	6,250	300	1,000	400	460	230	110	120	1,040	190	580	870	950
10	Lavender Dr	Grand Ave	29,900	2,990	10	10	10	10	1,020	70	220	0	20	20	1,560	40
11	Brea Canyon Rd	Lycoming St	31,900	3,190	80	1,370	40	20	30	130	110	980	140	180	50	60
12	Copely Dr	Golden Springs Dr	31,000	3,100	0	0	0	0	500	70	690	0	170	30	1,640	0
13	**Diamond Bar B lvd**	**Grand Ave**	**55,900**	5,590	80	500	220	110	640	520	810	950	220	180	1,130	230
14	Brea Canyon Rd	Golden Springs Dr	57,530	5,753	660	625	310	340	650	492	390	740	280	200	846	220
15	Lemon Ave	Golden Springs Dr	46,680	4,668	496	30	630	886	670	20	20	90	20	30	978	798
16	Diamond Bar Blvd	Quail Summit Dr	32,630	3,263	20	990	90	70	10	20	100	1,873	40	20	10	20
17	Summit Ridge Dr	Grand Ave	30,000	3,000	120	10	30	30	880	10	10	10	30	50	1,590	230
18	Longview Dr	Grand Ave	27,100	2,710	30	10	40	70	880	20	10	10	10	10	1,590	30
19	Diamond Bar Blvd	Kiow Crest Dr	33,440	3,344	60	852	20	10	0	20	30	2,182	70	50	0	50
20	Brea Canyon Rd	Pathfinder Rd	31,200	3,120	160	0	760	710	440	0	0	0	0	0	630	420
21	Brea Canyon Rd	Pathfinder Rd	27,100	2,710	50	20	10	10	640	40	80	30	670	240	830	90
22	Diamond Bar Blvd	Pathfinder Rd	34,400	3,440	360	580	10	10	10	10	10	1,520	140	120	10	660
23	Brea Canyon Cutoff Rd	Oak Crest Dr	23,100	2,310	0	0	0	0	1,150	40	30	0	10	10	1,070	0
24	Diamond Bar Blvd	Cold Springs Ln	24,510	2,451	30	370	60	50	20	20	50	1,621	80	60	40	50
25	Brea Canyon Rd	Diamond Bar Blvd	38,400	3,840	70	50	70	50	440	90	720	530	480	200	950	190
26	Brea Canyon Rd	Silver Bullet Dr	18,700	1,870	0	190	10	10	0	20	60	1,580	0	0	0	0
27	Diamond Bar Blvd	SR-57 NB Ramps	19,400	1,940	20	600	10	10	20	20	10	630	620	0	0	0
28	SB-57 SB Ramps	Sunset Crossing Rd	15,700	1,570	90	0	910	90	160	0	0	0	0	0	280	40
29	Diamond Bar Blvd	SR-60 WB Ramps	34,100	3,410	0	1,410	220	430	0	330	180	840	0	0	0	0
30	Diamond Bar Blvd	SR-60 EB Ramps	37,800	3,780	0	1,120	710	0	0	0	730	820	0	100	0	300
31	Grand Ave	SR-57 SB Ramps	43,200	4,320	0	1,670	0	430	0	230	280	1,710	0	0	0	0
32	Grand Ave	SR-57 NB Ramps	46,700	4,670	350	1,500	0	0	0	0	0	2,450	0	200	0	170
33	Brea Canyon Rd	SR-60 SB Ramps	38,700	3,870	510	1,260	0	470	0	300	0	980	350	0	0	0
34	SR-60 EB Ramps	Golden Springs Dr	31,760	3,176	0	0	0	166	1,514	30	40	0	110	70	1,246	0
35	SR 57 SB Ramps	Pathfinder Rd	30,500	3,050	120	20	290	0	1,100	130	0	0	0	410	980	0
36	SR-57 NB Ramps	Pathfinder Rd	32,200	3,220	0	0	0	560	800	0	90	110	390	0	1,110	160
37	SR-57 SB Ramps	Brea Canyon Cutoff	28,900	2,890	40	0	90	0	1,210	390	0	0	0	720	440	0
38	SR-57 NB Ramps	S Diamond Bar Blvd	30,000	3,000	0	0	0	80	920	0	780	10	680	0	510	20
39	NI		20,460	2,046	150	1,014	0	0	0	0	0	772	110	0	0	0
40	NI		31,620	3,162	0	914	100	0	0	0	908	880	0	242	10	108
41	Diamond Bar Blvd	Mountain Laurel Way	33,400	3,340	150	852	10	10	10	30	100	1,958	40	50	10	120
		Max:	62,500													

Air Quality

5. CalEEMod Output

a. Construction

Air Quality

5. CalEEMod Output

a. Construction

1. Single Family Residential

Diamond Bar GPU - Construction Only - 10% - SFR and Park

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	1.23	Acre	1.23	53,578.80	0
Single Family Housing	12.00	Dwelling Unit	3.90	21,600.00	34

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	538.2	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Assumptions

Land Use - See Assumptions

Construction Phase - See Assumptions

Construction Off-road Equipment Mitigation - See Assumptions

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	10.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblProjectCharacteristics	CO2IntensityFactor	702.44	538.2

2.0 Emissions Summary

Summary not used

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	SFR- Site Prep	Site Preparation	1/1/2020	1/14/2020	5	10	

2	SFR - Grading	Grading	1/15/2020	2/11/2020	5	20	
3	SFR - Building Construction	Building Construction	2/12/2020	12/29/2020	5	230	
4	SFR - Paving	Paving	11/30/2020	12/25/2020	5	20	
5	SFR - Architectural Coating	Architectural Coating	11/30/2020	12/25/2020	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 43,740; Residential Outdoor: 14,580; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
SFR- Site Prep	Rubber Tired Dozers	3	8.00	247	0.40
SFR- Site Prep	Tractors/Loaders/Backhoes	4	8.00	97	0.37
SFR - Grading	Excavators	1	8.00	158	0.38
SFR - Grading	Graders	1	8.00	187	0.41
SFR - Grading	Rubber Tired Dozers	1	8.00	247	0.40
SFR - Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
SFR - Building Construction	Cranes	1	7.00	231	0.29
SFR - Building Construction	Forklifts	3	8.00	89	0.20
SFR - Building Construction	Generator Sets	1	8.00	84	0.74
SFR - Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
SFR - Building Construction	Welders	1	8.00	46	0.45
SFR - Paving	Pavers	2	8.00	130	0.42
SFR - Paving	Paving Equipment	2	8.00	132	0.36
SFR - Paving	Rollers	2	8.00	80	0.38
SFR - 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
SFR- Site Prep	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
SFR - Grading	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
SFR - Building Construction	9	27.00	10.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
SFR - Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
SFR - Architectural Coating	1	5.00	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

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 SFR- Site Prep - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216		3,685.1016	3,685.1016	1.1918		3,714.8975
Total	**4.0765**	**42.4173**	**21.5136**	**0.0380**	**18.0663**	**2.1974**	**20.2637**	**9.9307**	**2.0216**	**11.9523**		**3,685.1016**	**3,685.1016**	**1.1918**		**3,714.8975**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0920	0.0652	0.7218	2.0000e-003	0.2012	1.6800e-003	0.2029	0.0534	1.5500e-003	0.0549		199.3357	199.3357	6.2800e-003		199.4927
Total	**0.0920**	**0.0652**	**0.7218**	**2.0000e-003**	**0.2012**	**1.6800e-003**	**0.2029**	**0.0534**	**1.5500e-003**	**0.0549**		**199.3357**	**199.3357**	**6.2800e-003**		**199.4927**

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					6.6936	0.0000	6.6936	3.6793	0.0000	3.6793			0.0000			0.0000
Off-Road	0.4656	2.0175	20.8690	0.0380		0.0621	0.0621		0.0621	0.0621	0.0000	3,685.1016	3,685.1016	1.1918		3,714.8975
Total	**0.4656**	**2.0175**	**20.8690**	**0.0380**	**6.6936**	**0.0621**	**6.7556**	**3.6793**	**0.0621**	**3.7414**	**0.0000**	**3,685.1016**	**3,685.1016**	**1.1918**		**3,714.8975**

Mitigated Construction Off-Site

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

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0920	0.0652	0.7218	2.0000e-003	0.2012	1.6800e-003	0.2029	0.0534	1.5500e-003	0.0549		199.3357	199.3357	6.2800e-003		199.4927
Total	**0.0920**	**0.0652**	**0.7218**	**2.0000e-003**	**0.2012**	**1.6800e-003**	**0.2029**	**0.0534**	**1.5500e-003**	**0.0549**		**199.3357**	**199.3357**	**6.2800e-003**		**199.4927**

3.3 SFR - Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.4288	26.3859	16.0530	0.0297		1.2734	1.2734		1.1716	1.1716		2,872.4851	2,872.4851	0.9290		2,895.7106
Total	**2.4288**	**26.3859**	**16.0530**	**0.0297**	**6.5523**	**1.2734**	**7.8258**	**3.3675**	**1.1716**	**4.5390**		**2,872.4851**	**2,872.4851**	**0.9290**		**2,895.7106**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0767	0.0544	0.6015	1.6700e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		166.1131	166.1131	5.2400e-003		166.2440
Total	**0.0767**	**0.0544**	**0.6015**	**1.6700e-003**	**0.1677**	**1.4000e-003**	**0.1691**	**0.0445**	**1.2900e-003**	**0.0458**		**166.1131**	**166.1131**	**5.2400e-003**		**166.2440**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.4276	0.0000	2.4276	1.2477	0.0000	1.2477			0.0000			0.0000
Off-Road	0.3632	1.5737	17.7527	0.0297		0.0484	0.0484		0.0484	0.0484	0.0000	2,872.4851	2,872.4851	0.9290		2,895.7106
Total	**0.3632**	**1.5737**	**17.7527**	**0.0297**	**2.4276**	**0.0484**	**2.4761**	**1.2477**	**0.0484**	**1.2961**	**0.0000**	**2,872.4851**	**2,872.4851**	**0.9290**		**2,895.7106**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0767	0.0544	0.6015	1.6700e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		166.1131	166.1131	5.2400e-003		166.2440
Total	**0.0767**	**0.0544**	**0.6015**	**1.6700e-003**	**0.1677**	**1.4000e-003**	**0.1691**	**0.0445**	**1.2900e-003**	**0.0458**		**166.1131**	**166.1131**	**5.2400e-003**		**166.2440**

3.4 SFR - Building Construction - 2020

Unmitigated Construction On-Site

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

Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**		**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0372	1.0635	0.3074	2.5200e-003	0.0640	5.0900e-003	0.0691	0.0184	4.8700e-003	0.0233		269.4491	269.4491	0.0180		269.8995
Worker	0.1380	0.0979	1.0827	3.0000e-003	0.3018	2.5200e-003	0.3043	0.0800	2.3200e-003	0.0824		299.0035	299.0035	9.4200e-003		299.2391
Total	**0.1752**	**1.1614**	**1.3901**	**5.5200e-003**	**0.3658**	**7.6100e-003**	**0.3734**	**0.0985**	**7.1900e-003**	**0.1057**		**568.4526**	**568.4526**	**0.0274**		**569.1386**

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	0.6261	2.8021	17.7304	0.0269		0.1248	0.1248		0.1248	0.1248	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**0.6261**	**2.8021**	**17.7304**	**0.0269**		**0.1248**	**0.1248**		**0.1248**	**0.1248**	**0.0000**	**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0372	1.0635	0.3074	2.5200e-003	0.0640	5.0900e-003	0.0691	0.0184	4.8700e-003	0.0233		269.4491	269.4491	0.0180		269.8995
Worker	0.1380	0.0979	1.0827	3.0000e-003	0.3018	2.5200e-003	0.3043	0.0800	2.3200e-003	0.0824		299.0035	299.0035	9.4200e-003		299.2391
Total	**0.1752**	**1.1614**	**1.3901**	**5.5200e-003**	**0.3658**	**7.6100e-003**	**0.3734**	**0.0985**	**7.1900e-003**	**0.1057**		**568.4526**	**568.4526**	**0.0274**		**569.1386**

3.5 SFR - Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.3566**	**14.0656**	**14.6521**	**0.0228**		**0.7528**	**0.7528**		**0.6926**	**0.6926**		**2,207.7334**	**2,207.7334**	**0.7140**		**2,225.5841**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0767	0.0544	0.6015	1.6700e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		166.1131	166.1131	5.2400e-003		166.2440
Total	**0.0767**	**0.0544**	**0.6015**	**1.6700e-003**	**0.1677**	**1.4000e-003**	**0.1691**	**0.0445**	**1.2900e-003**	**0.0458**		**166.1131**	**166.1131**	**5.2400e-003**		**166.2440**

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	0.2805	1.2154	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.2805**	**1.2154**	**17.2957**	**0.0228**		**0.0374**	**0.0374**		**0.0374**	**0.0374**	**0.0000**	**2,207.7334**	**2,207.7334**	**0.7140**		**2,225.5841**

Mitigated Construction Off-Site

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

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0767	0.0544	0.6015	1.6700e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		166.1131	166.1131	5.2400e-003		166.2440
Total	**0.0767**	**0.0544**	**0.6015**	**1.6700e-003**	**0.1677**	**1.4000e-003**	**0.1691**	**0.0445**	**1.2900e-003**	**0.0458**		**166.1131**	**166.1131**	**5.2400e-003**		**166.2440**

3.6 SFR - Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	6.7578					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
Total	**7.0000**	**1.6838**	**1.8314**	**2.9700e-003**		**0.1109**	**0.1109**		**0.1109**	**0.1109**		**281.4481**	**281.4481**	**0.0218**		**281.9928**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0256	0.0181	0.2005	5.6000e-004	0.0559	4.7000e-004	0.0564	0.0148	4.3000e-004	0.0153		55.3710	55.3710	1.7500e-003		55.4147
Total	**0.0256**	**0.0181**	**0.2005**	**5.6000e-004**	**0.0559**	**4.7000e-004**	**0.0564**	**0.0148**	**4.3000e-004**	**0.0153**		**55.3710**	**55.3710**	**1.7500e-003**		**55.4147**

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	6.7578					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0218		281.9928
Total	**6.7875**	**0.1288**	**1.8324**	**2.9700e-003**		**3.9600e-003**	**3.9600e-003**		**3.9600e-003**	**3.9600e-003**	**0.0000**	**281.4481**	**281.4481**	**0.0218**		**281.9928**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0256	0.0181	0.2005	5.6000e-004	0.0559	4.7000e-004	0.0564	0.0148	4.3000e-004	0.0153		55.3710	55.3710	1.7500e-003		55.4147
Total	**0.0256**	**0.0181**	**0.2005**	**5.6000e-004**	**0.0559**	**4.7000e-004**	**0.0564**	**0.0148**	**4.3000e-004**	**0.0153**		**55.3710**	**55.3710**	**1.7500e-003**		**55.4147**

4.0 Operational Detail - Mobile

Operational Emissions Modeled Separately

Diamond Bar GPU - Construction Only - 10% - SFR and Park

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	1.23	Acre	1.23	53,578.80	0
Single Family Housing	12.00	Dwelling Unit	3.90	21,600.00	34

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	538.2	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Assumptions

Land Use - See Assumptions

Construction Phase - See Assumptions

Construction Off-road Equipment Mitigation - See Assumptions

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	10.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblProjectCharacteristics	CO2IntensityFactor	702.44	538.2

2.0 Emissions Summary

Summary not used

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	SFR- Site Prep	Site Preparation	1/1/2020	1/14/2020	5	10	

2	SFR - Grading	Grading	1/15/2020	2/11/2020	5	20	
3	SFR - Building Construction	Building Construction	2/12/2020	12/29/2020	5	230	
4	SFR - Paving	Paving	11/30/2020	12/25/2020	5	20	
5	SFR - Architectural Coating	Architectural Coating	11/30/2020	12/25/2020	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 43,740; Residential Outdoor: 14,580; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
SFR- Site Prep	Rubber Tired Dozers	3	8.00	247	0.40
SFR- Site Prep	Tractors/Loaders/Backhoes	4	8.00	97	0.37
SFR - Grading	Excavators	1	8.00	158	0.38
SFR - Grading	Graders	1	8.00	187	0.41
SFR - Grading	Rubber Tired Dozers	1	8.00	247	0.40
SFR - Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
SFR - Building Construction	Cranes	1	7.00	231	0.29
SFR - Building Construction	Forklifts	3	8.00	89	0.20
SFR - Building Construction	Generator Sets	1	8.00	84	0.74
SFR - Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
SFR - Building Construction	Welders	1	8.00	46	0.45
SFR - Paving	Pavers	2	8.00	130	0.42
SFR - Paving	Paving Equipment	2	8.00	132	0.36
SFR - Paving	Rollers	2	8.00	80	0.38
SFR - 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
SFR- Site Prep	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
SFR - Grading	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
SFR - Building Construction	9	27.00	10.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
SFR - Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
SFR - Architectural Coating	1	5.00	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

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 SFR- Site Prep - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216		3,685.1016	3,685.1016	1.1918		3,714.8975
Total	**4.0765**	**42.4173**	**21.5136**	**0.0380**	**18.0663**	**2.1974**	**20.2637**	**9.9307**	**2.0216**	**11.9523**		**3,685.1016**	**3,685.1016**	**1.1918**		**3,714.8975**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0828	0.0589	0.7881	2.1300e-003	0.2012	1.6800e-003	0.2029	0.0534	1.5500e-003	0.0549		211.7003	211.7003	6.6700e-003		211.8672
Total	**0.0828**	**0.0589**	**0.7881**	**2.1300e-003**	**0.2012**	**1.6800e-003**	**0.2029**	**0.0534**	**1.5500e-003**	**0.0549**		**211.7003**	**211.7003**	**6.6700e-003**		**211.8672**

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					6.6936	0.0000	6.6936	3.6793	0.0000	3.6793			0.0000			0.0000
Off-Road	0.4656	2.0175	20.8690	0.0380		0.0621	0.0621		0.0621	0.0621	0.0000	3,685.1016	3,685.1016	1.1918		3,714.8975
Total	**0.4656**	**2.0175**	**20.8690**	**0.0380**	**6.6936**	**0.0621**	**6.7556**	**3.6793**	**0.0621**	**3.7414**	**0.0000**	**3,685.1016**	**3,685.1016**	**1.1918**		**3,714.8975**

Mitigated Construction Off-Site

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

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0828	0.0589	0.7881	2.1300e-003	0.2012	1.6800e-003	0.2029	0.0534	1.5500e-003	0.0549		211.7003	211.7003	6.6700e-003		211.8672
Total	**0.0828**	**0.0589**	**0.7881**	**2.1300e-003**	**0.2012**	**1.6800e-003**	**0.2029**	**0.0534**	**1.5500e-003**	**0.0549**		**211.7003**	**211.7003**	**6.6700e-003**		**211.8672**

3.3 SFR - Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.4288	26.3859	16.0530	0.0297		1.2734	1.2734		1.1716	1.1716		2,872.4851	2,872.4851	0.9290		2,895.7106
Total	**2.4288**	**26.3859**	**16.0530**	**0.0297**	**6.5523**	**1.2734**	**7.8258**	**3.3675**	**1.1716**	**4.5390**		**2,872.4851**	**2,872.4851**	**0.9290**		**2,895.7106**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0690	0.0491	0.6568	1.7700e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		176.4169	176.4169	5.5600e-003		176.5560
Total	**0.0690**	**0.0491**	**0.6568**	**1.7700e-003**	**0.1677**	**1.4000e-003**	**0.1691**	**0.0445**	**1.2900e-003**	**0.0458**		**176.4169**	**176.4169**	**5.5600e-003**		**176.5560**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.4276	0.0000	2.4276	1.2477	0.0000	1.2477			0.0000			0.0000
Off-Road	0.3632	1.5737	17.7527	0.0297		0.0484	0.0484		0.0484	0.0484	0.0000	2,872.4851	2,872.4851	0.9290		2,895.7106
Total	**0.3632**	**1.5737**	**17.7527**	**0.0297**	**2.4276**	**0.0484**	**2.4761**	**1.2477**	**0.0484**	**1.2961**	**0.0000**	**2,872.4851**	**2,872.4851**	**0.9290**		**2,895.7106**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0690	0.0491	0.6568	1.7700e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		176.4169	176.4169	5.5600e-003		176.5560
Total	**0.0690**	**0.0491**	**0.6568**	**1.7700e-003**	**0.1677**	**1.4000e-003**	**0.1691**	**0.0445**	**1.2900e-003**	**0.0458**		**176.4169**	**176.4169**	**5.5600e-003**		**176.5560**

3.4 SFR - Building Construction - 2020

Unmitigated Construction On-Site

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

Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**		**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0356	1.0637	0.2787	2.5900e-003	0.0640	5.0100e-003	0.0690	0.0184	4.7900e-003	0.0232		277.0247	277.0247	0.0169		277.4473
Worker	0.1243	0.0884	1.1822	3.1900e-003	0.3018	2.5200e-003	0.3043	0.0800	2.3200e-003	0.0824		317.5505	317.5505	0.0100		317.8008
Total	**0.1598**	**1.1521**	**1.4609**	**5.7800e-003**	**0.3658**	**7.5300e-003**	**0.3734**	**0.0985**	**7.1100e-003**	**0.1056**		**594.5752**	**594.5752**	**0.0269**		**595.2481**

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	0.6261	2.8021	17.7304	0.0269		0.1248	0.1248		0.1248	0.1248	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**0.6261**	**2.8021**	**17.7304**	**0.0269**		**0.1248**	**0.1248**		**0.1248**	**0.1248**	**0.0000**	**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0356	1.0637	0.2787	2.5900e-003	0.0640	5.0100e-003	0.0690	0.0184	4.7900e-003	0.0232		277.0247	277.0247	0.0169		277.4473
Worker	0.1243	0.0884	1.1822	3.1900e-003	0.3018	2.5200e-003	0.3043	0.0800	2.3200e-003	0.0824		317.5505	317.5505	0.0100		317.8008
Total	**0.1598**	**1.1521**	**1.4609**	**5.7800e-003**	**0.3658**	**7.5300e-003**	**0.3734**	**0.0985**	**7.1100e-003**	**0.1056**		**594.5752**	**594.5752**	**0.0269**		**595.2481**

3.5 SFR - Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.3566**	**14.0656**	**14.6521**	**0.0228**		**0.7528**	**0.7528**		**0.6926**	**0.6926**		**2,207.7334**	**2,207.7334**	**0.7140**		**2,225.5841**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0690	0.0491	0.6568	1.7700e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		176.4169	176.4169	5.5600e-003		176.5560
Total	**0.0690**	**0.0491**	**0.6568**	**1.7700e-003**	**0.1677**	**1.4000e-003**	**0.1691**	**0.0445**	**1.2900e-003**	**0.0458**		**176.4169**	**176.4169**	**5.5600e-003**		**176.5560**

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	0.2805	1.2154	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.2805**	**1.2154**	**17.2957**	**0.0228**		**0.0374**	**0.0374**		**0.0374**	**0.0374**	**0.0000**	**2,207.7334**	**2,207.7334**	**0.7140**		**2,225.5841**

Mitigated Construction Off-Site

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

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0690	0.0491	0.6568	1.7700e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		176.4169	176.4169	5.5600e-003		176.5560
Total	**0.0690**	**0.0491**	**0.6568**	**1.7700e-003**	**0.1677**	**1.4000e-003**	**0.1691**	**0.0445**	**1.2900e-003**	**0.0458**		**176.4169**	**176.4169**	**5.5600e-003**		**176.5560**

3.6 SFR - Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	6.7578					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
Total	**7.0000**	**1.6838**	**1.8314**	**2.9700e-003**		**0.1109**	**0.1109**		**0.1109**	**0.1109**		**281.4481**	**281.4481**	**0.0218**		**281.9928**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0230	0.0164	0.2189	5.9000e-004	0.0559	4.7000e-004	0.0564	0.0148	4.3000e-004	0.0153		58.8056	58.8056	1.8500e-003		58.8520
Total	**0.0230**	**0.0164**	**0.2189**	**5.9000e-004**	**0.0559**	**4.7000e-004**	**0.0564**	**0.0148**	**4.3000e-004**	**0.0153**		**58.8056**	**58.8056**	**1.8500e-003**		**58.8520**

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	6.7578					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0218		281.9928
Total	**6.7875**	**0.1288**	**1.8324**	**2.9700e-003**		**3.9600e-003**	**3.9600e-003**		**3.9600e-003**	**3.9600e-003**	**0.0000**	**281.4481**	**281.4481**	**0.0218**		**281.9928**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0230	0.0164	0.2189	5.9000e-004	0.0559	4.7000e-004	0.0564	0.0148	4.3000e-004	0.0153		58.8056	58.8056	1.8500e-003		58.8520
Total	**0.0230**	**0.0164**	**0.2189**	**5.9000e-004**	**0.0559**	**4.7000e-004**	**0.0564**	**0.0148**	**4.3000e-004**	**0.0153**		**58.8056**	**58.8056**	**1.8500e-003**		**58.8520**

4.0 Operational Detail - Mobile

Operational Emissions Modeled Separately

Air Quality

5. CalEEMod Output

a. Construction

2. Multi-Family Residential

Diamond Bar GPU - Construction 10% - MFR

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	3.38	Acre	3.38	147,232.80	0
Apartments Mid Rise	377.00	Dwelling Unit	9.92	377,000.00	1078

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	538.2	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Assumptions

Land Use - See Assumptions

Construction Phase - See Assumptions

Vehicle Trips - No Operational

Construction Off-road Equipment Mitigation - See Assumptions

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	300.00	213.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	538.2

2.0 Emissions Summary

Summary Not Used

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	MFR - Site Preparation	Site Preparation	1/1/2020	1/14/2020	5	10	
2	MFR - Grading	Grading	1/15/2020	2/25/2020	5	30	
3	MFR - Building Construction	Building Construction	2/26/2020	12/20/2020	5	213	
4	MFR - Architectural Coating	Architectural Coating	11/19/2020	12/16/2020	5	20	
5	MFR - Paving	Paving	11/21/2020	12/18/2020	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 3.38

Residential Indoor: 763,425; Residential Outdoor: 254,475; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
MFR - Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
MFR - Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
MFR - Grading	Excavators	2	8.00	158	0.38
MFR - Grading	Graders	1	8.00	187	0.41
MFR - Grading	Rubber Tired Dozers	1	8.00	247	0.40
MFR - Grading	Scrapers	2	8.00	367	0.48
MFR - Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
MFR - Building Construction	Cranes	1	7.00	231	0.29
MFR - Building Construction	Forklifts	3	8.00	89	0.20
MFR - Building Construction	Generator Sets	1	8.00	84	0.74
MFR - Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
MFR - Building Construction	Welders	1	8.00	46	0.45
MFR - Paving	Pavers	2	8.00	130	0.42
MFR - Paving	Paving Equipment	2	8.00	132	0.36
MFR - Paving	Rollers	2	8.00	80	0.38

MFR - 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
MFR - Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
MFR - Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
MFR - Building Construction	9	333.00	64.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
MFR - Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
MFR - Architectural Coating	1	67.00	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

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 MFR - Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216		3,685.1016	3,685.1016	1.1918		3,714.8975
Total	**4.0765**	**42.4173**	**21.5136**	**0.0380**	**18.0663**	**2.1974**	**20.2637**	**9.9307**	**2.0216**	**11.9523**		**3,685.1016**	**3,685.1016**	**1.1918**		**3,714.8975**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0920	0.0652	0.7218	2.0000e-003	0.2012	1.6800e-003	0.2029	0.0534	1.5500e-003	0.0549		199.3357	199.3357	6.2800e-003		199.4927
Total	**0.0920**	**0.0652**	**0.7218**	**2.0000e-003**	**0.2012**	**1.6800e-003**	**0.2029**	**0.0534**	**1.5500e-003**	**0.0549**		**199.3357**	**199.3357**	**6.2800e-003**		**199.4927**

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					6.6936	0.0000	6.6936	3.6793	0.0000	3.6793			0.0000			0.0000
Off-Road	0.4656	2.0175	20.8690	0.0380		0.0621	0.0621		0.0621	0.0621	0.0000	3,685.1016	3,685.1016	1.1918		3,714.8975
Total	**0.4656**	**2.0175**	**20.8690**	**0.0380**	**6.6936**	**0.0621**	**6.7556**	**3.6793**	**0.0621**	**3.7414**	**0.0000**	**3,685.1016**	**3,685.1016**	**1.1918**		**3,714.8975**

Mitigated Construction Off-Site

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

Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0920	0.0652	0.7218	2.0000e-003	0.2012	1.6800e-003	0.2029	0.0534	1.5500e-003	0.0549		199.3357	199.3357	6.2800e-003		199.4927
Total	**0.0920**	**0.0652**	**0.7218**	**2.0000e-003**	**0.2012**	**1.6800e-003**	**0.2029**	**0.0534**	**1.5500e-003**	**0.0549**		**199.3357**	**199.3357**	**6.2800e-003**		**199.4927**

3.3 MFR - Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000		6,005.8653	6,005.8653	1.9424		6,054.4257
Total	**4.4501**	**50.1975**	**31.9583**	**0.0620**	**8.6733**	**2.1739**	**10.8472**	**3.5965**	**2.0000**	**5.5965**		**6,005.8653**	**6,005.8653**	**1.9424**		**6,054.4257**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1022	0.0725	0.8020	2.2200e-003	0.2236	1.8700e-003	0.2254	0.0593	1.7200e-003	0.0610		221.4841	221.4841	6.9800e-003		221.6586

Total	**0.1022**	**0.0725**	**0.8020**	**2.2200e-003**	**0.2236**	**1.8700e-003**	**0.2254**	**0.0593**	**1.7200e-003**	**0.0610**		**221.4841**	**221.4841**	**6.9800e-003**		**221.6586**

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					3.2135	0.0000	3.2135	1.3325	0.0000	1.3325			0.0000			0.0000
Off-Road	0.7616	3.3000	32.9991	0.0620		0.1015	0.1015		0.1015	0.1015	0.0000	6,005.8653	6,005.8653	1.9424		6,054.4257
Total	**0.7616**	**3.3000**	**32.9991**	**0.0620**	**3.2135**	**0.1015**	**3.3150**	**1.3325**	**0.1015**	**1.4340**	**0.0000**	**6,005.8653**	**6,005.8653**	**1.9424**		**6,054.4257**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1022	0.0725	0.8020	2.2200e-003	0.2236	1.8700e-003	0.2254	0.0593	1.7200e-003	0.0610		221.4841	221.4841	6.9800e-003		221.6586
Total	**0.1022**	**0.0725**	**0.8020**	**2.2200e-003**	**0.2236**	**1.8700e-003**	**0.2254**	**0.0593**	**1.7200e-003**	**0.0610**		**221.4841**	**221.4841**	**6.9800e-003**		**221.6586**

3.4 MFR - Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**		**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2380	6.8064	1.9673	0.0162	0.4097	0.0326	0.4423	0.1180	0.0311	0.1491		1,724.4740	1,724.4740	0.1153		1,727.3569
Worker	1.7017	1.2070	13.3537	0.0370	3.7222	0.0311	3.7533	0.9871	0.0287	1.0158		3,687.7099	3,687.7099	0.1162		3,690.6157
Total	**1.9397**	**8.0135**	**15.3209**	**0.0532**	**4.1319**	**0.0637**	**4.1956**	**1.1051**	**0.0598**	**1.1649**		**5,412.1839**	**5,412.1839**	**0.2315**		**5,417.9726**

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	0.6261	2.8021	17.7304	0.0269		0.1248	0.1248		0.1248	0.1248	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**0.6261**	**2.8021**	**17.7304**	**0.0269**		**0.1248**	**0.1248**		**0.1248**	**0.1248**	**0.0000**	**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2380	6.8064	1.9673	0.0162	0.4097	0.0326	0.4423	0.1180	0.0311	0.1491		1,724.4740	1,724.4740	0.1153		1,727.3569
Worker	1.7017	1.2070	13.3537	0.0370	3.7222	0.0311	3.7533	0.9871	0.0287	1.0158		3,687.7099	3,687.7099	0.1162		3,690.6157
Total	**1.9397**	**8.0135**	**15.3209**	**0.0532**	**4.1319**	**0.0637**	**4.1956**	**1.1051**	**0.0598**	**1.1649**		**5,412.1839**	**5,412.1839**	**0.2315**		**5,417.9726**

3.5 MFR - Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	119.9964					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
Total	**120.2386**	**1.6838**	**1.8314**	**2.9700e-003**		**0.1109**	**0.1109**		**0.1109**	**0.1109**		**281.4481**	**281.4481**	**0.0218**		**281.9928**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3424	0.2429	2.6868	7.4500e-003	0.7489	6.2600e-003	0.7552	0.1986	5.7700e-003	0.2044		741.9717	741.9717	0.0234		742.5563
Total	**0.3424**	**0.2429**	**2.6868**	**7.4500e-003**	**0.7489**	**6.2600e-003**	**0.7552**	**0.1986**	**5.7700e-003**	**0.2044**		**741.9717**	**741.9717**	**0.0234**		**742.5563**

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	119.9964					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0218		281.9928
Total	**120.0262**	**0.1288**	**1.8324**	**2.9700e-003**		**3.9600e-003**	**3.9600e-003**		**3.9600e-003**	**3.9600e-003**	**0.0000**	**281.4481**	**281.4481**	**0.0218**		**281.9928**

Mitigated Construction Off-Site

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

Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3424	0.2429	2.6868	7.4500e-003	0.7489	6.2600e-003	0.7552	0.1986	5.7700e-003	0.2044		741.9717	741.9717	0.0234		742.5563
Total	**0.3424**	**0.2429**	**2.6868**	**7.4500e-003**	**0.7489**	**6.2600e-003**	**0.7552**	**0.1986**	**5.7700e-003**	**0.2044**		**741.9717**	**741.9717**	**0.0234**		**742.5563**

3.6 MFR - Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.4428					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.7993**	**14.0656**	**14.6521**	**0.0228**		**0.7528**	**0.7528**		**0.6926**	**0.6926**		**2,207.7334**	**2,207.7334**	**0.7140**		**2,225.5841**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0767	0.0544	0.6015	1.6700e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		166.1131	166.1131	5.2400e-003		166.2440

Total	**0.0767**	**0.0544**	**0.6015**	**1.6700e-003**	**0.1677**	**1.4000e-003**	**0.1691**	**0.0445**	**1.2900e-003**	**0.0458**		**166.1131**	**166.1131**	**5.2400e-003**		**166.2440**

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	0.2805	1.2154	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.4428					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.7233**	**1.2154**	**17.2957**	**0.0228**		**0.0374**	**0.0374**		**0.0374**	**0.0374**	**0.0000**	**2,207.7334**	**2,207.7334**	**0.7140**		**2,225.5841**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0767	0.0544	0.6015	1.6700e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		166.1131	166.1131	5.2400e-003		166.2440
Total	**0.0767**	**0.0544**	**0.6015**	**1.6700e-003**	**0.1677**	**1.4000e-003**	**0.1691**	**0.0445**	**1.2900e-003**	**0.0458**		**166.1131**	**166.1131**	**5.2400e-003**		**166.2440**

4.0 Operational Detail - Mobile

Operational Emissions Modeled Separately

Diamond Bar GPU - Construction 10% - MFR

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	3.38	Acre	3.38	147,232.80	0
Apartments Mid Rise	377.00	Dwelling Unit	9.92	377,000.00	1078

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	538.2	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Assumptions

Land Use - See Assumptions

Construction Phase - See Assumptions

Vehicle Trips - No Operational

Construction Off-road Equipment Mitigation - See Assumptions

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	300.00	213.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	538.2

2.0 Emissions Summary

Summary not used

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	MFR - Site Preparation	Site Preparation	1/1/2020	1/14/2020	5	10	
2	MFR - Grading	Grading	1/15/2020	2/25/2020	5	30	
3	MFR - Building Construction	Building Construction	2/26/2020	12/20/2020	5	213	
4	MFR - Architectural Coating	Architectural Coating	11/19/2020	12/16/2020	5	20	
5	MFR - Paving	Paving	11/21/2020	12/18/2020	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 3.38

Residential Indoor: 763,425; Residential Outdoor: 254,475; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
MFR - Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
MFR - Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
MFR - Grading	Excavators	2	8.00	158	0.38
MFR - Grading	Graders	1	8.00	187	0.41
MFR - Grading	Rubber Tired Dozers	1	8.00	247	0.40
MFR - Grading	Scrapers	2	8.00	367	0.48
MFR - Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
MFR - Building Construction	Cranes	1	7.00	231	0.29
MFR - Building Construction	Forklifts	3	8.00	89	0.20
MFR - Building Construction	Generator Sets	1	8.00	84	0.74
MFR - Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
MFR - Building Construction	Welders	1	8.00	46	0.45
MFR - Paving	Pavers	2	8.00	130	0.42
MFR - Paving	Paving Equipment	2	8.00	132	0.36
MFR - Paving	Rollers	2	8.00	80	0.38

MFR - 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
MFR - Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
MFR - Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
MFR - Building Construction	9	333.00	64.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
MFR - Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
MFR - Architectural Coating	1	67.00	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

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 MFR - Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216		3,685.1016	3,685.1016	1.1918		3,714.8975
Total	**4.0765**	**42.4173**	**21.5136**	**0.0380**	**18.0663**	**2.1974**	**20.2637**	**9.9307**	**2.0216**	**11.9523**		**3,685.1016**	**3,685.1016**	**1.1918**		**3,714.8975**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0828	0.0589	0.7881	2.1300e-003	0.2012	1.6800e-003	0.2029	0.0534	1.5500e-003	0.0549		211.7003	211.7003	6.6700e-003		211.8672
Total	**0.0828**	**0.0589**	**0.7881**	**2.1300e-003**	**0.2012**	**1.6800e-003**	**0.2029**	**0.0534**	**1.5500e-003**	**0.0549**		**211.7003**	**211.7003**	**6.6700e-003**		**211.8672**

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					6.6936	0.0000	6.6936	3.6793	0.0000	3.6793			0.0000			0.0000
Off-Road	0.4656	2.0175	20.8690	0.0380		0.0621	0.0621		0.0621	0.0621	0.0000	3,685.1016	3,685.1016	1.1918		3,714.8975
Total	**0.4656**	**2.0175**	**20.8690**	**0.0380**	**6.6936**	**0.0621**	**6.7556**	**3.6793**	**0.0621**	**3.7414**	**0.0000**	**3,685.1016**	**3,685.1016**	**1.1918**		**3,714.8975**

Mitigated Construction Off-Site

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

Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0828	0.0589	0.7881	2.1300e-003	0.2012	1.6800e-003	0.2029	0.0534	1.5500e-003	0.0549		211.7003	211.7003	6.6700e-003		211.8672
Total	**0.0828**	**0.0589**	**0.7881**	**2.1300e-003**	**0.2012**	**1.6800e-003**	**0.2029**	**0.0534**	**1.5500e-003**	**0.0549**		**211.7003**	**211.7003**	**6.6700e-003**		**211.8672**

3.3 MFR - Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000		6,005.8653	6,005.8653	1.9424		6,054.4257
Total	**4.4501**	**50.1975**	**31.9583**	**0.0620**	**8.6733**	**2.1739**	**10.8472**	**3.5965**	**2.0000**	**5.5965**		**6,005.8653**	**6,005.8653**	**1.9424**		**6,054.4257**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0920	0.0655	0.8757	2.3600e-003	0.2236	1.8700e-003	0.2254	0.0593	1.7200e-003	0.0610		235.2226	235.2226	7.4200e-003		235.4080

Total	**0.0920**	**0.0655**	**0.8757**	**2.3600e-003**	**0.2236**	**1.8700e-003**	**0.2254**	**0.0593**	**1.7200e-003**	**0.0610**		**235.2226**	**235.2226**	**7.4200e-003**		**235.4080**

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					3.2135	0.0000	3.2135	1.3325	0.0000	1.3325			0.0000			0.0000
Off-Road	0.7616	3.3000	32.9991	0.0620		0.1015	0.1015		0.1015	0.1015	0.0000	6,005.8653	6,005.8653	1.9424		6,054.4257
Total	**0.7616**	**3.3000**	**32.9991**	**0.0620**	**3.2135**	**0.1015**	**3.3150**	**1.3325**	**0.1015**	**1.4340**	**0.0000**	**6,005.8653**	**6,005.8653**	**1.9424**		**6,054.4257**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0920	0.0655	0.8757	2.3600e-003	0.2236	1.8700e-003	0.2254	0.0593	1.7200e-003	0.0610		235.2226	235.2226	7.4200e-003		235.4080
Total	**0.0920**	**0.0655**	**0.8757**	**2.3600e-003**	**0.2236**	**1.8700e-003**	**0.2254**	**0.0593**	**1.7200e-003**	**0.0610**		**235.2226**	**235.2226**	**7.4200e-003**		**235.4080**

3.4 MFR - Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**		**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2276	6.8078	1.7837	0.0166	0.4097	0.0320	0.4418	0.1180	0.0307	0.1486		1,772.9581	1,772.9581	0.1082		1,775.6628
Worker	1.5325	1.0902	14.5802	0.0393	3.7222	0.0311	3.7533	0.9871	0.0287	1.0158		3,916.4559	3,916.4559	0.1235		3,919.5428
Total	**1.7601**	**7.8981**	**16.3639**	**0.0559**	**4.1319**	**0.0632**	**4.1950**	**1.1051**	**0.0593**	**1.1644**		**5,689.4139**	**5,689.4139**	**0.2317**		**5,695.2056**

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	0.6261	2.8021	17.7304	0.0269		0.1248	0.1248		0.1248	0.1248	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**0.6261**	**2.8021**	**17.7304**	**0.0269**		**0.1248**	**0.1248**		**0.1248**	**0.1248**	**0.0000**	**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2276	6.8078	1.7837	0.0166	0.4097	0.0320	0.4418	0.1180	0.0307	0.1486		1,772.9581	1,772.9581	0.1082		1,775.6628
Worker	1.5325	1.0902	14.5802	0.0393	3.7222	0.0311	3.7533	0.9871	0.0287	1.0158		3,916.4559	3,916.4559	0.1235		3,919.5428
Total	**1.7601**	**7.8981**	**16.3639**	**0.0559**	**4.1319**	**0.0632**	**4.1950**	**1.1051**	**0.0593**	**1.1644**		**5,689.4139**	**5,689.4139**	**0.2317**		**5,695.2056**

3.5 MFR - Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	119.9964					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
Total	**120.2386**	**1.6838**	**1.8314**	**2.9700e-003**		**0.1109**	**0.1109**		**0.1109**	**0.1109**		**281.4481**	**281.4481**	**0.0218**		**281.9928**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3083	0.2194	2.9336	7.9100e-003	0.7489	6.2600e-003	0.7552	0.1986	5.7700e-003	0.2044		787.9956	787.9956	0.0248		788.6167
Total	**0.3083**	**0.2194**	**2.9336**	**7.9100e-003**	**0.7489**	**6.2600e-003**	**0.7552**	**0.1986**	**5.7700e-003**	**0.2044**		**787.9956**	**787.9956**	**0.0248**		**788.6167**

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	119.9964					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0218		281.9928
Total	**120.0262**	**0.1288**	**1.8324**	**2.9700e-003**		**3.9600e-003**	**3.9600e-003**		**3.9600e-003**	**3.9600e-003**	**0.0000**	**281.4481**	**281.4481**	**0.0218**		**281.9928**

Mitigated Construction Off-Site

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

Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3083	0.2194	2.9336	7.9100e-003	0.7489	6.2600e-003	0.7552	0.1986	5.7700e-003	0.2044		787.9956	787.9956	0.0248		788.6167
Total	**0.3083**	**0.2194**	**2.9336**	**7.9100e-003**	**0.7489**	**6.2600e-003**	**0.7552**	**0.1986**	**5.7700e-003**	**0.2044**		**787.9956**	**787.9956**	**0.0248**		**788.6167**

3.6 MFR - Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.4428					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.7993**	**14.0656**	**14.6521**	**0.0228**		**0.7528**	**0.7528**		**0.6926**	**0.6926**		**2,207.7334**	**2,207.7334**	**0.7140**		**2,225.5841**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0690	0.0491	0.6568	1.7700e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		176.4169	176.4169	5.5600e-003		176.5560

Total	**0.0690**	**0.0491**	**0.6568**	**1.7700e-003**	**0.1677**	**1.4000e-003**	**0.1691**	**0.0445**	**1.2900e-003**	**0.0458**		**176.4169**	**176.4169**	**5.5600e-003**		**176.5560**

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	0.2805	1.2154	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.4428					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.7233**	**1.2154**	**17.2957**	**0.0228**		**0.0374**	**0.0374**		**0.0374**	**0.0374**	**0.0000**	**2,207.7334**	**2,207.7334**	**0.7140**		**2,225.5841**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0690	0.0491	0.6568	1.7700e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		176.4169	176.4169	5.5600e-003		176.5560
Total	**0.0690**	**0.0491**	**0.6568**	**1.7700e-003**	**0.1677**	**1.4000e-003**	**0.1691**	**0.0445**	**1.2900e-003**	**0.0458**		**176.4169**	**176.4169**	**5.5600e-003**		**176.5560**

4.0 Operational Detail - Mobile

Opeartional Emissions Modeled Separately

Air Quality

5. CalEEMod Output

a. Construction

3. Non Residential

Diamond Bar GPU - Construction Only - Demo & Non Residential

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Pharmacy/Drugstore w/o Drive Thru	69.34	1000sqft	1.59	69,340.00	0
Parking Lot	0.88	Acre	0.88	38,332.80	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	538.2	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Assumptions

Land Use - See Assumptions

Construction Phase - See Assumptions

Demolition -

Construction Off-road Equipment Mitigation - See Assumptions

Vehicle Trips - no operational

Consumer Products - no operational

Area Coating - no operational

Landscape Equipment - no operational

Energy Use - no operational

Water And Wastewater - no operational

Solid Waste - no operational

Table Name	Column Name	Default Value	New Value
tblAreaCoating	ReapplicationRatePercent	10	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final

tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	PhaseEndDate	12/28/2020	11/27/2020
tblConstructionPhase	PhaseEndDate	1/11/2021	12/11/2020
tblConstructionPhase	PhaseStartDate	12/15/2020	11/15/2020
tblConstructionPhase	PhaseStartDate	12/29/2020	11/29/2020
tblEnergyUse	LightingElect	6.26	0.00
tblEnergyUse	LightingElect	0.35	0.00
tblEnergyUse	NT24E	3.23	0.00
tblEnergyUse	NT24NG	0.49	0.00
tblEnergyUse	T24E	4.01	0.00
tblEnergyUse	T24NG	1.15	0.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	538.2
tblSolidWaste	SolidWasteGenerationRate	208.50	0.00
tblVehicleTrips	ST_TR	90.06	0.00
tblVehicleTrips	SU_TR	90.06	0.00
tblVehicleTrips	WD_TR	90.06	0.00
tblWater	IndoorWaterUseRate	4,884,831.26	0.00
tblWater	OutdoorWaterUseRate	2,993,928.83	0.00

2.0 Emissions Summary

Summary not used

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2020	1/28/2020	5	20	
2	NR - Site Preparation	Site Preparation	1/29/2020	1/31/2020	5	3	

3	NR - Grading	Grading	2/1/2020	2/10/2020	5	6	
4	NR - Building Construction	Building Construction	2/11/2020	12/14/2020	5	220	
5	NR - Paving	Paving	11/15/2020	11/27/2020	5	10	
6	NR - Architectural Coating	Architectural Coating	11/29/2020	12/11/2020	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0.88

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 104,010; Non-Residential Outdoor: 34,670; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
NR - Site Preparation	Graders	1	8.00	187	0.41
NR - Site Preparation	Scrapers	1	8.00	367	0.48
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
NR - Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
NR - Grading	Graders	1	8.00	187	0.41
NR - Grading	Rubber Tired Dozers	1	8.00	247	0.40
NR - Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
NR - Building Construction	Cranes	1	8.00	231	0.29
NR - Building Construction	Forklifts	2	7.00	89	0.20
NR - Building Construction	Generator Sets	1	8.00	84	0.74
NR - Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
NR - Building Construction	Welders	3	8.00	46	0.45
NR - Paving	Cement and Mortar Mixers	1	8.00	9	0.56
NR - Paving	Pavers	1	8.00	130	0.42
NR - Paving	Paving Equipment	1	8.00	132	0.36
NR - Paving	Rollers	2	8.00	80	0.38

NR - Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
NR - Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	92.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
NR - Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
NR - Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
NR - Building Construction	8	38.00	18.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
NR - Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
NR - Architectural Coating	1	8.00	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

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.9991	0.0000	0.9991	0.1513	0.0000	0.1513			0.0000			0.0000
Off-Road	2.1262	20.9463	14.6573	0.0241		1.1525	1.1525		1.0761	1.0761		2,322.3127	2,322.3127	0.5970		2,337.2363

Total	**2.1262**	**20.9463**	**14.6573**	**0.0241**	**0.9991**	**1.1525**	**2.1516**	**0.1513**	**1.0761**	**1.2274**		**2,322.3127**	**2,322.3127**	**0.5970**		**2,337.2363**

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	0.0412	1.3398	0.3115	3.5700e-003	0.0804	4.2900e-003	0.0847	0.0221	4.1000e-003	0.0262		386.9033	386.9033	0.0278		387.5975
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0664	0.0471	0.5213	1.4500e-003	0.1453	1.2100e-003	0.1465	0.0385	1.1200e-003	0.0397		143.9647	143.9647	4.5400e-003		144.0781
Total	**0.1076**	**1.3869**	**0.8328**	**5.0200e-003**	**0.2257**	**5.5000e-003**	**0.2312**	**0.0606**	**5.2200e-003**	**0.0658**		**530.8679**	**530.8679**	**0.0323**		**531.6756**

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					0.3702	0.0000	0.3702	0.0561	0.0000	0.0561			0.0000			0.0000
Off-Road	0.2811	1.2179	14.7184	0.0241		0.0375	0.0375		0.0375	0.0375	0.0000	2,322.3127	2,322.3127	0.5970		2,337.2363
Total	**0.2811**	**1.2179**	**14.7184**	**0.0241**	**0.3702**	**0.0375**	**0.4077**	**0.0561**	**0.0375**	**0.0935**	**0.0000**	**2,322.3127**	**2,322.3127**	**0.5970**		**2,337.2363**

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	0.0412	1.3398	0.3115	3.5700e-003	0.0804	4.2900e-003	0.0847	0.0221	4.1000e-003	0.0262		386.9033	386.9033	0.0278		387.5975
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0664	0.0471	0.5213	1.4500e-003	0.1453	1.2100e-003	0.1465	0.0385	1.1200e-003	0.0397		143.9647	143.9647	4.5400e-003		144.0781
Total	**0.1076**	**1.3869**	**0.8328**	**5.0200e-003**	**0.2257**	**5.5000e-003**	**0.2312**	**0.0606**	**5.2200e-003**	**0.0658**		**530.8679**	**530.8679**	**0.0323**		**531.6756**

3.3 NR - Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	1.6521	19.9196	11.2678	0.0245		0.7771	0.7771		0.7149	0.7149		2,372.9062	2,372.9062	0.7675		2,392.0924
Total	**1.6521**	**19.9196**	**11.2678**	**0.0245**	**1.5908**	**0.7771**	**2.3678**	**0.1718**	**0.7149**	**0.8867**		**2,372.9062**	**2,372.9062**	**0.7675**		**2,392.0924**

Unmitigated Construction Off-Site

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

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0409	0.0290	0.3208	8.9000e-004	0.0894	7.5000e-004	0.0902	0.0237	6.9000e-004	0.0244		88.5936	88.5936	2.7900e-003		88.6634
Total	**0.0409**	**0.0290**	**0.3208**	**8.9000e-004**	**0.0894**	**7.5000e-004**	**0.0902**	**0.0237**	**6.9000e-004**	**0.0244**		**88.5936**	**88.5936**	**2.7900e-003**		**88.6634**

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					0.5894	0.0000	0.5894	0.0636	0.0000	0.0636			0.0000			0.0000
Off-Road	0.3008	1.3034	11.8595	0.0245		0.0401	0.0401		0.0401	0.0401	0.0000	2,372.9062	2,372.9062	0.7675		2,392.0924
Total	**0.3008**	**1.3034**	**11.8595**	**0.0245**	**0.5894**	**0.0401**	**0.6295**	**0.0636**	**0.0401**	**0.1037**	**0.0000**	**2,372.9062**	**2,372.9062**	**0.7675**		**2,392.0924**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0409	0.0290	0.3208	8.9000e-004	0.0894	7.5000e-004	0.0902	0.0237	6.9000e-004	0.0244		88.5936	88.5936	2.7900e-003		88.6634
Total	**0.0409**	**0.0290**	**0.3208**	**8.9000e-004**	**0.0894**	**7.5000e-004**	**0.0902**	**0.0237**	**6.9000e-004**	**0.0244**		**88.5936**	**88.5936**	**2.7900e-003**		**88.6634**

3.4 NR - Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.9219	21.3418	9.9355	0.0206		0.9902	0.9902		0.9110	0.9110		1,996.4061	1,996.4061	0.6457		2,012.5480
Total	**1.9219**	**21.3418**	**9.9355**	**0.0206**	**6.5523**	**0.9902**	**7.5425**	**3.3675**	**0.9110**	**4.2784**		**1,996.4061**	**1,996.4061**	**0.6457**		**2,012.5480**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0511	0.0363	0.4010	1.1100e-003	0.1118	9.3000e-004	0.1127	0.0296	8.6000e-004	0.0305		110.7420	110.7420	3.4900e-003		110.8293
Total	**0.0511**	**0.0363**	**0.4010**	**1.1100e-003**	**0.1118**	**9.3000e-004**	**0.1127**	**0.0296**	**8.6000e-004**	**0.0305**		**110.7420**	**110.7420**	**3.4900e-003**		**110.8293**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.4276	0.0000	2.4276	1.2477	0.0000	1.2477			0.0000			0.0000
Off-Road	0.2522	1.0927	10.9071	0.0206		0.0336	0.0336		0.0336	0.0336	0.0000	1,996.4061	1,996.4061	0.6457		2,012.5480
Total	**0.2522**	**1.0927**	**10.9071**	**0.0206**	**2.4276**	**0.0336**	**2.4613**	**1.2477**	**0.0336**	**1.2813**	**0.0000**	**1,996.4061**	**1,996.4061**	**0.6457**		**2,012.5480**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0511	0.0363	0.4010	1.1100e-003	0.1118	9.3000e-004	0.1127	0.0296	8.6000e-004	0.0305		110.7420	110.7420	3.4900e-003		110.8293
Total	**0.0511**	**0.0363**	**0.4010**	**1.1100e-003**	**0.1118**	**9.3000e-004**	**0.1127**	**0.0296**	**8.6000e-004**	**0.0305**		**110.7420**	**110.7420**	**3.4900e-003**		**110.8293**

3.5 NR - Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2879	17.4336	14.8972	0.0250		0.9482	0.9482		0.9089	0.9089		2,288.8877	2,288.8877	0.4646		2,300.5014

Total	**2.2879**	**17.4336**	**14.8972**	**0.0250**		**0.9482**	**0.9482**		**0.9089**	**0.9089**		**2,288.8877**	**2,288.8877**	**0.4646**		**2,300.5014**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0669	1.9143	0.5533	4.5400e-003	0.1152	9.1600e-003	0.1244	0.0332	8.7600e-003	0.0419		485.0083	485.0083	0.0324		485.8191
Worker	0.1942	0.1377	1.5238	4.2300e-003	0.4248	3.5500e-003	0.4283	0.1127	3.2700e-003	0.1159		420.8198	420.8198	0.0133		421.1513
Total	**0.2611**	**2.0521**	**2.0771**	**8.7700e-003**	**0.5400**	**0.0127**	**0.5527**	**0.1458**	**0.0120**	**0.1579**		**905.8281**	**905.8281**	**0.0457**		**906.9705**

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	1.2244	5.5725	15.7460	0.0250		0.2871	0.2871		0.2871	0.2871	0.0000	2,288.8877	2,288.8877	0.4646		2,300.5014
Total	**1.2244**	**5.5725**	**15.7460**	**0.0250**		**0.2871**	**0.2871**		**0.2871**	**0.2871**	**0.0000**	**2,288.8877**	**2,288.8877**	**0.4646**		**2,300.5014**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0669	1.9143	0.5533	4.5400e-003	0.1152	9.1600e-003	0.1244	0.0332	8.7600e-003	0.0419		485.0083	485.0083	0.0324		485.8191
Worker	0.1942	0.1377	1.5238	4.2300e-003	0.4248	3.5500e-003	0.4283	0.1127	3.2700e-003	0.1159		420.8198	420.8198	0.0133		421.1513
Total	**0.2611**	**2.0521**	**2.0771**	**8.7700e-003**	**0.5400**	**0.0127**	**0.5527**	**0.1458**	**0.0120**	**0.1579**		**905.8281**	**905.8281**	**0.0457**		**906.9705**

3.6 NR - Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1547	11.5873	11.8076	0.0178		0.6565	0.6565		0.6051	0.6051		1,709.2180	1,709.2180	0.5417		1,722.7605
Paving	0.2306					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.3852**	**11.5873**	**11.8076**	**0.0178**		**0.6565**	**0.6565**		**0.6051**	**0.6051**		**1,709.2180**	**1,709.2180**	**0.5417**		**1,722.7605**

Unmitigated Construction Off-Site

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

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0767	0.0544	0.6015	1.6700e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		166.1131	166.1131	5.2400e-003		166.2440
Total	**0.0767**	**0.0544**	**0.6015**	**1.6700e-003**	**0.1677**	**1.4000e-003**	**0.1691**	**0.0445**	**1.2900e-003**	**0.0458**		**166.1131**	**166.1131**	**5.2400e-003**		**166.2440**

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	0.2104	0.9117	12.9737	0.0178		0.0281	0.0281		0.0281	0.0281	0.0000	1,709.2180	1,709.2180	0.5417		1,722.7605
Paving	0.2306					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.4409**	**0.9117**	**12.9737**	**0.0178**		**0.0281**	**0.0281**		**0.0281**	**0.0281**	**0.0000**	**1,709.2180**	**1,709.2180**	**0.5417**		**1,722.7605**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0767	0.0544	0.6015	1.6700e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		166.1131	166.1131	5.2400e-003		166.2440
Total	**0.0767**	**0.0544**	**0.6015**	**1.6700e-003**	**0.1677**	**1.4000e-003**	**0.1691**	**0.0445**	**1.2900e-003**	**0.0458**		**166.1131**	**166.1131**	**5.2400e-003**		**166.2440**

3.7 NR - Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	65.3442					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
Total	**65.5864**	**1.6838**	**1.8314**	**2.9700e-003**		**0.1109**	**0.1109**		**0.1109**	**0.1109**		**281.4481**	**281.4481**	**0.0218**		**281.9928**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0409	0.0290	0.3208	8.9000e-004	0.0894	7.5000e-004	0.0902	0.0237	6.9000e-004	0.0244		88.5936	88.5936	2.7900e-003		88.6634
Total	**0.0409**	**0.0290**	**0.3208**	**8.9000e-004**	**0.0894**	**7.5000e-004**	**0.0902**	**0.0237**	**6.9000e-004**	**0.0244**		**88.5936**	**88.5936**	**2.7900e-003**		**88.6634**

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	65.3442					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0218		281.9928
Total	**65.3739**	**0.1288**	**1.8324**	**2.9700e-003**		**3.9600e-003**	**3.9600e-003**		**3.9600e-003**	**3.9600e-003**	**0.0000**	**281.4481**	**281.4481**	**0.0218**		**281.9928**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0409	0.0290	0.3208	8.9000e-004	0.0894	7.5000e-004	0.0902	0.0237	6.9000e-004	0.0244		88.5936	88.5936	2.7900e-003		88.6634
Total	**0.0409**	**0.0290**	**0.3208**	**8.9000e-004**	**0.0894**	**7.5000e-004**	**0.0902**	**0.0237**	**6.9000e-004**	**0.0244**		**88.5936**	**88.5936**	**2.7900e-003**		**88.6634**

4.0 Operational Detail - Mobile

Operational Emissions Modeled Separately

Diamond Bar GPU - Construction Only - Demo & Non Residential

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Pharmacy/Drugstore w/o Drive Thru	69.34	1000sqft	1.59	69,340.00	0
Parking Lot	0.88	Acre	0.88	38,332.80	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	538.2	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Assumptions

Land Use - See Assumptions

Construction Phase - See Assumptions

Demolition -

Construction Off-road Equipment Mitigation - See Assumptions

Vehicle Trips - no operational

Consumer Products - no operational

Area Coating - no operational

Landscape Equipment - no operational

Energy Use - no operational

Water And Wastewater - no operational

Solid Waste - no operational

Table Name	Column Name	Default Value	New Value
tblAreaCoating	ReapplicationRatePercent	10	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final

tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	PhaseEndDate	12/28/2020	11/27/2020
tblConstructionPhase	PhaseEndDate	1/11/2021	12/11/2020
tblConstructionPhase	PhaseStartDate	12/15/2020	11/15/2020
tblConstructionPhase	PhaseStartDate	12/29/2020	11/29/2020
tblEnergyUse	LightingElect	6.26	0.00
tblEnergyUse	LightingElect	0.35	0.00
tblEnergyUse	NT24E	3.23	0.00
tblEnergyUse	NT24NG	0.49	0.00
tblEnergyUse	T24E	4.01	0.00
tblEnergyUse	T24NG	1.15	0.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	538.2
tblSolidWaste	SolidWasteGenerationRate	208.50	0.00
tblVehicleTrips	ST_TR	90.06	0.00
tblVehicleTrips	SU_TR	90.06	0.00
tblVehicleTrips	WD_TR	90.06	0.00
tblWater	IndoorWaterUseRate	4,884,831.26	0.00
tblWater	OutdoorWaterUseRate	2,993,928.83	0.00

2.0 Emissions Summary

Summary not used

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2020	1/28/2020	5	20	
2	NR - Site Preparation	Site Preparation	1/29/2020	1/31/2020	5	3	

3	NR - Grading	Grading	2/1/2020	2/10/2020	5	6	
4	NR - Building Construction	Building Construction	2/11/2020	12/14/2020	5	220	
5	NR - Paving	Paving	11/15/2020	11/27/2020	5	10	
6	NR - Architectural Coating	Architectural Coating	11/29/2020	12/11/2020	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0.88

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 104,010; Non-Residential Outdoor: 34,670; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
NR - Site Preparation	Graders	1	8.00	187	0.41
NR - Site Preparation	Scrapers	1	8.00	367	0.48
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
NR - Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
NR - Grading	Graders	1	8.00	187	0.41
NR - Grading	Rubber Tired Dozers	1	8.00	247	0.40
NR - Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
NR - Building Construction	Cranes	1	8.00	231	0.29
NR - Building Construction	Forklifts	2	7.00	89	0.20
NR - Building Construction	Generator Sets	1	8.00	84	0.74
NR - Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
NR - Building Construction	Welders	3	8.00	46	0.45
NR - Paving	Cement and Mortar Mixers	1	8.00	9	0.56
NR - Paving	Pavers	1	8.00	130	0.42
NR - Paving	Paving Equipment	1	8.00	132	0.36
NR - Paving	Rollers	2	8.00	80	0.38

NR - Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
NR - Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	92.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
NR - Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
NR - Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
NR - Building Construction	8	38.00	18.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
NR - Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
NR - Architectural Coating	1	8.00	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

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.9991	0.0000	0.9991	0.1513	0.0000	0.1513			0.0000			0.0000
Off-Road	2.1262	20.9463	14.6573	0.0241		1.1525	1.1525		1.0761	1.0761		2,322.3127	2,322.3127	0.5970		2,337.2363

Total	**2.1262**	**20.9463**	**14.6573**	**0.0241**	**0.9991**	**1.1525**	**2.1516**	**0.1513**	**1.0761**	**1.2274**		**2,322.3127**	**2,322.3127**	**0.5970**		**2,337.2363**

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	0.0402	1.3227	0.2931	3.6300e-003	0.0804	4.2200e-003	0.0847	0.0221	4.0400e-003	0.0261		393.6826	393.6826	0.0268		394.3526
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0598	0.0426	0.5692	1.5400e-003	0.1453	1.2100e-003	0.1465	0.0385	1.1200e-003	0.0397		152.8947	152.8947	4.8200e-003		153.0152
Total	**0.1000**	**1.3653**	**0.8623**	**5.1700e-003**	**0.2257**	**5.4300e-003**	**0.2312**	**0.0606**	**5.1600e-003**	**0.0658**		**546.5773**	**546.5773**	**0.0316**		**547.3677**

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					0.3702	0.0000	0.3702	0.0561	0.0000	0.0561			0.0000			0.0000
Off-Road	0.2811	1.2179	14.7184	0.0241		0.0375	0.0375		0.0375	0.0375	0.0000	2,322.3127	2,322.3127	0.5970		2,337.2363
Total	**0.2811**	**1.2179**	**14.7184**	**0.0241**	**0.3702**	**0.0375**	**0.4077**	**0.0561**	**0.0375**	**0.0935**	**0.0000**	**2,322.3127**	**2,322.3127**	**0.5970**		**2,337.2363**

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	0.0402	1.3227	0.2931	3.6300e-003	0.0804	4.2200e-003	0.0847	0.0221	4.0400e-003	0.0261		393.6826	393.6826	0.0268		394.3526
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0598	0.0426	0.5692	1.5400e-003	0.1453	1.2100e-003	0.1465	0.0385	1.1200e-003	0.0397		152.8947	152.8947	4.8200e-003		153.0152
Total	**0.1000**	**1.3653**	**0.8623**	**5.1700e-003**	**0.2257**	**5.4300e-003**	**0.2312**	**0.0606**	**5.1600e-003**	**0.0658**		**546.5773**	**546.5773**	**0.0316**		**547.3677**

3.3 NR - Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	1.6521	19.9196	11.2678	0.0245		0.7771	0.7771		0.7149	0.7149		2,372.9062	2,372.9062	0.7675		2,392.0924
Total	**1.6521**	**19.9196**	**11.2678**	**0.0245**	**1.5908**	**0.7771**	**2.3678**	**0.1718**	**0.7149**	**0.8867**		**2,372.9062**	**2,372.9062**	**0.7675**		**2,392.0924**

Unmitigated Construction Off-Site

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

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0368	0.0262	0.3503	9.4000e-004	0.0894	7.5000e-004	0.0902	0.0237	6.9000e-004	0.0244		94.0890	94.0890	2.9700e-003		94.1632
Total	**0.0368**	**0.0262**	**0.3503**	**9.4000e-004**	**0.0894**	**7.5000e-004**	**0.0902**	**0.0237**	**6.9000e-004**	**0.0244**		**94.0890**	**94.0890**	**2.9700e-003**		**94.1632**

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					0.5894	0.0000	0.5894	0.0636	0.0000	0.0636			0.0000			0.0000
Off-Road	0.3008	1.3034	11.8595	0.0245		0.0401	0.0401		0.0401	0.0401	0.0000	2,372.9062	2,372.9062	0.7675		2,392.0924
Total	**0.3008**	**1.3034**	**11.8595**	**0.0245**	**0.5894**	**0.0401**	**0.6295**	**0.0636**	**0.0401**	**0.1037**	**0.0000**	**2,372.9062**	**2,372.9062**	**0.7675**		**2,392.0924**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0368	0.0262	0.3503	9.4000e-004	0.0894	7.5000e-004	0.0902	0.0237	6.9000e-004	0.0244		94.0890	94.0890	2.9700e-003		94.1632
Total	**0.0368**	**0.0262**	**0.3503**	**9.4000e-004**	**0.0894**	**7.5000e-004**	**0.0902**	**0.0237**	**6.9000e-004**	**0.0244**		**94.0890**	**94.0890**	**2.9700e-003**		**94.1632**

3.4 NR - Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.9219	21.3418	9.9355	0.0206		0.9902	0.9902		0.9110	0.9110		1,996.4061	1,996.4061	0.6457		2,012.5480
Total	**1.9219**	**21.3418**	**9.9355**	**0.0206**	**6.5523**	**0.9902**	**7.5425**	**3.3675**	**0.9110**	**4.2784**		**1,996.4061**	**1,996.4061**	**0.6457**		**2,012.5480**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0460	0.0327	0.4378	1.1800e-003	0.1118	9.3000e-004	0.1127	0.0296	8.6000e-004	0.0305		117.6113	117.6113	3.7100e-003		117.7040
Total	**0.0460**	**0.0327**	**0.4378**	**1.1800e-003**	**0.1118**	**9.3000e-004**	**0.1127**	**0.0296**	**8.6000e-004**	**0.0305**		**117.6113**	**117.6113**	**3.7100e-003**		**117.7040**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.4276	0.0000	2.4276	1.2477	0.0000	1.2477			0.0000			0.0000
Off-Road	0.2522	1.0927	10.9071	0.0206		0.0336	0.0336		0.0336	0.0336	0.0000	1,996.4061	1,996.4061	0.6457		2,012.5480
Total	**0.2522**	**1.0927**	**10.9071**	**0.0206**	**2.4276**	**0.0336**	**2.4613**	**1.2477**	**0.0336**	**1.2813**	**0.0000**	**1,996.4061**	**1,996.4061**	**0.6457**		**2,012.5480**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0460	0.0327	0.4378	1.1800e-003	0.1118	9.3000e-004	0.1127	0.0296	8.6000e-004	0.0305		117.6113	117.6113	3.7100e-003		117.7040
Total	**0.0460**	**0.0327**	**0.4378**	**1.1800e-003**	**0.1118**	**9.3000e-004**	**0.1127**	**0.0296**	**8.6000e-004**	**0.0305**		**117.6113**	**117.6113**	**3.7100e-003**		**117.7040**

3.5 NR - Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2879	17.4336	14.8972	0.0250		0.9482	0.9482		0.9089	0.9089		2,288.8877	2,288.8877	0.4646		2,300.5014

Total	**2.2879**	**17.4336**	**14.8972**	**0.0250**		**0.9482**	**0.9482**		**0.9089**	**0.9089**		**2,288.8877**	**2,288.8877**	**0.4646**		**2,300.5014**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0640	1.9147	0.5017	4.6700e-003	0.1152	9.0100e-003	0.1243	0.0332	8.6200e-003	0.0418		498.6445	498.6445	0.0304		499.4052
Worker	0.1749	0.1244	1.6638	4.4900e-003	0.4248	3.5500e-003	0.4283	0.1127	3.2700e-003	0.1159		446.9229	446.9229	0.0141		447.2752
Total	**0.2389**	**2.0391**	**2.1655**	**9.1600e-003**	**0.5400**	**0.0126**	**0.5526**	**0.1458**	**0.0119**	**0.1577**		**945.5673**	**945.5673**	**0.0445**		**946.6803**

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	1.2244	5.5725	15.7460	0.0250		0.2871	0.2871		0.2871	0.2871	0.0000	2,288.8877	2,288.8877	0.4646		2,300.5014
Total	**1.2244**	**5.5725**	**15.7460**	**0.0250**		**0.2871**	**0.2871**		**0.2871**	**0.2871**	**0.0000**	**2,288.8877**	**2,288.8877**	**0.4646**		**2,300.5014**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0640	1.9147	0.5017	4.6700e-003	0.1152	9.0100e-003	0.1243	0.0332	8.6200e-003	0.0418		498.6445	498.6445	0.0304		499.4052
Worker	0.1749	0.1244	1.6638	4.4900e-003	0.4248	3.5500e-003	0.4283	0.1127	3.2700e-003	0.1159		446.9229	446.9229	0.0141		447.2752
Total	**0.2389**	**2.0391**	**2.1655**	**9.1600e-003**	**0.5400**	**0.0126**	**0.5526**	**0.1458**	**0.0119**	**0.1577**		**945.5673**	**945.5673**	**0.0445**		**946.6803**

3.6 NR - Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1547	11.5873	11.8076	0.0178		0.6565	0.6565		0.6051	0.6051		1,709.2180	1,709.2180	0.5417		1,722.7605
Paving	0.2306					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.3852**	**11.5873**	**11.8076**	**0.0178**		**0.6565**	**0.6565**		**0.6051**	**0.6051**		**1,709.2180**	**1,709.2180**	**0.5417**		**1,722.7605**

Unmitigated Construction Off-Site

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

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0690	0.0491	0.6568	1.7700e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		176.4169	176.4169	5.5600e-003		176.5560
Total	**0.0690**	**0.0491**	**0.6568**	**1.7700e-003**	**0.1677**	**1.4000e-003**	**0.1691**	**0.0445**	**1.2900e-003**	**0.0458**		**176.4169**	**176.4169**	**5.5600e-003**		**176.5560**

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	0.2104	0.9117	12.9737	0.0178		0.0281	0.0281		0.0281	0.0281	0.0000	1,709.2180	1,709.2180	0.5417		1,722.7605
Paving	0.2306					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.4409**	**0.9117**	**12.9737**	**0.0178**		**0.0281**	**0.0281**		**0.0281**	**0.0281**	**0.0000**	**1,709.2180**	**1,709.2180**	**0.5417**		**1,722.7605**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0690	0.0491	0.6568	1.7700e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		176.4169	176.4169	5.5600e-003		176.5560
Total	**0.0690**	**0.0491**	**0.6568**	**1.7700e-003**	**0.1677**	**1.4000e-003**	**0.1691**	**0.0445**	**1.2900e-003**	**0.0458**		**176.4169**	**176.4169**	**5.5600e-003**		**176.5560**

3.7 NR - Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	65.3442					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
Total	**65.5864**	**1.6838**	**1.8314**	**2.9700e-003**		**0.1109**	**0.1109**		**0.1109**	**0.1109**		**281.4481**	**281.4481**	**0.0218**		**281.9928**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0368	0.0262	0.3503	9.4000e-004	0.0894	7.5000e-004	0.0902	0.0237	6.9000e-004	0.0244		94.0890	94.0890	2.9700e-003		94.1632
Total	**0.0368**	**0.0262**	**0.3503**	**9.4000e-004**	**0.0894**	**7.5000e-004**	**0.0902**	**0.0237**	**6.9000e-004**	**0.0244**		**94.0890**	**94.0890**	**2.9700e-003**		**94.1632**

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	65.3442					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0218		281.9928
Total	**65.3739**	**0.1288**	**1.8324**	**2.9700e-003**		**3.9600e-003**	**3.9600e-003**		**3.9600e-003**	**3.9600e-003**	**0.0000**	**281.4481**	**281.4481**	**0.0218**		**281.9928**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0368	0.0262	0.3503	9.4000e-004	0.0894	7.5000e-004	0.0902	0.0237	6.9000e-004	0.0244		94.0890	94.0890	2.9700e-003		94.1632
Total	**0.0368**	**0.0262**	**0.3503**	**9.4000e-004**	**0.0894**	**7.5000e-004**	**0.0902**	**0.0237**	**6.9000e-004**	**0.0244**		**94.0890**	**94.0890**	**2.9700e-003**		**94.1632**

4.0 Operational Detail - Mobile

Operational Emissions Modeled Separately

Air Quality

5. CalEEMod Output

b. Operational

1. Existing

Diamond Bar GPU - Existing Operational

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	13,252.00	Dwelling Unit	4,302.60	23,853,600.00	37901
Apartments Mid Rise	5,661.00	Dwelling Unit	148.97	5,661,000.00	16190
General Office Building	3,924.96	1000sqft	90.10	3,924,960.00	0
Strip Mall	586.66	1000sqft	13.47	586,660.00	0
General Light Industry	1,052.87	1000sqft	24.17	1,052,870.00	0
City Park	133.00	Acre	133.00	5,793,480.00	0
Golf Course	168.33	Acre	168.33	7,332,454.80	0
Health Club	7.34	1000sqft	17.65	7,340.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2016
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	643.73	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Assumptions

Land Use - See Assumptions

Construction Phase - No Construction

Off-road Equipment - No construction

Trips and VMT - No construction

Architectural Coating - No Construction

Vehicle Trips - Emissions Modeled Outside of CalEEMod

Woodstoves - See Assumptions

Energy Use - Modeled Outside of CalEEMod

Water And Wastewater - See Assumptions

Solid Waste - See Assumptions

Operational Off-Road Equipment - Modeled Outside of CalEEMod

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	2,785,915.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	8,357,745.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Exterior	19,922,355.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Interior	59,767,065.00	0.00
tblConstructionPhase	NumDays	11,000.00	1.00
tblConstructionPhase	PhaseEndDate	2/28/2057	1/1/2015
tblEnergyUse	LightingElect	741.44	0.00
tblEnergyUse	LightingElect	3.10	0.00
tblEnergyUse	LightingElect	3.77	0.00
tblEnergyUse	LightingElect	3.10	0.00
tblEnergyUse	LightingElect	1,608.84	0.00
tblEnergyUse	LightingElect	6.26	0.00
tblEnergyUse	NT24E	3,054.10	0.00
tblEnergyUse	NT24E	5.75	0.00
tblEnergyUse	NT24E	4.62	0.00
tblEnergyUse	NT24E	5.75	0.00
tblEnergyUse	NT24E	6,155.97	0.00
tblEnergyUse	NT24E	3.23	0.00
tblEnergyUse	NT24NG	6,384.00	0.00

tblEnergyUse	NT24NG	4.45	0.00
tblEnergyUse	NT24NG	0.39	0.00
tblEnergyUse	NT24NG	4.45	0.00
tblEnergyUse	NT24NG	6,384.00	0.00
tblEnergyUse	NT24NG	0.49	0.00
tblEnergyUse	T24E	252.63	0.00
tblEnergyUse	T24E	2.25	0.00
tblEnergyUse	T24E	4.60	0.00
tblEnergyUse	T24E	2.25	0.00
tblEnergyUse	T24E	443.48	0.00
tblEnergyUse	T24E	4.01	0.00
tblEnergyUse	T24NG	7,012.17	0.00
tblEnergyUse	T24NG	13.65	0.00
tblEnergyUse	T24NG	10.02	0.00
tblEnergyUse	T24NG	13.65	0.00
tblEnergyUse	T24NG	21,090.59	0.00
tblEnergyUse	T24NG	1.15	0.00
tblFireplaces	NumberGas	4,811.85	0.00
tblFireplaces	NumberNoFireplace	566.10	5,661.00
tblFireplaces	NumberNoFireplace	1,325.20	7,951.50
tblFireplaces	NumberWood	283.05	0.00
tblFireplaces	NumberWood	662.60	0.00
tblLandUse	LotAcreage	0.17	17.65
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	643.73
tblSolidWaste	SolidWasteGenerationRate	2,604.06	0.00
tblSolidWaste	SolidWasteGenerationRate	11.44	0.00
tblSolidWaste	SolidWasteGenerationRate	1,305.56	0.00
tblSolidWaste	SolidWasteGenerationRate	3,650.21	0.00
tblSolidWaste	SolidWasteGenerationRate	156.55	0.00

tblSolidWaste	SolidWasteGenerationRate	41.84	0.00
tblSolidWaste	SolidWasteGenerationRate	15,539.41	0.00
tblSolidWaste	SolidWasteGenerationRate	615.99	0.00
tblTripsAndVMT	WorkerTripNumber	3,250.00	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
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tblVehicleTrips	CNW_TL	6.90	0.00
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tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00

tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
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tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	CW_TTP	16.90	0.00
tblVehicleTrips	CW_TTP	16.60	0.00
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tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	DV_TP	19.00	0.00
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tblVehicleTrips	HO_TTP	40.60	0.00
tblVehicleTrips	HO_TTP	40.60	0.00
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tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	2.46
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	2.46
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	2.46
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	2.46
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	2.46

tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	2.46
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tblWater	OutdoorWaterUseRate	26,633,945.92	0.00
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tblWoodstoves	NumberCatalytic	283.05	0.00
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tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**						

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					
2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**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**

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	831.8856	205.3697	1,662.2159	1.2751		23.6445	23.6445		23.6445	23.6445						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Total	**831.8856**	**205.3697**	**1,662.2159**	**1.2751**	**0.0000**	**23.6445**	**23.6445**	**0.0000**	**23.6445**	**23.6445**						

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	831.8856	205.3697	1,662.2159	1.2751		23.6445	23.6445		23.6445	23.6445						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Total	**831.8856**	**205.3697**	**1,662.2159**	**1.2751**	**0.0000**	**23.6445**	**23.6445**	**0.0000**	**23.6445**	**23.6445**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**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

No Construction

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	0.00	0.00	0.00		
City Park	0.00	0.00	0.00		
General Light Industry	0.00	0.00	0.00		
General Office Building	0.00	0.00	0.00		
Golf Course	0.00	0.00	0.00		
Health Club	0.00	0.00	0.00		
Single Family Housing	0.00	0.00	0.00		
Strip Mall	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
General Light Industry	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Golf Course	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Health Club	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Single Family Housing	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Strip Mall	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.546581	0.047315	0.196959	0.128768	0.019038	0.005774	0.017712	0.026513	0.002264	0.002897	0.004538	0.000646	0.000994
City Park	0.546581	0.047315	0.196959	0.128768	0.019038	0.005774	0.017712	0.026513	0.002264	0.002897	0.004538	0.000646	0.000994
General Light Industry	0.546581	0.047315	0.196959	0.128768	0.019038	0.005774	0.017712	0.026513	0.002264	0.002897	0.004538	0.000646	0.000994
General Office Building	0.546581	0.047315	0.196959	0.128768	0.019038	0.005774	0.017712	0.026513	0.002264	0.002897	0.004538	0.000646	0.000994
Golf Course	0.546581	0.047315	0.196959	0.128768	0.019038	0.005774	0.017712	0.026513	0.002264	0.002897	0.004538	0.000646	0.000994
Health Club	0.546581	0.047315	0.196959	0.128768	0.019038	0.005774	0.017712	0.026513	0.002264	0.002897	0.004538	0.000646	0.000994
Single Family Housing	0.546581	0.047315	0.196959	0.128768	0.019038	0.005774	0.017712	0.026513	0.002264	0.002897	0.004538	0.000646	0.000994
Strip Mall	0.546581	0.047315	0.196959	0.128768	0.019038	0.005774	0.017712	0.026513	0.002264	0.002897	0.004538	0.000646	0.000994

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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

Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
General Office Building	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Golf Course	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Health Club	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Single Family Housing	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Strip Mall	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
General Office Building	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Golf Course	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Health Club	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Single Family Housing	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Strip Mall	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	831.8856	205.3697	1,662.2159	1.2751		23.6445	23.6445		23.6445	23.6445						
Unmitigated	831.8856	205.3697	1,662.2159	1.2751		23.6445	23.6445		23.6445	23.6445						

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	64.7483					0.0000	0.0000		0.0000	0.0000						
Consumer Products	695.3876					0.0000	0.0000		0.0000	0.0000						
Hearth	21.8658	186.8532	79.5120	1.1927		15.1073	15.1073		15.1073	15.1073						
Landscaping	49.8840	18.5165	1,582.7039	0.0824		8.5373	8.5373		8.5373	8.5373						
Total	**831.8856**	**205.3697**	**1,662.2159**	**1.2751**		**23.6445**	**23.6445**		**23.6445**	**23.6445**						

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	64.7483					0.0000	0.0000		0.0000	0.0000						
Consumer Products	695.3876					0.0000	0.0000		0.0000	0.0000						
Hearth	21.8658	186.8532	79.5120	1.1927		15.1073	15.1073		15.1073	15.1073						
Landscaping	49.8840	18.5165	1,582.7039	0.0824		8.5373	8.5373		8.5373	8.5373						
Total	**831.8856**	**205.3697**	**1,662.2159**	**1.2751**		**23.6445**	**23.6445**		**23.6445**	**23.6445**						

7.0 Water Detail

7.1 Mitigation Measures Water

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

Diamond Bar GPU - Existing Operational

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	13,252.00	Dwelling Unit	4,302.60	23,853,600.00	37901
Apartments Mid Rise	5,661.00	Dwelling Unit	148.97	5,661,000.00	16190
General Office Building	3,924.96	1000sqft	90.10	3,924,960.00	0
Strip Mall	586.66	1000sqft	13.47	586,660.00	0
General Light Industry	1,052.87	1000sqft	24.17	1,052,870.00	0
City Park	133.00	Acre	133.00	5,793,480.00	0
Golf Course	168.33	Acre	168.33	7,332,454.80	0
Health Club	7.34	1000sqft	17.65	7,340.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2016
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	643.73	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Assumptions

Land Use - See Assumptions

Construction Phase - No Construction

Off-road Equipment - No construction

Trips and VMT - No construction

Architectural Coating - No Construction

Vehicle Trips - Emissions Modeled Outside of CalEEMod

Woodstoves - See Assumptions

Energy Use - Modeled Outside of CalEEMod

Water And Wastewater - See Assumptions

Solid Waste - See Assumptions

Operational Off-Road Equipment - Modeled Outside of CalEEMod

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	2,785,915.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	8,357,745.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Exterior	19,922,355.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Interior	59,767,065.00	0.00
tblConstructionPhase	NumDays	11,000.00	1.00
tblConstructionPhase	PhaseEndDate	2/28/2057	1/1/2015
tblEnergyUse	LightingElect	741.44	0.00
tblEnergyUse	LightingElect	3.10	0.00
tblEnergyUse	LightingElect	3.77	0.00
tblEnergyUse	LightingElect	3.10	0.00
tblEnergyUse	LightingElect	1,608.84	0.00
tblEnergyUse	LightingElect	6.26	0.00
tblEnergyUse	NT24E	3,054.10	0.00
tblEnergyUse	NT24E	5.75	0.00
tblEnergyUse	NT24E	4.62	0.00
tblEnergyUse	NT24E	5.75	0.00
tblEnergyUse	NT24E	6,155.97	0.00
tblEnergyUse	NT24E	3.23	0.00
tblEnergyUse	NT24NG	6,384.00	0.00

tblEnergyUse	NT24NG	4.45	0.00
tblEnergyUse	NT24NG	0.39	0.00
tblEnergyUse	NT24NG	4.45	0.00
tblEnergyUse	NT24NG	6,384.00	0.00
tblEnergyUse	NT24NG	0.49	0.00
tblEnergyUse	T24E	252.63	0.00
tblEnergyUse	T24E	2.25	0.00
tblEnergyUse	T24E	4.60	0.00
tblEnergyUse	T24E	2.25	0.00
tblEnergyUse	T24E	443.48	0.00
tblEnergyUse	T24E	4.01	0.00
tblEnergyUse	T24NG	7,012.17	0.00
tblEnergyUse	T24NG	13.65	0.00
tblEnergyUse	T24NG	10.02	0.00
tblEnergyUse	T24NG	13.65	0.00
tblEnergyUse	T24NG	21,090.59	0.00
tblEnergyUse	T24NG	1.15	0.00
tblFireplaces	NumberGas	4,811.85	0.00
tblFireplaces	NumberNoFireplace	566.10	5,661.00
tblFireplaces	NumberNoFireplace	1,325.20	7,951.50
tblFireplaces	NumberWood	283.05	0.00
tblFireplaces	NumberWood	662.60	0.00
tblLandUse	LotAcreage	0.17	17.65
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	643.73
tblSolidWaste	SolidWasteGenerationRate	2,604.06	0.00
tblSolidWaste	SolidWasteGenerationRate	11.44	0.00
tblSolidWaste	SolidWasteGenerationRate	1,305.56	0.00
tblSolidWaste	SolidWasteGenerationRate	3,650.21	0.00
tblSolidWaste	SolidWasteGenerationRate	156.55	0.00

tblSolidWaste	SolidWasteGenerationRate	41.84	0.00
tblSolidWaste	SolidWasteGenerationRate	15,539.41	0.00
tblSolidWaste	SolidWasteGenerationRate	615.99	0.00
tblTripsAndVMT	WorkerTripNumber	3,250.00	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TTP	48.00	0.00
tblVehicleTrips	CC_TTP	28.00	0.00
tblVehicleTrips	CC_TTP	48.00	0.00
tblVehicleTrips	CC_TTP	48.00	0.00
tblVehicleTrips	CC_TTP	64.10	0.00
tblVehicleTrips	CC_TTP	64.40	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CNW_TTP	13.00	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00

tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	CW_TTP	16.90	0.00
tblVehicleTrips	CW_TTP	16.60	0.00
tblVehicleTrips	DV_TP	11.00	0.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	DV_TP	19.00	0.00
tblVehicleTrips	DV_TP	39.00	0.00
tblVehicleTrips	DV_TP	39.00	0.00
tblVehicleTrips	DV_TP	11.00	0.00
tblVehicleTrips	DV_TP	40.00	0.00
tblVehicleTrips	HO_TL	8.70	0.00
tblVehicleTrips	HO_TL	8.70	0.00
tblVehicleTrips	HO_TTP	40.60	0.00
tblVehicleTrips	HO_TTP	40.60	0.00
tblVehicleTrips	HS_TL	5.90	0.00
tblVehicleTrips	HS_TL	5.90	0.00
tblVehicleTrips	HS_TTP	19.20	0.00
tblVehicleTrips	HS_TTP	19.20	0.00
tblVehicleTrips	HW_TL	14.70	0.00
tblVehicleTrips	HW_TL	14.70	0.00
tblVehicleTrips	HW_TTP	40.20	0.00
tblVehicleTrips	HW_TTP	40.20	0.00

tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PB_TP	9.00	0.00
tblVehicleTrips	PB_TP	9.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	15.00	0.00
tblVehicleTrips	PR_TP	86.00	0.00
tblVehicleTrips	PR_TP	66.00	0.00
tblVehicleTrips	PR_TP	92.00	0.00
tblVehicleTrips	PR_TP	77.00	0.00
tblVehicleTrips	PR_TP	52.00	0.00
tblVehicleTrips	PR_TP	52.00	0.00
tblVehicleTrips	PR_TP	86.00	0.00
tblVehicleTrips	PR_TP	45.00	0.00
tblWater	AerobicPercent	87.46	97.54
tblWater	AerobicPercent	87.46	97.54
tblWater	AerobicPercent	87.46	97.54
tblWater	AerobicPercent	87.46	97.54
tblWater	AerobicPercent	87.46	97.54
tblWater	AerobicPercent	87.46	97.54
tblWater	AerobicPercent	87.46	97.54
tblWater	AerobicPercent	87.46	97.54
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	2.46
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	2.46
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	2.46
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	2.46
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	2.46
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	2.46

tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	2.46
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	2.46
tblWater	IndoorWaterUseRate	368,836,939.04	0.00
tblWater	IndoorWaterUseRate	243,476,187.50	0.00
tblWater	IndoorWaterUseRate	697,597,851.52	0.00
tblWater	IndoorWaterUseRate	434,110.68	0.00
tblWater	IndoorWaterUseRate	863,421,147.54	0.00
tblWater	IndoorWaterUseRate	43,455,385.45	0.00
tblWater	OutdoorWaterUseRate	232,527,635.48	0.00
tblWater	OutdoorWaterUseRate	158,467,019.50	0.00
tblWater	OutdoorWaterUseRate	427,559,973.52	0.00
tblWater	OutdoorWaterUseRate	200,562,055.59	0.00
tblWater	OutdoorWaterUseRate	266,067.83	0.00
tblWater	OutdoorWaterUseRate	544,330,723.45	0.00
tblWater	OutdoorWaterUseRate	26,633,945.92	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWoodstoves	NumberCatalytic	283.05	0.00
tblWoodstoves	NumberCatalytic	662.60	0.00
tblWoodstoves	NumberNoncatalytic	283.05	0.00
tblWoodstoves	NumberNoncatalytic	662.60	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**						

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					
2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**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**

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	831.8856	205.3697	1,662.2159	1.2751		23.6445	23.6445		23.6445	23.6445						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Total	**831.8856**	**205.3697**	**1,662.2159**	**1.2751**	**0.0000**	**23.6445**	**23.6445**	**0.0000**	**23.6445**	**23.6445**						

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	831.8856	205.3697	1,662.2159	1.2751		23.6445	23.6445		23.6445	23.6445						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Total	**831.8856**	**205.3697**	**1,662.2159**	**1.2751**	**0.0000**	**23.6445**	**23.6445**	**0.0000**	**23.6445**	**23.6445**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**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

No Construction

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	0.00	0.00	0.00		
City Park	0.00	0.00	0.00		
General Light Industry	0.00	0.00	0.00		
General Office Building	0.00	0.00	0.00		
Golf Course	0.00	0.00	0.00		
Health Club	0.00	0.00	0.00		
Single Family Housing	0.00	0.00	0.00		
Strip Mall	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
General Light Industry	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Golf Course	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Health Club	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Single Family Housing	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Strip Mall	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.546581	0.047315	0.196959	0.128768	0.019038	0.005774	0.017712	0.026513	0.002264	0.002897	0.004538	0.000646	0.000994
City Park	0.546581	0.047315	0.196959	0.128768	0.019038	0.005774	0.017712	0.026513	0.002264	0.002897	0.004538	0.000646	0.000994
General Light Industry	0.546581	0.047315	0.196959	0.128768	0.019038	0.005774	0.017712	0.026513	0.002264	0.002897	0.004538	0.000646	0.000994
General Office Building	0.546581	0.047315	0.196959	0.128768	0.019038	0.005774	0.017712	0.026513	0.002264	0.002897	0.004538	0.000646	0.000994
Golf Course	0.546581	0.047315	0.196959	0.128768	0.019038	0.005774	0.017712	0.026513	0.002264	0.002897	0.004538	0.000646	0.000994
Health Club	0.546581	0.047315	0.196959	0.128768	0.019038	0.005774	0.017712	0.026513	0.002264	0.002897	0.004538	0.000646	0.000994
Single Family Housing	0.546581	0.047315	0.196959	0.128768	0.019038	0.005774	0.017712	0.026513	0.002264	0.002897	0.004538	0.000646	0.000994
Strip Mall	0.546581	0.047315	0.196959	0.128768	0.019038	0.005774	0.017712	0.026513	0.002264	0.002897	0.004538	0.000646	0.000994

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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

Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
General Office Building	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Golf Course	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Health Club	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Single Family Housing	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Strip Mall	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
General Office Building	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Golf Course	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Health Club	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Single Family Housing	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Strip Mall	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	831.8856	205.3697	1,662.2159	1.2751		23.6445	23.6445		23.6445	23.6445						
Unmitigated	831.8856	205.3697	1,662.2159	1.2751		23.6445	23.6445		23.6445	23.6445						

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	64.7483					0.0000	0.0000		0.0000	0.0000						
Consumer Products	695.3876					0.0000	0.0000		0.0000	0.0000						
Hearth	21.8658	186.8532	79.5120	1.1927		15.1073	15.1073		15.1073	15.1073						
Landscaping	49.8840	18.5165	1,582.7039	0.0824		8.5373	8.5373		8.5373	8.5373						
Total	**831.8856**	**205.3697**	**1,662.2159**	**1.2751**		**23.6445**	**23.6445**		**23.6445**	**23.6445**						

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	64.7483					0.0000	0.0000		0.0000	0.0000						
Consumer Products	695.3876					0.0000	0.0000		0.0000	0.0000						
Hearth	21.8658	186.8532	79.5120	1.1927		15.1073	15.1073		15.1073	15.1073						
Landscaping	49.8840	18.5165	1,582.7039	0.0824		8.5373	8.5373		8.5373	8.5373						
Total	**831.8856**	**205.3697**	**1,662.2159**	**1.2751**		**23.6445**	**23.6445**		**23.6445**	**23.6445**						

7.0 Water Detail

7.1 Mitigation Measures Water

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

Diamond Bar GPU - Existing Operational

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

USED TO DETERMINE NUMBER OF TRIPS ONLY

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	3,924.96	1000sqft	90.10	3,924,960.00	0
General Light Industry	1,052.87	1000sqft	24.17	1,052,870.00	0
City Park	133.00	Acre	133.00	5,793,480.00	0
Golf Course	168.33	Acre	168.33	7,332,454.80	0
Health Club	7.34	1000sqft	17.65	7,340.00	0
Apartments Mid Rise	5,661.00	Dwelling Unit	148.97	5,661,000.00	16190
Single Family Housing	13,252.00	Dwelling Unit	4,302.60	23,853,600.00	37901
Strip Mall	586.66	1000sqft	13.47	586,660.00	0

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	37,645.65	36,173.79	33173.46	125,739,231	125,739,231
City Park	251.37	3,025.75	2226.42	2,675,709	2,675,709
General Light Industry	7,338.50	1,389.79	715.95	24,544,208	24,544,208
General Office Building	43,292.31	9,655.40	4121.21	105,957,604	105,957,604
Golf Course	848.38	979.68	989.78	2,161,126	2,161,126
Health Club	241.71	153.19	196.20	476,003	476,003
Single Family Housing	126,159.04	131,327.32	114232.24	427,805,336	427,805,336
Strip Mall	26,000.77	24,663.19	11985.46	45,296,038	45,296,038
Total	241,777.73	207,368.10	167,640.72	734,655,256	734,655,256

Air Quality

5. CalEEMod Output

b. Operational

2. 2040 Buildout

Diamond Bar GPU - 2040 Buildout Emissions

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	13,394.00	Dwelling Unit	4,348.70	24,109,200.00	38307
Apartments Mid Rise	9,273.00	Dwelling Unit	244.03	9,273,000.00	26521
General Office Building	5,138.26	1000sqft	117.96	5,138,260.00	0
Strip Mall	1,193.94	1000sqft	27.41	1,193,940.00	0
General Light Industry	849.87	1000sqft	19.51	849,870.00	0
City Park	134.00	Acre	134.00	5,837,040.00	0
Golf Course	118.00	Acre	118.00	5,140,080.00	0
Health Club	7.34	1000sqft	15.00	7,340.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2040
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	421.2	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Assumptions

Land Use - See Assumptions

Construction Phase - Construction modeled separately

Off-road Equipment - See Assumptions

Trips and VMT - See Assumptions

Architectural Coating - See Assumptions

Vehicle Trips - See Assumptions

Woodstoves - See Assumptions

Energy Use - See Assumptions

Water And Wastewater - See Assumptions

Solid Waste - See Assumptions

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	3,594,721.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	10,784,163.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Exterior	22,532,985.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Interior	67,598,955.00	0.00
tblConstructionPhase	NumDays	11,000.00	1.00
tblConstructionPhase	PhaseEndDate	2/28/2081	1/3/2039
tblEnergyUse	LightingElect	741.44	0.00
tblEnergyUse	LightingElect	3.10	0.00
tblEnergyUse	LightingElect	3.77	0.00
tblEnergyUse	LightingElect	3.10	0.00
tblEnergyUse	LightingElect	1,608.84	0.00
tblEnergyUse	LightingElect	6.26	0.00
tblEnergyUse	NT24E	3,054.10	0.00
tblEnergyUse	NT24E	5.75	0.00
tblEnergyUse	NT24E	4.62	0.00
tblEnergyUse	NT24E	5.75	0.00
tblEnergyUse	NT24E	6,155.97	0.00
tblEnergyUse	NT24E	3.23	0.00
tblEnergyUse	NT24NG	6,384.00	0.00
tblEnergyUse	NT24NG	4.45	0.00

tblEnergyUse	NT24NG	0.39	0.00
tblEnergyUse	NT24NG	4.45	0.00
tblEnergyUse	NT24NG	6,384.00	0.00
tblEnergyUse	NT24NG	0.49	0.00
tblEnergyUse	T24E	252.63	0.00
tblEnergyUse	T24E	2.25	0.00
tblEnergyUse	T24E	4.60	0.00
tblEnergyUse	T24E	2.25	0.00
tblEnergyUse	T24E	443.48	0.00
tblEnergyUse	T24E	4.01	0.00
tblEnergyUse	T24NG	7,012.17	0.00
tblEnergyUse	T24NG	13.65	0.00
tblEnergyUse	T24NG	10.02	0.00
tblEnergyUse	T24NG	13.65	0.00
tblEnergyUse	T24NG	21,090.59	0.00
tblEnergyUse	T24NG	1.15	0.00
tblFireplaces	NumberGas	7,882.05	0.00
tblFireplaces	NumberNoFireplace	927.30	0.00
tblFireplaces	NumberNoFireplace	1,339.40	2,009.10
tblFireplaces	NumberWood	463.65	0.00
tblFireplaces	NumberWood	669.70	0.00
tblLandUse	LotAcreage	0.17	15.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	421.2
tblSolidWaste	SolidWasteGenerationRate	4,265.58	0.00
tblSolidWaste	SolidWasteGenerationRate	11.52	0.00
tblSolidWaste	SolidWasteGenerationRate	1,053.84	0.00
tblSolidWaste	SolidWasteGenerationRate	4,778.58	0.00
tblSolidWaste	SolidWasteGenerationRate	109.74	0.00
tblSolidWaste	SolidWasteGenerationRate	41.84	0.00

tblSolidWaste	SolidWasteGenerationRate	15,705.87	0.00
tblSolidWaste	SolidWasteGenerationRate	1,253.64	0.00
tblTripsAndVMT	WorkerTripNumber	3,699.00	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TTP	48.00	0.00
tblVehicleTrips	CC_TTP	28.00	0.00
tblVehicleTrips	CC_TTP	48.00	0.00
tblVehicleTrips	CC_TTP	48.00	0.00
tblVehicleTrips	CC_TTP	64.10	0.00
tblVehicleTrips	CC_TTP	64.40	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CNW_TTP	13.00	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00

tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	CW_TTP	16.90	0.00
tblVehicleTrips	CW_TTP	16.60	0.00
tblVehicleTrips	DV_TP	11.00	0.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	DV_TP	19.00	0.00
tblVehicleTrips	DV_TP	39.00	0.00
tblVehicleTrips	DV_TP	39.00	0.00
tblVehicleTrips	DV_TP	11.00	0.00
tblVehicleTrips	DV_TP	40.00	0.00
tblVehicleTrips	HO_TL	8.70	0.00
tblVehicleTrips	HO_TL	8.70	0.00
tblVehicleTrips	HO_TTP	40.60	0.00
tblVehicleTrips	HO_TTP	40.60	0.00
tblVehicleTrips	HS_TL	5.90	0.00
tblVehicleTrips	HS_TL	5.90	0.00
tblVehicleTrips	HS_TTP	19.20	0.00
tblVehicleTrips	HS_TTP	19.20	0.00
tblVehicleTrips	HW_TL	14.70	0.00
tblVehicleTrips	HW_TL	14.70	0.00
tblVehicleTrips	HW_TTP	40.20	0.00
tblVehicleTrips	HW_TTP	40.20	0.00
tblVehicleTrips	PB_TP	3.00	0.00

tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PB_TP	9.00	0.00
tblVehicleTrips	PB_TP	9.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	15.00	0.00
tblVehicleTrips	PR_TP	86.00	0.00
tblVehicleTrips	PR_TP	66.00	0.00
tblVehicleTrips	PR_TP	92.00	0.00
tblVehicleTrips	PR_TP	77.00	0.00
tblVehicleTrips	PR_TP	52.00	0.00
tblVehicleTrips	PR_TP	52.00	0.00
tblVehicleTrips	PR_TP	86.00	0.00
tblVehicleTrips	PR_TP	45.00	0.00
tblWater	IndoorWaterUseRate	604,173,279.59	0.00
tblWater	IndoorWaterUseRate	196,532,437.50	0.00
tblWater	IndoorWaterUseRate	913,242,207.97	0.00
tblWater	IndoorWaterUseRate	434,110.68	0.00
tblWater	IndoorWaterUseRate	872,673,019.17	0.00
tblWater	IndoorWaterUseRate	88,438,146.30	0.00
tblWater	OutdoorWaterUseRate	380,891,850.17	0.00
tblWater	OutdoorWaterUseRate	159,658,500.85	0.00
tblWater	OutdoorWaterUseRate	559,729,095.20	0.00
tblWater	OutdoorWaterUseRate	140,594,799.26	0.00
tblWater	OutdoorWaterUseRate	266,067.83	0.00
tblWater	OutdoorWaterUseRate	550,163,425.13	0.00
tblWater	OutdoorWaterUseRate	54,204,025.15	0.00
tblWoodstoves	NumberCatalytic	669.70	0.00
tblWoodstoves	NumberNoncatalytic	463.65	0.00

tblWoodstoves	NumberNoncatalytic	669.70	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2039	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**						

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					
2039	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**						

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	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**

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	957.2262	210.3527	1,942.9601	1.3043		25.6423	25.6423		25.6423	25.6423						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Total	**957.2262**	**210.3527**	**1,942.9601**	**1.3043**	**0.0000**	**25.6423**	**25.6423**	**0.0000**	**25.6423**	**25.6423**						

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	957.2262	210.3527	1,942.9601	1.3043		25.6423	25.6423		25.6423	25.6423						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						

Total	**957.2262**	**210.3527**	**1,942.9601**	**1.3043**	**0.0000**	**25.6423**	**25.6423**	**0.0000**	**25.6423**	**25.6423**						

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	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 Modeled Separately

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	0.00	0.00	0.00		
City Park	0.00	0.00	0.00		
General Light Industry	0.00	0.00	0.00		
General Office Building	0.00	0.00	0.00		
Golf Course	0.00	0.00	0.00		
Health Club	0.00	0.00	0.00		

Single Family Housing	0.00	0.00	0.00		
Strip Mall	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
General Light Industry	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Golf Course	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Health Club	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Single Family Housing	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Strip Mall	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.537194	0.043713	0.210127	0.116181	0.013260	0.006460	0.022765	0.039037	0.002776	0.001599	0.005341	0.000737	0.000810
City Park	0.537194	0.043713	0.210127	0.116181	0.013260	0.006460	0.022765	0.039037	0.002776	0.001599	0.005341	0.000737	0.000810
General Light Industry	0.537194	0.043713	0.210127	0.116181	0.013260	0.006460	0.022765	0.039037	0.002776	0.001599	0.005341	0.000737	0.000810
General Office Building	0.537194	0.043713	0.210127	0.116181	0.013260	0.006460	0.022765	0.039037	0.002776	0.001599	0.005341	0.000737	0.000810
Golf Course	0.537194	0.043713	0.210127	0.116181	0.013260	0.006460	0.022765	0.039037	0.002776	0.001599	0.005341	0.000737	0.000810
Health Club	0.537194	0.043713	0.210127	0.116181	0.013260	0.006460	0.022765	0.039037	0.002776	0.001599	0.005341	0.000737	0.000810
Single Family Housing	0.537194	0.043713	0.210127	0.116181	0.013260	0.006460	0.022765	0.039037	0.002776	0.001599	0.005341	0.000737	0.000810
Strip Mall	0.537194	0.043713	0.210127	0.116181	0.013260	0.006460	0.022765	0.039037	0.002776	0.001599	0.005341	0.000737	0.000810

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
General Office Building	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Golf Course	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Health Club	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Single Family Housing	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Strip Mall	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
General Office Building	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Golf Course	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Health Club	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Single Family Housing	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Strip Mall	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

6.0 Area Detail

6.1 Mitigation Measures Area

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

Mitigated	957.2262	210.3527	1,942.9601	1.3043		25.6423	25.6423		25.6423	25.6423						
Unmitigated	957.2262	210.3527	1,942.9601	1.3043		25.6423	25.6423		25.6423	25.6423						

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	75.4868					0.0000	0.0000		0.0000	0.0000						
Consumer Products	803.8841					0.0000	0.0000		0.0000	0.0000						
Hearth	22.1001	188.8554	80.3640	1.2055		15.2692	15.2692		15.2692	15.2692						
Landscaping	55.7552	21.4973	1,862.5961	0.0988		10.3731	10.3731		10.3731	10.3731						
Total	**957.2262**	**210.3527**	**1,942.9601**	**1.3043**		**25.6423**	**25.6423**		**25.6423**	**25.6423**						

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	75.4868					0.0000	0.0000		0.0000	0.0000						
Consumer Products	803.8841					0.0000	0.0000		0.0000	0.0000						
Hearth	22.1001	188.8554	80.3640	1.2055		15.2692	15.2692		15.2692	15.2692						

Landscaping	55.7552	21.4973	1,862.5961	0.0988		10.3731	10.3731		10.3731	10.3731						
Total	**957.2262**	**210.3527**	**1,942.9601**	**1.3043**		**25.6423**	**25.6423**		**25.6423**	**25.6423**						

7.0 Water Detail

7.1 Mitigation Measures Water

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

Diamond Bar GPU - 2040 Buildout Emissions

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	13,394.00	Dwelling Unit	4,348.70	24,109,200.00	38307
Apartments Mid Rise	9,273.00	Dwelling Unit	244.03	9,273,000.00	26521
General Office Building	5,138.26	1000sqft	117.96	5,138,260.00	0
Strip Mall	1,193.94	1000sqft	27.41	1,193,940.00	0
General Light Industry	849.87	1000sqft	19.51	849,870.00	0
City Park	134.00	Acre	134.00	5,837,040.00	0
Golf Course	118.00	Acre	118.00	5,140,080.00	0
Health Club	7.34	1000sqft	15.00	7,340.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2040
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	421.2	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Assumptions

Land Use - See Assumptions

Construction Phase - Construction modeled separately

Off-road Equipment - See Assumptions

Trips and VMT - See Assumptions

Architectural Coating - See Assumptions

Vehicle Trips - See Assumptions

Woodstoves - See Assumptions

Energy Use - See Assumptions

Water And Wastewater - See Assumptions

Solid Waste - See Assumptions

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	3,594,721.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	10,784,163.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Exterior	22,532,985.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Interior	67,598,955.00	0.00
tblConstructionPhase	NumDays	11,000.00	1.00
tblConstructionPhase	PhaseEndDate	2/28/2081	1/3/2039
tblEnergyUse	LightingElect	741.44	0.00
tblEnergyUse	LightingElect	3.10	0.00
tblEnergyUse	LightingElect	3.77	0.00
tblEnergyUse	LightingElect	3.10	0.00
tblEnergyUse	LightingElect	1,608.84	0.00
tblEnergyUse	LightingElect	6.26	0.00
tblEnergyUse	NT24E	3,054.10	0.00
tblEnergyUse	NT24E	5.75	0.00
tblEnergyUse	NT24E	4.62	0.00
tblEnergyUse	NT24E	5.75	0.00
tblEnergyUse	NT24E	6,155.97	0.00
tblEnergyUse	NT24E	3.23	0.00
tblEnergyUse	NT24NG	6,384.00	0.00
tblEnergyUse	NT24NG	4.45	0.00

tblEnergyUse	NT24NG	0.39	0.00
tblEnergyUse	NT24NG	4.45	0.00
tblEnergyUse	NT24NG	6,384.00	0.00
tblEnergyUse	NT24NG	0.49	0.00
tblEnergyUse	T24E	252.63	0.00
tblEnergyUse	T24E	2.25	0.00
tblEnergyUse	T24E	4.60	0.00
tblEnergyUse	T24E	2.25	0.00
tblEnergyUse	T24E	443.48	0.00
tblEnergyUse	T24E	4.01	0.00
tblEnergyUse	T24NG	7,012.17	0.00
tblEnergyUse	T24NG	13.65	0.00
tblEnergyUse	T24NG	10.02	0.00
tblEnergyUse	T24NG	13.65	0.00
tblEnergyUse	T24NG	21,090.59	0.00
tblEnergyUse	T24NG	1.15	0.00
tblFireplaces	NumberGas	7,882.05	0.00
tblFireplaces	NumberNoFireplace	927.30	0.00
tblFireplaces	NumberNoFireplace	1,339.40	2,009.10
tblFireplaces	NumberWood	463.65	0.00
tblFireplaces	NumberWood	669.70	0.00
tblLandUse	LotAcreage	0.17	15.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	421.2
tblSolidWaste	SolidWasteGenerationRate	4,265.58	0.00
tblSolidWaste	SolidWasteGenerationRate	11.52	0.00
tblSolidWaste	SolidWasteGenerationRate	1,053.84	0.00
tblSolidWaste	SolidWasteGenerationRate	4,778.58	0.00
tblSolidWaste	SolidWasteGenerationRate	109.74	0.00
tblSolidWaste	SolidWasteGenerationRate	41.84	0.00

tblSolidWaste	SolidWasteGenerationRate	15,705.87	0.00
tblSolidWaste	SolidWasteGenerationRate	1,253.64	0.00
tblTripsAndVMT	WorkerTripNumber	3,699.00	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TTP	48.00	0.00
tblVehicleTrips	CC_TTP	28.00	0.00
tblVehicleTrips	CC_TTP	48.00	0.00
tblVehicleTrips	CC_TTP	48.00	0.00
tblVehicleTrips	CC_TTP	64.10	0.00
tblVehicleTrips	CC_TTP	64.40	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CNW_TTP	13.00	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00

tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
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tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	CW_TTP	16.90	0.00
tblVehicleTrips	CW_TTP	16.60	0.00
tblVehicleTrips	DV_TP	11.00	0.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	DV_TP	19.00	0.00
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tblVehicleTrips	DV_TP	39.00	0.00
tblVehicleTrips	DV_TP	11.00	0.00
tblVehicleTrips	DV_TP	40.00	0.00
tblVehicleTrips	HO_TL	8.70	0.00
tblVehicleTrips	HO_TL	8.70	0.00
tblVehicleTrips	HO_TTP	40.60	0.00
tblVehicleTrips	HO_TTP	40.60	0.00
tblVehicleTrips	HS_TL	5.90	0.00
tblVehicleTrips	HS_TL	5.90	0.00
tblVehicleTrips	HS_TTP	19.20	0.00
tblVehicleTrips	HS_TTP	19.20	0.00
tblVehicleTrips	HW_TL	14.70	0.00
tblVehicleTrips	HW_TL	14.70	0.00
tblVehicleTrips	HW_TTP	40.20	0.00
tblVehicleTrips	HW_TTP	40.20	0.00
tblVehicleTrips	PB_TP	3.00	0.00

tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PB_TP	9.00	0.00
tblVehicleTrips	PB_TP	9.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	15.00	0.00
tblVehicleTrips	PR_TP	86.00	0.00
tblVehicleTrips	PR_TP	66.00	0.00
tblVehicleTrips	PR_TP	92.00	0.00
tblVehicleTrips	PR_TP	77.00	0.00
tblVehicleTrips	PR_TP	52.00	0.00
tblVehicleTrips	PR_TP	52.00	0.00
tblVehicleTrips	PR_TP	86.00	0.00
tblVehicleTrips	PR_TP	45.00	0.00
tblWater	IndoorWaterUseRate	604,173,279.59	0.00
tblWater	IndoorWaterUseRate	196,532,437.50	0.00
tblWater	IndoorWaterUseRate	913,242,207.97	0.00
tblWater	IndoorWaterUseRate	434,110.68	0.00
tblWater	IndoorWaterUseRate	872,673,019.17	0.00
tblWater	IndoorWaterUseRate	88,438,146.30	0.00
tblWater	OutdoorWaterUseRate	380,891,850.17	0.00
tblWater	OutdoorWaterUseRate	159,658,500.85	0.00
tblWater	OutdoorWaterUseRate	559,729,095.20	0.00
tblWater	OutdoorWaterUseRate	140,594,799.26	0.00
tblWater	OutdoorWaterUseRate	266,067.83	0.00
tblWater	OutdoorWaterUseRate	550,163,425.13	0.00
tblWater	OutdoorWaterUseRate	54,204,025.15	0.00
tblWoodstoves	NumberCatalytic	669.70	0.00
tblWoodstoves	NumberNoncatalytic	463.65	0.00

tblWoodstoves	NumberNoncatalytic	669.70	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2039	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**						

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					
2039	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**						

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	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**

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	957.2262	210.3527	1,942.9601	1.3043		25.6423	25.6423		25.6423	25.6423						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Total	**957.2262**	**210.3527**	**1,942.9601**	**1.3043**	**0.0000**	**25.6423**	**25.6423**	**0.0000**	**25.6423**	**25.6423**						

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	957.2262	210.3527	1,942.9601	1.3043		25.6423	25.6423		25.6423	25.6423						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						

Total	957.2262	210.3527	1,942.9601	1.3043	0.0000	25.6423	25.6423	0.0000	25.6423	25.6423						

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	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 Modeled Separately

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	0.00	0.00	0.00		
City Park	0.00	0.00	0.00		
General Light Industry	0.00	0.00	0.00		
General Office Building	0.00	0.00	0.00		
Golf Course	0.00	0.00	0.00		
Health Club	0.00	0.00	0.00		
Single Family Housing	0.00	0.00	0.00		

Strip Mall	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
General Light Industry	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Golf Course	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Health Club	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Single Family Housing	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Strip Mall	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.537194	0.043713	0.210127	0.116181	0.013260	0.006460	0.022765	0.039037	0.002776	0.001599	0.005341	0.000737	0.000810
City Park	0.537194	0.043713	0.210127	0.116181	0.013260	0.006460	0.022765	0.039037	0.002776	0.001599	0.005341	0.000737	0.000810
General Light Industry	0.537194	0.043713	0.210127	0.116181	0.013260	0.006460	0.022765	0.039037	0.002776	0.001599	0.005341	0.000737	0.000810
General Office Building	0.537194	0.043713	0.210127	0.116181	0.013260	0.006460	0.022765	0.039037	0.002776	0.001599	0.005341	0.000737	0.000810
Golf Course	0.537194	0.043713	0.210127	0.116181	0.013260	0.006460	0.022765	0.039037	0.002776	0.001599	0.005341	0.000737	0.000810
Health Club	0.537194	0.043713	0.210127	0.116181	0.013260	0.006460	0.022765	0.039037	0.002776	0.001599	0.005341	0.000737	0.000810
Single Family Housing	0.537194	0.043713	0.210127	0.116181	0.013260	0.006460	0.022765	0.039037	0.002776	0.001599	0.005341	0.000737	0.000810
Strip Mall	0.537194	0.043713	0.210127	0.116181	0.013260	0.006460	0.022765	0.039037	0.002776	0.001599	0.005341	0.000737	0.000810

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
General Office Building	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Golf Course	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Health Club	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Single Family Housing	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Strip Mall	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
General Office Building	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Golf Course	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Health Club	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Single Family Housing	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Strip Mall	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

6.0 Area Detail

6.1 Mitigation Measures Area

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

Mitigated	957.2262	210.3527	1,942.9601	1.3043		25.6423	25.6423		25.6423	25.6423						
Unmitigated	957.2262	210.3527	1,942.9601	1.3043		25.6423	25.6423		25.6423	25.6423						

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	75.4868					0.0000	0.0000		0.0000	0.0000						
Consumer Products	803.8841					0.0000	0.0000		0.0000	0.0000						
Hearth	22.1001	188.8554	80.3640	1.2055		15.2692	15.2692		15.2692	15.2692						
Landscaping	55.7552	21.4973	1,862.5961	0.0988		10.3731	10.3731		10.3731	10.3731						
Total	**957.2262**	**210.3527**	**1,942.9601**	**1.3043**		**25.6423**	**25.6423**		**25.6423**	**25.6423**						

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	75.4868					0.0000	0.0000		0.0000	0.0000						
Consumer Products	803.8841					0.0000	0.0000		0.0000	0.0000						
Hearth	22.1001	188.8554	80.3640	1.2055		15.2692	15.2692		15.2692	15.2692						

Landscaping	55.7552	21.4973	1,862.5961	0.0988		10.3731	10.3731		10.3731	10.3731						
Total	**957.2262**	**210.3527**	**1,942.9601**	**1.3043**		**25.6423**	**25.6423**		**25.6423**	**25.6423**						

7.0 Water Detail

7.1 Mitigation Measures Water

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

Diamond Bar GPU - 2040 Buildout Emissions

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

USED TO DETERMINE NUMBER OF TRIPS ONLY

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	13,394.00	Dwelling Unit	4,348.70	24,109,200.00	38307
Apartments Mid Rise	9,273.00	Dwelling Unit	244.03	9,273,000.00	26521
General Office Building	5,138.26	1000sqft	117.96	5,138,260.00	0
Strip Mall	1,193.94	1000sqft	27.41	1,193,940.00	0
General Light Industry	849.87	1000sqft	19.51	849,870.00	0
City Park	134.00	Acre	134.00	5,837,040.00	0
Golf Course	118.00	Acre	118.00	5,140,080.00	0
Health Club	7.34	1000sqft	15.00	7,340.00	0

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	61,665.45	59,254.47	54339.78	205,842,505	205,842,505
City Park	253.26	3,048.50	2243.16	2,695,828	2,695,828
General Light Industry	5,923.59	1,121.83	577.91	19,811,930	19,811,930
General Office Building	56,675.01	12,640.12	5395.17	138,711,660	138,711,660
Golf Course	594.72	686.76	693.84	1,514,958	1,514,958
Health Club	241.71	153.19	196.20	476,003	476,003
Single Family Housing	127,510.88	132,734.54	115456.28	432,127,812	432,127,812
Strip Mall	52,915.42	50,193.24	24392.19	92,184,147	92,184,147
Total	305,780.04	259,832.64	203,294.54	893,364,842	893,364,842

Air Quality

6. EMFAC2017

a. Construction

2020 Total On-Road Emissions

Diamond Bar Construction

2020 Total On-Road Emissions

Construction Phase	Daily One-Way Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	One-Way Trip Distance per Day (miles)	Idling per Day (minutes)
Demolition					
Total Haul Trips	92				
Hauling	14	20	8	20	15
Vendor	0	20	8	6.9	15
Worker	13	20	8	14.7	0
NR - Site Prep					
Total Haul Trips	0				
Hauling	0	3	8	20	15
Vendor	0	3	8	6.9	15
Worker	8	3	8	14.7	0
NR - Grading					
Total Haul Trips	0				
Hauling	0	6	8	20	15
Vendor	0	6	8	6.9	15
Worker	10	6	8	14.7	0
NR - Building Construction					
Total Haul Trips	0				
Hauling	0	220	8	20	15
Vendor	18	220	8	6.9	15
Worker	38	220	8	14.7	0
NR - Paving					
Total Haul Trips	0				
Hauling	0	10	8	20	15
Vendor	15	10	8	6.9	15
Worker	0	10	8	14.7	0
NR - Architectural Coating					
Total Haul Trips	0				
Hauling	0	10	8	20	15
Vendor	0	10	8	6.9	15
Worker	8	10	8	14.7	0
SFR - Site Prep					
Total Haul Trips	0				
Hauling	0	10	8	20	15
Vendor	0	10	8	6.9	15
Worker	18	10	8	14.7	0
SFR - Grading					
Total Haul Trips	0				
Hauling	0	20	8	20	15
Vendor	0	20	8	6.9	15
Worker	15	20	8	14.7	0
SFR - Building Construction					
Total Haul Trips	0				
Hauling	0	230	8	20	15
Vendor	10	230	8	6.9	15
Worker	27	230	8	14.7	0

Diamond Bar Construction

2020 Total On-Road Emissions

Construction Phase	Daily One-Way Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	One-Way Trip Distance per Day (miles)	Idling per Day (minutes)
SFR - Paving					
Total Haul Trips	0				
Hauling	0	20	8	20	15
Vendor	0	20	8	6.9	15
Worker	15	20	8	14.7	0
SFR - Architectural Coating					
Total Haul Trips	0				
Hauling	0	20	8	20	15
Vendor	0	20	8	6.9	15
Worker	5	20	8	14.7	0
MFR - Site Prep					
Total Haul Trips	0				
Hauling	0	10	8	20	15
Vendor	0	10	8	6.9	15
Worker	18	10	8	14.7	0
MFR - Grading					
Total Haul Trips	0				
Hauling	0	30	8	20	15
Vendor	0	30	8	6.9	15
Worker	20	30	8	14.7	0
MFR - Building Construction					
Total Haul Trips	0				
Hauling	0	213	8	20	15
Vendor	64	213	8	6.9	15
Worker	333	213	8	14.7	0
MFR - Paving					
Total Haul Trips	0				
Hauling	0	20	8	20	15
Vendor	0	20	8	6.9	15
Worker	15	20	8	14.7	0
MFR - Architectural Coating					
Total Haul Trips	0				
Hauling	0	20	8	20	15
Vendor	0	20	8	6.9	15
Worker	67	20	8	14.7	0

Diamond Bar Construction

2020 Total On-Road Emissions

Construction Phase	Regional Emissions (pounds/day)										(MT/yr)
	ROG	NOX	CO	SO2	PM10 Dust	PM10 Exh	Total PM10	PM2.5 Dust	PM2.5 Exh	Total PM2.5	Total CO2e
Demolition											
Total Haul Trips											
Hauling	0.10	2.95	0.58	0.01	0.24	0.04	0.28	0.07	0.03	0.10	9.31
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.01	0.04	0.51	0.00	0.15	0.00	0.15	0.04	0.00	0.04	1.23
NR - Site Prep											
Total Haul Trips											
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.01	0.02	0.31	0.00	0.09	0.00	0.09	0.02	0.00	0.02	0.11
NR - Grading											
Total Haul Trips											
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.01	0.03	0.39	0.00	0.11	0.00	0.11	0.03	0.00	0.03	0.28
NR - Building Construction											
Total Haul Trips											
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.05	1.09	0.30	0.00	0.11	0.02	0.13	0.03	0.02	0.05	39.71
Worker	0.03	0.12	1.48	0.00	0.42	0.00	0.43	0.11	0.00	0.12	39.56
NR - Paving											
Total Haul Trips											
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.04	0.91	0.25	0.00	0.10	0.02	0.11	0.03	0.01	0.04	1.50
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NR - Architectural Coating											
Total Haul Trips											
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.01	0.02	0.31	0.00	0.09	0.00	0.09	0.02	0.00	0.02	0.38
SFR - Site Prep											
Total Haul Trips											
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.02	0.06	0.70	0.00	0.20	0.00	0.20	0.05	0.00	0.05	0.85
SFR - Grading											
Total Haul Trips											
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.01	0.05	0.59	0.00	0.17	0.00	0.17	0.04	0.00	0.05	1.42
SFR - Building Construction											
Total Haul Trips											
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.03	0.60	0.17	0.00	0.06	0.01	0.07	0.02	0.01	0.03	23.06
Worker	0.02	0.08	1.05	0.00	0.30	0.00	0.30	0.08	0.00	0.08	29.39

Diamond Bar Construction

2020 Total On-Road Emissions

Construction Phase	Regional Emissions (pounds/day)										(MT/yr)
	ROG	NOX	CO	SO2	PM10 Dust	PM10 Exh	Total PM10	PM2.5 Dust	PM2.5 Exh	Total PM2.5	Total CO2e
SFR - Paving											
Total Haul Trips											
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.01	0.05	0.59	0.00	0.17	0.00	0.17	0.04	0.00	0.05	1.42
SFR - Architectural Coating											
Total Haul Trips											
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.02	0.20	0.00	0.06	0.00	0.06	0.01	0.00	0.02	0.47
MFR - Site Prep											
Total Haul Trips											
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.02	0.06	0.70	0.00	0.20	0.00	0.20	0.05	0.00	0.05	0.85
MFR - Grading											
Total Haul Trips											
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.02	0.06	0.78	0.00	0.22	0.00	0.22	0.06	0.00	0.06	2.84
MFR - Building Construction											
Total Haul Trips											
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.17	3.87	1.06	0.01	0.41	0.07	0.47	0.12	0.06	0.18	136.68
Worker	0.29	1.04	13.00	0.03	3.72	0.03	3.74	0.99	0.02	1.01	335.64
MFR - Paving											
Total Haul Trips											
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.01	0.05	0.59	0.00	0.17	0.00	0.17	0.04	0.00	0.05	1.42
MFR - Architectural Coating											
Total Haul Trips											
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.06	0.21	2.62	0.01	0.75	0.01	0.75	0.20	0.00	0.20	6.34

2020 Running Emissions

Diamond Bar Construction
2020 Running Emissions

	Running Emissions Factor (grams/mile)					
	ROG	NOX	CO	SO2	PM10	PM2.5
Hauling	0.15227033	4.584609715	0.77352785	0.01421514	0.05991493	0.05074238
Vendor	0.15052095	3.661476833	0.82032612	0.01250546	0.0674547	0.06124278
Worker	0.02663624	0.096097887	1.20453196	0.00316067	0.002367	0.00217971
GWP	N/A	N/A	N/A	N/A	N/A	N/A

Construction Phase	Daily One-Way Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	One-Way Trip Distance per Day (miles)	Regional Emissions (pounds/day)					
					ROG	NOX	CO	SO2	PM10	PM2.5
Demolition										
Total Haul Trips	92									
Hauling	14	20	8	20	0.09	2.83	0.48	0.01	0.04	0.03
Vendor	0	20	8	6.9	0.00	0.00	0.00	0.00	0.00	0.00
Worker	13	20	8	14.7	0.01	0.04	0.51	0.00	0.00	0.00
NR - Site Prep										
Total Haul Trips	0									
Hauling	0	3	8	20	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0	3	8	6.9	0.00	0.00	0.00	0.00	0.00	0.00
Worker	8	3	8	14.7	0.01	0.02	0.31	0.00	0.00	0.00
NR - Grading										
Total Haul Trips	0									
Hauling	0	6	8	20	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0	6	8	6.9	0.00	0.00	0.00	0.00	0.00	0.00
Worker	10	6	8	14.7	0.01	0.03	0.39	0.00	0.00	0.00
NR - Building Construction										
Total Haul Trips	0									
Hauling	0	220	8	20	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	18	220	8	6.9	0.04	1.00	0.22	0.00	0.02	0.02
Worker	38	220	8	14.7	0.03	0.12	1.48	0.00	0.00	0.00

Diamond Bar Construction
2020 Running Emissions

	Running Emissions Factor (grams/mile)					
	ROG	NOX	CO	SO2	PM10	PM2.5
Hauling	0.15227033	4.584609715	0.77352785	0.01421514	0.05991493	0.05074238
Vendor	0.15052095	3.661476833	0.82032612	0.01250546	0.0674547	0.06124278
Worker	0.02663624	0.096097887	1.20453196	0.00316067	0.002367	0.00217971
GWP	N/A	N/A	N/A	N/A	N/A	N/A

Construction Phase	Daily One-Way Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	One-Way Trip Distance per Day (miles)	Regional Emissions (pounds/day)					
					ROG	NOX	CO	SO2	PM10	PM2.5
NR - Paving										
Total Haul Trips	0									
Hauling	0	10	8	20	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	15	10	8	6.9	0.03	0.84	0.19	0.00	0.02	0.01
Worker	0	10	8	14.7	0.00	0.00	0.00	0.00	0.00	0.00
NR - Architectural Coating										
Total Haul Trips	0									
Hauling	0	10	8	20	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0	10	8	6.9	0.00	0.00	0.00	0.00	0.00	0.00
Worker	8	10	8	14.7	0.01	0.02	0.31	0.00	0.00	0.00
SFR - Site Prep										
Total Haul Trips	0									
Hauling	0	10	8	20	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0	10	8	6.9	0.00	0.00	0.00	0.00	0.00	0.00
Worker	18	10	8	14.7	0.02	0.06	0.70	0.00	0.00	0.00
SFR - Grading										
Total Haul Trips	0									
Hauling	0	20	8	20	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0	20	8	6.9	0.00	0.00	0.00	0.00	0.00	0.00
Worker	15	20	8	14.7	0.01	0.05	0.59	0.00	0.00	0.00

Diamond Bar Construction
2020 Running Emissions

	Running Emissions Factor (grams/mile)					
	ROG	NOX	CO	SO2	PM10	PM2.5
Hauling	0.15227033	4.584609715	0.77352785	0.01421514	0.05991493	0.05074238
Vendor	0.15052095	3.661476833	0.82032612	0.01250546	0.0674547	0.06124278
Worker	0.02663624	0.096097887	1.20453196	0.00316067	0.002367	0.00217971
GWP	N/A	N/A	N/A	N/A	N/A	N/A

Construction Phase	Daily One-Way Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	One-Way Trip Distance per Day (miles)	Regional Emissions (pounds/day)					
					ROG	NOX	CO	SO2	PM10	PM2.5
SFR - Building Construction										
Total Haul Trips	0									
Hauling	0	230	8	20	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	10	230	8	6.9	0.02	0.56	0.12	0.00	0.01	0.01
Worker	27	230	8	14.7	0.02	0.08	1.05	0.00	0.00	0.00
SFR - Paving										
Total Haul Trips	0									
Hauling	0	20	8	20	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0	20	8	6.9	0.00	0.00	0.00	0.00	0.00	0.00
Worker	15	20	8	14.7	0.01	0.05	0.59	0.00	0.00	0.00
SFR - Architectural Coating										
Total Haul Trips	0									
Hauling	0	20	8	20	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0	20	8	6.9	0.00	0.00	0.00	0.00	0.00	0.00
Worker	5	20	8	14.7	0.00	0.02	0.20	0.00	0.00	0.00
MFR - Site Prep										
Total Haul Trips	0									
Hauling	0	10	8	20	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0	10	8	6.9	0.00	0.00	0.00	0.00	0.00	0.00
Worker	18	10	8	14.7	0.02	0.06	0.70	0.00	0.00	0.00

Diamond Bar Construction
2020 Running Emissions

	Running Emissions Factor (grams/mile)					
	ROG	NOX	CO	SO2	PM10	PM2.5
Hauling	0.15227033	4.584609715	0.77352785	0.01421514	0.05991493	0.05074238
Vendor	0.15052095	3.661476833	0.82032612	0.01250546	0.0674547	0.06124278
Worker	0.02663624	0.096097887	1.20453196	0.00316067	0.002367	0.00217971
GWP	N/A	N/A	N/A	N/A	N/A	N/A

Construction Phase	Daily One-Way Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	One-Way Trip Distance per Day (miles)	Regional Emissions (pounds/day)					
					ROG	NOX	CO	SO2	PM10	PM2.5
MFR - Grading										
Total Haul Trips	0									
Hauling	0	30	8	20	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0	30	8	6.9	0.00	0.00	0.00	0.00	0.00	0.00
Worker	20	30	8	14.7	0.02	0.06	0.78	0.00	0.00	0.00
MFR - Building Construction										
Total Haul Trips	0									
Hauling	0	213	8	20	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	64	213	8	6.9	0.15	3.56	0.80	0.01	0.07	0.06
Worker	333	213	8	14.7	0.29	1.04	13.00	0.03	0.03	0.02
MFR - Paving										
Total Haul Trips	0									
Hauling	0	20	8	20	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0	20	8	6.9	0.00	0.00	0.00	0.00	0.00	0.00
Worker	15	20	8	14.7	0.01	0.05	0.59	0.00	0.00	0.00
MFR - Architectural Coating										
Total Haul Trips	0									
Hauling	0	20	8	20	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0	20	8	6.9	0.00	0.00	0.00	0.00	0.00	0.00
Worker	67	20	8	14.7	0.06	0.21	2.62	0.01	0.01	0.00

Diamond Bar Construction
2020 Running Emissions

	Running Emissions Factor (grams/mile)		
	CO2	CH4	N2O
Hauling	1551.87916	0.08112809	0.24599271
Vendor	1340.46338	0.04529837	0.19169371
Worker	319.458691	0.00617495	0.00790785
GWP	1	25	290

Construction Phase	Daily One-Way Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	One-Way Trip Distance per Day (miles)	Regional Emissions (MT/year)			
					CO2	CH4	N2O	CO2e
Demolition								
Total Haul Trips	92							
Hauling	14	20	8	20	8.69	0.01	0.40	9.10
Vendor	0	20	8	6.9	0.00	0.00	0.00	0.00
Worker	13	20	8	14.7	1.22	0.00	0.01	1.23
NR - Site Prep								
Total Haul Trips	0							
Hauling	0	3	8	20	0.00	0.00	0.00	0.00
Vendor	0	3	8	6.9	0.00	0.00	0.00	0.00
Worker	8	3	8	14.7	0.11	0.00	0.00	0.11
NR - Grading								
Total Haul Trips	0							
Hauling	0	6	8	20	0.00	0.00	0.00	0.00
Vendor	0	6	8	6.9	0.00	0.00	0.00	0.00
Worker	10	6	8	14.7	0.28	0.00	0.00	0.28
NR - Building Construction								
Total Haul Trips	0							
Hauling	0	220	8	20	0.00	0.00	0.00	0.00
Vendor	18	220	8	6.9	36.63	0.03	1.52	38.18
Worker	38	220	8	14.7	39.26	0.02	0.28	39.56

Diamond Bar Construction
2020 Running Emissions

	Running Emissions Factor (grams/mile)		
	CO2	CH4	N2O
Hauling	1551.87916	0.08112809	0.24599271
Vendor	1340.46338	0.04529837	0.19169371
Worker	319.458691	0.00617495	0.00790785
GWP	1	25	290

Construction Phase	Daily One-Way Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	One-Way Trip Distance per Day (miles)	Regional Emissions (MT/year)			
					CO2	CH4	N2O	CO2e
NR - Paving								
Total Haul Trips	0							
Hauling	0	10	8	20	0.00	0.00	0.00	0.00
Vendor	15	10	8	6.9	1.39	0.00	0.06	1.45
Worker	0	10	8	14.7	0.00	0.00	0.00	0.00
NR - Architectural Coating								
Total Haul Trips	0							
Hauling	0	10	8	20	0.00	0.00	0.00	0.00
Vendor	0	10	8	6.9	0.00	0.00	0.00	0.00
Worker	8	10	8	14.7	0.38	0.00	0.00	0.38
SFR - Site Prep								
Total Haul Trips	0							
Hauling	0	10	8	20	0.00	0.00	0.00	0.00
Vendor	0	10	8	6.9	0.00	0.00	0.00	0.00
Worker	18	10	8	14.7	0.85	0.00	0.01	0.85
SFR - Grading								
Total Haul Trips	0							
Hauling	0	20	8	20	0.00	0.00	0.00	0.00
Vendor	0	20	8	6.9	0.00	0.00	0.00	0.00
Worker	15	20	8	14.7	1.41	0.00	0.01	1.42

Diamond Bar Construction
2020 Running Emissions

	Running Emissions Factor (grams/mile)		
	CO2	CH4	N2O
Hauling	1551.87916	0.08112809	0.24599271
Vendor	1340.46338	0.04529837	0.19169371
Worker	319.458691	0.00617495	0.00790785
GWP	1	25	290

Construction Phase	Daily One-Way Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	One-Way Trip Distance per Day (miles)	Regional Emissions (MT/year)			
					CO2	CH4	N2O	CO2e
SFR - Building Construction								
Total Haul Trips	0							
Hauling	0	230	8	20	0.00	0.00	0.00	0.00
Vendor	10	230	8	6.9	21.27	0.02	0.88	22.17
Worker	27	230	8	14.7	29.16	0.01	0.21	29.39
SFR - Paving								
Total Haul Trips	0							
Hauling	0	20	8	20	0.00	0.00	0.00	0.00
Vendor	0	20	8	6.9	0.00	0.00	0.00	0.00
Worker	15	20	8	14.7	1.41	0.00	0.01	1.42
SFR - Architectural Coating								
Total Haul Trips	0							
Hauling	0	20	8	20	0.00	0.00	0.00	0.00
Vendor	0	20	8	6.9	0.00	0.00	0.00	0.00
Worker	5	20	8	14.7	0.47	0.00	0.00	0.47
MFR - Site Prep								
Total Haul Trips	0							
Hauling	0	10	8	20	0.00	0.00	0.00	0.00
Vendor	0	10	8	6.9	0.00	0.00	0.00	0.00
Worker	18	10	8	14.7	0.85	0.00	0.01	0.85

Diamond Bar Construction
2020 Running Emissions

	Running Emissions Factor (grams/mile)		
	CO2	CH4	N2O
Hauling	1551.87916	0.08112809	0.24599271
Vendor	1340.46338	0.04529837	0.19169371
Worker	319.458691	0.00617495	0.00790785
GWP	1	25	290

Construction Phase	Daily One-Way Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	One-Way Trip Distance per Day (miles)	Regional Emissions (MT/year)			
					CO2	CH4	N2O	CO2e
MFR - Grading								
Total Haul Trips	0							
Hauling	0	30	8	20	0.00	0.00	0.00	0.00
Vendor	0	30	8	6.9	0.00	0.00	0.00	0.00
Worker	20	30	8	14.7	2.82	0.00	0.02	2.84
MFR - Building Construction								
Total Haul Trips	0							
Hauling	0	213	8	20	0.00	0.00	0.00	0.00
Vendor	64	213	8	6.9	126.09	0.11	5.23	131.42
Worker	333	213	8	14.7	333.09	0.16	2.39	335.64
MFR - Paving								
Total Haul Trips	0							
Hauling	0	20	8	20	0.00	0.00	0.00	0.00
Vendor	0	20	8	6.9	0.00	0.00	0.00	0.00
Worker	15	20	8	14.7	1.41	0.00	0.01	1.42
MFR - Architectural Coating								
Total Haul Trips	0							
Hauling	0	20	8	20	0.00	0.00	0.00	0.00
Vendor	0	20	8	6.9	0.00	0.00	0.00	0.00
Worker	67	20	8	14.7	6.29	0.00	0.05	6.34

2020 Idling Emissions

Diamond Bar Construction
2020 Idling Emissions

	Idling Emissions Factor (grams/minute)					
	ROG	NOX	CO	SO2	PM10	PM2.5
Hauling	0.01876859	0.260056442	0.22922082	0.00043201	0.00052989	0.00050697
Vendor	0.00987959	0.142517399	0.12251179	0.00022933	0.00030983	0.00029642
Worker	0	0	0	0	0	0
GWP	N/A	N/A	N/A	N/A	N/A	N/A

Construction Phase	Daily One-Way Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	Idling minutes per Day (miles)	Regional Emissions (pounds/day)					
					ROG	NOX	CO	SO2	PM10	PM2.5
Demolition										
Total Haul Trips	92									
Hauling	14	20	8	15	0.01	0.12	0.11	0.00	0.00	0.00
Vendor	0	20	8	15	0.00	0.00	0.00	0.00	0.00	0.00
Worker	13	20	8	0	0.00	0.00	0.00	0.00	0.00	0.00
NR - Site Prep										
Total Haul Trips	0									
Hauling	0	3	8	15	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0	3	8	15	0.00	0.00	0.00	0.00	0.00	0.00
Worker	8	3	8	0	0.00	0.00	0.00	0.00	0.00	0.00
NR - Grading										
Total Haul Trips	0									
Hauling	0	6	8	15	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0	6	8	15	0.00	0.00	0.00	0.00	0.00	0.00
Worker	10	6	8	0	0.00	0.00	0.00	0.00	0.00	0.00
NR - Building Construction										
Total Haul Trips	0									
Hauling	0	220	8	15	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	18	220	8	15	0.01	0.08	0.07	0.00	0.00	0.00
Worker	38	220	8	0	0.00	0.00	0.00	0.00	0.00	0.00

Diamond Bar Construction
2020 Idling Emissions

	Idling Emissions Factor (grams/minute)					
	ROG	NOX	CO	SO2	PM10	PM2.5
Hauling	0.01876859	0.260056442	0.22922082	0.00043201	0.00052989	0.00050697
Vendor	0.00987959	0.142517399	0.12251179	0.00022933	0.00030983	0.00029642
Worker	0	0	0	0	0	0
GWP	N/A	N/A	N/A	N/A	N/A	N/A

Construction Phase	Daily One-Way Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	Idling minutes per Day (miles)	Regional Emissions (pounds/day)					
					ROG	NOX	CO	SO2	PM10	PM2.5
NR - Paving										
Total Haul Trips	0									
Hauling	0	10	8	15	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	15	10	8	15	0.00	0.07	0.06	0.00	0.00	0.00
Worker	0	10	8	0	0.00	0.00	0.00	0.00	0.00	0.00
NR - Architectural Coating										
Total Haul Trips	0									
Hauling	0	10	8	15	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0	10	8	15	0.00	0.00	0.00	0.00	0.00	0.00
Worker	8	10	8	0	0.00	0.00	0.00	0.00	0.00	0.00
SFR - Site Prep										
Total Haul Trips	0									
Hauling	0	10	8	15	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0	10	8	15	0.00	0.00	0.00	0.00	0.00	0.00
Worker	18	10	8	0	0.00	0.00	0.00	0.00	0.00	0.00
SFR - Grading										
Total Haul Trips	0									
Hauling	0	20	8	15	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0	20	8	15	0.00	0.00	0.00	0.00	0.00	0.00
Worker	15	20	8	0	0.00	0.00	0.00	0.00	0.00	0.00

Diamond Bar Construction
2020 Idling Emissions

	Idling Emissions Factor (grams/minute)					
	ROG	NOX	CO	SO2	PM10	PM2.5
Hauling	0.01876859	0.260056442	0.22922082	0.00043201	0.00052989	0.00050697
Vendor	0.00987959	0.142517399	0.12251179	0.00022933	0.00030983	0.00029642
Worker	0	0	0	0	0	0
GWP	N/A	N/A	N/A	N/A	N/A	N/A

Construction Phase	Daily One-Way Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	Idling minutes per Day (miles)	Regional Emissions (pounds/day)					
					ROG	NOX	CO	SO2	PM10	PM2.5
SFR - Building Construction										
Total Haul Trips	0									
Hauling	0	230	8	15	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	10	230	8	15	0.00	0.05	0.04	0.00	0.00	0.00
Worker	27	230	8	0	0.00	0.00	0.00	0.00	0.00	0.00
SFR - Paving										
Total Haul Trips	0									
Hauling	0	20	8	15	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0	20	8	15	0.00	0.00	0.00	0.00	0.00	0.00
Worker	15	20	8	0	0.00	0.00	0.00	0.00	0.00	0.00
SFR - Architectural Coating										
Total Haul Trips	0									
Hauling	0	20	8	15	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0	20	8	15	0.00	0.00	0.00	0.00	0.00	0.00
Worker	5	20	8	0	0.00	0.00	0.00	0.00	0.00	0.00
MFR - Site Prep										
Total Haul Trips	0									
Hauling	0	10	8	15	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0	10	8	15	0.00	0.00	0.00	0.00	0.00	0.00
Worker	18	10	8	0	0.00	0.00	0.00	0.00	0.00	0.00

Diamond Bar Construction
2020 Idling Emissions

	Idling Emissions Factor (grams/minute)					
	ROG	NOX	CO	SO2	PM10	PM2.5
Hauling	0.01876859	0.260056442	0.22922082	0.00043201	0.00052989	0.00050697
Vendor	0.00987959	0.142517399	0.12251179	0.00022933	0.00030983	0.00029642
Worker	0	0	0	0	0	0
GWP	N/A	N/A	N/A	N/A	N/A	N/A

Construction Phase	Daily One-Way Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	Idling minutes per Day (miles)	Regional Emissions (pounds/day)					
					ROG	NOX	CO	SO2	PM10	PM2.5
MFR - Grading										
Total Haul Trips	0									
Hauling	0	30	8	15	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0	30	8	15	0.00	0.00	0.00	0.00	0.00	0.00
Worker	20	30	8	0	0.00	0.00	0.00	0.00	0.00	0.00
MFR - Building Construction										
Total Haul Trips	0									
Hauling	0	213	8	15	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	64	213	8	15	0.02	0.30	0.26	0.00	0.00	0.00
Worker	333	213	8	0	0.00	0.00	0.00	0.00	0.00	0.00
MFR - Paving										
Total Haul Trips	0									
Hauling	0	20	8	15	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0	20	8	15	0.00	0.00	0.00	0.00	0.00	0.00
Worker	15	20	8	0	0.00	0.00	0.00	0.00	0.00	0.00
MFR - Architectural Coating										
Total Haul Trips	0									
Hauling	0	20	8	15	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0	20	8	15	0.00	0.00	0.00	0.00	0.00	0.00
Worker	67	20	8	0	0.00	0.00	0.00	0.00	0.00	0.00

Diamond Bar Construction
2020 Idling Emissions

	Idling Emissions Factor (grams/minute)		
	CO2	CH4	N2O
Hauling	46.4004861	0.00108436	0.0073249
Vendor	24.6020747	0.00063132	0.0038577
Worker	0	0	0
GWP	1	25	290

Construction Phase	Daily One-Way Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	Idling minutes per Day (miles)	Regional Emissions (MT/year)			
					CO2	CH4	N2O	CO2e
Demolition								
Total Haul Trips	92							
Hauling	14	20	8	15	0.19	0.00	0.01	0.20
Vendor	0	20	8	15	0.00	0.00	0.00	0.00
Worker	13	20	8	0	0.00	0.00	0.00	0.00
NR - Site Prep								
Total Haul Trips	0							
Hauling	0	3	8	15	0.00	0.00	0.00	0.00
Vendor	0	3	8	15	0.00	0.00	0.00	0.00
Worker	8	3	8	0	0.00	0.00	0.00	0.00
NR - Grading								
Total Haul Trips	0							
Hauling	0	6	8	15	0.00	0.00	0.00	0.00
Vendor	0	6	8	15	0.00	0.00	0.00	0.00
Worker	10	6	8	0	0.00	0.00	0.00	0.00
NR - Building Construction								
Total Haul Trips	0							
Hauling	0	220	8	15	0.00	0.00	0.00	0.00
Vendor	18	220	8	15	1.46	0.00	0.07	1.53
Worker	38	220	8	0	0.00	0.00	0.00	0.00

Diamond Bar Construction
2020 Idling Emissions

	Idling Emissions Factor (grams/minute)		
	CO2	CH4	N2O
Hauling	46.4004861	0.00108436	0.0073249
Vendor	24.6020747	0.00063132	0.0038577
Worker	0	0	0
GWP	1	25	290

Construction Phase	Daily One-Way Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	Idling minutes per Day (miles)	Regional Emissions (MT/year)			
					CO2	CH4	N2O	CO2e
NR - Paving								
Total Haul Trips	0							
Hauling	0	10	8	15	0.00	0.00	0.00	0.00
Vendor	15	10	8	15	0.06	0.00	0.00	0.06
Worker	0	10	8	0	0.00	0.00	0.00	0.00
NR - Architectural Coating								
Total Haul Trips	0							
Hauling	0	10	8	15	0.00	0.00	0.00	0.00
Vendor	0	10	8	15	0.00	0.00	0.00	0.00
Worker	8	10	8	0	0.00	0.00	0.00	0.00
SFR - Site Prep								
Total Haul Trips	0							
Hauling	0	10	8	15	0.00	0.00	0.00	0.00
Vendor	0	10	8	15	0.00	0.00	0.00	0.00
Worker	18	10	8	0	0.00	0.00	0.00	0.00
SFR - Grading								
Total Haul Trips	0							
Hauling	0	20	8	15	0.00	0.00	0.00	0.00
Vendor	0	20	8	15	0.00	0.00	0.00	0.00
Worker	15	20	8	0	0.00	0.00	0.00	0.00

Diamond Bar Construction
2020 Idling Emissions

	Idling Emissions Factor (grams/minute)		
	CO2	CH4	N2O
Hauling	46.4004861	0.00108436	0.0073249
Vendor	24.6020747	0.00063132	0.0038577
Worker	0	0	0
GWP	1	25	290

Construction Phase	Daily One-Way Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	Idling minutes per Day (miles)	Regional Emissions (MT/year)			
					CO2	CH4	N2O	CO2e
SFR - Building Construction								
Total Haul Trips	0							
Hauling	0	230	8	15	0.00	0.00	0.00	0.00
Vendor	10	230	8	15	0.85	0.00	0.04	0.89
Worker	27	230	8	0	0.00	0.00	0.00	0.00
SFR - Paving								
Total Haul Trips	0							
Hauling	0	20	8	15	0.00	0.00	0.00	0.00
Vendor	0	20	8	15	0.00	0.00	0.00	0.00
Worker	15	20	8	0	0.00	0.00	0.00	0.00
SFR - Architectural Coating								
Total Haul Trips	0							
Hauling	0	20	8	15	0.00	0.00	0.00	0.00
Vendor	0	20	8	15	0.00	0.00	0.00	0.00
Worker	5	20	8	0	0.00	0.00	0.00	0.00
MFR - Site Prep								
Total Haul Trips	0							
Hauling	0	10	8	15	0.00	0.00	0.00	0.00
Vendor	0	10	8	15	0.00	0.00	0.00	0.00
Worker	18	10	8	0	0.00	0.00	0.00	0.00

Diamond Bar Construction
2020 Idling Emissions

	Idling Emissions Factor (grams/minute)		
	CO2	CH4	N2O
Hauling	46.4004861	0.00108436	0.0073249
Vendor	24.6020747	0.00063132	0.0038577
Worker	0	0	0
GWP	1	25	290

Construction Phase	Daily One-Way Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	Idling minutes per Day (miles)	Regional Emissions (MT/year)			
					CO2	CH4	N2O	CO2e
MFR - Grading								
Total Haul Trips	0							
Hauling	0	30	8	15	0.00	0.00	0.00	0.00
Vendor	0	30	8	15	0.00	0.00	0.00	0.00
Worker	20	30	8	0	0.00	0.00	0.00	0.00
MFR - Building Construction								
Total Haul Trips	0							
Hauling	0	213	8	15	0.00	0.00	0.00	0.00
Vendor	64	213	8	15	5.03	0.00	0.23	5.26
Worker	333	213	8	0	0.00	0.00	0.00	0.00
MFR - Paving								
Total Haul Trips	0							
Hauling	0	20	8	15	0.00	0.00	0.00	0.00
Vendor	0	20	8	15	0.00	0.00	0.00	0.00
Worker	15	20	8	0	0.00	0.00	0.00	0.00
MFR - Architectural Coating								
Total Haul Trips	0							
Hauling	0	20	8	15	0.00	0.00	0.00	0.00
Vendor	0	20	8	15	0.00	0.00	0.00	0.00
Worker	67	20	8	0	0.00	0.00	0.00	0.00

2020 Road Dust, Break Wear, and Tire wear Emissions

Diamond Bar Construction
2020 Road Dust, Break Wear, and Tire wear Emissions

	Emission Factors (grams/mile)					
	PM10			PM2.5		
	RD	BW	TW	RD	BW	TW
Hauling	3.00E-01	0.061039688	0.03557827	7.36E-02	0.02615987	0.00889457
Vendor	3.00E-01	0.095689863	0.02378913	7.36E-02	0.04100994	0.00594728
Worker	3.00E-01	0.036750011	0.008	7.36E-02	0.01575	0.002

Construction Phase	Daily One-Way Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	One-Way Trip Distance per Day (miles)	Regional Emissions (pounds/day)					
					PM10			PM2.5		
					RD	BW	TW	RD	BW	TW
Demolition										
Total Haul Trips	92									
Hauling	14	20	8	20	0.19	0.04	0.02	0.05	0.02	0.01
Vendor	0	20	8	6.9	0.00	0.00	0.00	0.00	0.00	0.00
Worker	13	20	8	14.7	0.13	0.02	0.00	0.03	0.01	0.00
NR - Site Prep										
Total Haul Trips	0									
Hauling	0	3	8	20	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0	3	8	6.9	0.00	0.00	0.00	0.00	0.00	0.00
Worker	8	3	8	14.7	0.08	0.01	0.00	0.02	0.00	0.00
NR - Grading										
Total Haul Trips	0									
Hauling	0	6	8	20	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0	6	8	6.9	0.00	0.00	0.00	0.00	0.00	0.00
Worker	10	6	8	14.7	0.10	0.01	0.00	0.02	0.01	0.00
NR - Building Construction										
Total Haul Trips	0									
Hauling	0	220	8	20	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	18	220	8	6.9	0.08	0.03	0.01	0.02	0.01	0.00
Worker	38	220	8	14.7	0.37	0.05	0.01	0.09	0.02	0.00

Diamond Bar Construction
2020 Road Dust, Break Wear, and Tire wear Emissions

	Emission Factors (grams/mile)					
	PM10			PM2.5		
	RD	BW	TW	RD	BW	TW
Hauling	3.00E-01	0.061039688	0.03557827	7.36E-02	0.02615987	0.00889457
Vendor	3.00E-01	0.095689863	0.02378913	7.36E-02	0.04100994	0.00594728
Worker	3.00E-01	0.036750011	0.008	7.36E-02	0.01575	0.002

Construction Phase	Daily One-Way Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	One-Way Trip Distance per Day (miles)	Regional Emissions (pounds/day)					
					PM10			PM2.5		
					RD	BW	TW	RD	BW	TW
NR - Paving										
Total Haul Trips	0									
Hauling	0	10	8	20	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	15	10	8	6.9	0.07	0.02	0.01	0.02	0.01	0.00
Worker	0	10	8	14.7	0.00	0.00	0.00	0.00	0.00	0.00
NR - Architectural Coating										
Total Haul Trips	0									
Hauling	0	10	8	20	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0	10	8	6.9	0.00	0.00	0.00	0.00	0.00	0.00
Worker	8	10	8	14.7	0.08	0.01	0.00	0.02	0.00	0.00
SFR - Site Prep										
Total Haul Trips	0									
Hauling	0	10	8	20	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0	10	8	6.9	0.00	0.00	0.00	0.00	0.00	0.00
Worker	18	10	8	14.7	0.17	0.02	0.00	0.04	0.01	0.00
SFR - Grading										
Total Haul Trips	0									
Hauling	0	20	8	20	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0	20	8	6.9	0.00	0.00	0.00	0.00	0.00	0.00
Worker	15	20	8	14.7	0.15	0.02	0.00	0.04	0.01	0.00

Diamond Bar Construction
2020 Road Dust, Break Wear, and Tire wear Emissions

	Emission Factors (grams/mile)					
	PM10			PM2.5		
	RD	BW	TW	RD	BW	TW
Hauling	3.00E-01	0.061039688	0.03557827	7.36E-02	0.02615987	0.00889457
Vendor	3.00E-01	0.095689863	0.02378913	7.36E-02	0.04100994	0.00594728
Worker	3.00E-01	0.036750011	0.008	7.36E-02	0.01575	0.002

Construction Phase	Daily One-Way Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	One-Way Trip Distance per Day (miles)	Regional Emissions (pounds/day)					
					PM10			PM2.5		
					RD	BW	TW	RD	BW	TW
SFR - Building Construction										
Total Haul Trips	0									
Hauling	0	230	8	20	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	10	230	8	6.9	0.05	0.01	0.00	0.01	0.01	0.00
Worker	27	230	8	14.7	0.26	0.03	0.01	0.06	0.01	0.00
SFR - Paving										
Total Haul Trips	0									
Hauling	0	20	8	20	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0	20	8	6.9	0.00	0.00	0.00	0.00	0.00	0.00
Worker	15	20	8	14.7	0.15	0.02	0.00	0.04	0.01	0.00
SFR - Architectural Coating										
Total Haul Trips	0									
Hauling	0	20	8	20	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0	20	8	6.9	0.00	0.00	0.00	0.00	0.00	0.00
Worker	5	20	8	14.7	0.05	0.01	0.00	0.01	0.00	0.00
MFR - Site Prep										
Total Haul Trips	0									
Hauling	0	10	8	20	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0	10	8	6.9	0.00	0.00	0.00	0.00	0.00	0.00
Worker	18	10	8	14.7	0.17	0.02	0.00	0.04	0.01	0.00

Diamond Bar Construction
2020 Road Dust, Break Wear, and Tire wear Emissions

	Emission Factors (grams/mile)					
	PM10			PM2.5		
	RD	BW	TW	RD	BW	TW
Hauling	3.00E-01	0.061039688	0.03557827	7.36E-02	0.02615987	0.00889457
Vendor	3.00E-01	0.095689863	0.02378913	7.36E-02	0.04100994	0.00594728
Worker	3.00E-01	0.036750011	0.008	7.36E-02	0.01575	0.002

Construction Phase	Daily One-Way Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	One-Way Trip Distance per Day (miles)	Regional Emissions (pounds/day)					
					PM10			PM2.5		
					RD	BW	TW	RD	BW	TW
MFR - Grading										
Total Haul Trips	0									
Hauling	0	30	8	20	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0	30	8	6.9	0.00	0.00	0.00	0.00	0.00	0.00
Worker	20	30	8	14.7	0.19	0.02	0.01	0.05	0.01	0.00
MFR - Building Construction										
Total Haul Trips	0									
Hauling	0	213	8	20	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	64	213	8	6.9	0.29	0.09	0.02	0.07	0.04	0.01
Worker	333	213	8	14.7	3.24	0.40	0.09	0.79	0.17	0.02
MFR - Paving										
Total Haul Trips	0									
Hauling	0	20	8	20	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0	20	8	6.9	0.00	0.00	0.00	0.00	0.00	0.00
Worker	15	20	8	14.7	0.15	0.02	0.00	0.04	0.01	0.00
MFR - Architectural Coating										
Total Haul Trips	0									
Hauling	0	20	8	20	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0	20	8	6.9	0.00	0.00	0.00	0.00	0.00	0.00
Worker	67	20	8	14.7	0.65	0.08	0.02	0.16	0.03	0.00

Road Dust

Diamond Bar Construction
Road Dust

Paved Road Dust Emission Factors (Assumes No Precipitation)

Formula: $EF_{Dust,P} = (k\ (sL)^{0.91} \times (W)^{1.02})$

Where:

$EF_{Dust,P}$ =	Paved Road Dust Emission Factor (having the same units as k)
k =	particle size multiplier
sL =	road surface silt loading (g/m^2)
W =	average fleet vehicle weight (tons) (CARB uses 2.4 tons as a fleet average vehicle weight factor)

	Emission Factor (grams per VMT)	
	PM10	PM2.5
k	0.9979	0.2449
sL	0.1	0.1
W	2.4	2.4
$EF_{Dust,P}$	3.00E-01	7.36E-02

Unpaved Road Dust Emission Factors (Assumes No Precipitation)

Formula: $EF_{Dust,U} = (k\ (\ s / 12)^{1} \times (Sp / 30)^{0.5} / (M / 0.5)^{0.2}) - C)$

Where:

$EF_{Dust,U}$ =	Unpaved Road Dust Emission Factor (having the same units as k)
k =	particle size multiplier
s =	surface material silt content (%)
Sp =	mean vehicle speed (mph)
M =	surface material moisture content (%)
C =	Emission Factor for 1980s vehicle fleet exhaust, brake wear, and tire wear

	Emission Factor (grams per VMT)	
	PM10	PM2.5
k	816.47	81.65
s	4.3%	4.3%
Sp	15	15
M	0.5%	0.5%
C	0.00047	0.00036
$EF_{Dust,U}$	5.20E+00	5.19E-01

Sources:

SCAQMD, CalEEMod, Version 2011.1.

CARB, *Entrained Dust from Paved Road Travel: Emission Estimation Methodology Background Document*, (1997).

USEPA, *AP-42* , Fifth Edition, Volume I, Chapter 13.2.1 - Paved Roads, (2011).

PCR Services Corporation, 2013.

Air Quality

6. EMFAC2017

b. Operational

Air Quality

6. EMFAC2017

b. Operational

1. Existing

Diamond Bar Construction

2016 Total On-Road Emissions

Construction Phase	One-Way Trips	(Years)	Annual VMT	Idling per Day (minutes)
On Road - Diesel	4,211,239	1	31,413,579	25
On Road - Gasoline	78,151,429	1	477,712,477	0
Off Road - Diesel	5,556	1	67,280	25
Off Road - Gasoline	648	1	1,827	25
Off Road - Natural Gas	3,603	1	37,398	25
Total Annual				
Total Daily				

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2016 T

Diamond Bar Construction

2016 Total On-Road Emissions

Construction Phase	Regional Emissions (pounds/day)									
	ROG	NOX	CO	SO2	PM10 Dust	PM10 Exh	Total PM10	PM2.5 Dust	PM2.5 Exh	Total PM2.5
On Road - Diesel	48,166	801,933	288,010	1,397	29,039	14,181	43,221	8,349	8,874	17,222
On Road - Gasoline	62,148	197,066	2,173,937	3,742	362,924	2,811	365,736	96,207	2,588	98,795
Off Road - Diesel	83	1,415	446	3	62	29	91	18	17	35
Off Road - Gasoline	0	1	8	0	1	0	1	0	0	0
Off Road - Natural Gas	71	924	1,069	0	33	2	35	9	1	10
Total Annual	110,469	1,001,339	2,463,471	5,142	392,060	17,023	409,083	104,583	11,480	116,063
Total Daily	302.65	2,743.39	6,749.23	14.09	1,074.14	46.64	1,120.78	286.53	31.45	317.98

Diamond Bar Construction
2016 Running Emissions

	Running Emissions Factor (grams/mile)					
	ROG	NOX	CO	SO2	PM10	PM2.5
Hauling	0.32605171	6.890480986	1.179375629	0.01585719	0.14169332	0
Diesel	0.34703289	6.268583954	1.162263518	0.01309225	0.1754181	0.10004772
Gasoline	0.05901043	0.18711632	2.064173036	0.00355308	0.00266931	0.00245756
Natural Gas	0.84652372	8.018921884	11.22981752	0	0.01426406	0
GWP	N/A	N/A	N/A	N/A	N/A	N/A

Construction Phase		Regional Emissions (pounds/day)					
	VMT	ROG	NOX	CO	SO2	PM10	PM2.5
On Road - Diesel	31413579	24033.79	434131.30	80492.66	906.70	12148.59	6928.81
On Road - Gasoline	477712477	62148.34	197066.35	2173936.81	3742.02	2811.26	2588.24
Off Road - Diesel	67280	51.47	929.80	172.40	1.94	26.02	14.84
Off Road - Gasoline	1827	0.24	0.75	8.31	0.01	0.01	0.01
Off Road - Natural Gas	37398	69.79	661.15	925.88	0.00	1.18	0.00

Diamond Bar Construction
2016 Idling Emissions

	Idling Emissions Factor (grams/minute)					
	ROG	NOX	CO	SO2	PM10	PM2.5
Hauling	0.19769474	2.676002392	1.68080112	0.00387953	0.01428708	0.01366903
Diesel	0.10396956	1.584634638	0.89406893	0.00211404	0.00875794	0.00837908
Gasoline	0	0	0	0	0	0
NG	0.00616383	1.323301908	0.72104469	0	0.00484647	0.00463681
GWP	N/A	N/A	N/A	N/A	N/A	N/A

Construction Phase	Daily One-Way Trips	VMT	Regional Emissions (pounds/day)					
			ROG	NOX	CO	SO2	PM10	PM2.5
On Road - Diesel	4211239	25	24131.83	367801.31	207517.69	490.68	2032.76	1944.82
On Road - Gasoline	78151429	0	0.00	0.00	0.00	0.00	0.00	0.00
Off Road - Diesel	5556	25	31.84	485.25	273.78	0.65	2.68	2.57
Off Road - Gasoline	648	25	0.00	0.00	0.00	0.00	0.00	0.00
Off Road - Natural Gas	3603	25	1.22	262.78	143.19	0.00	0.96	0.92

Diamond Bar Construction
2016 Road Dust, Break Wear, and Tire wear Emissions

	Emission Factors (grams/mile)					
	PM10			PM2.5		
	RD	BW	TW	RD	BW	TW
Hauling	3.00E-01	0.061004616	0.0355712	7.36E-02	0.02614484	0.0088928
Diesel	3.00E-01	0.095672327	0.0237856	7.36E-02	0.04100243	0.0059464
Gasoline	3.00E-01	0.036750011	0.008	7.36E-02	0.01575	0.002
NG	3.00E-01	0.061740018	0.03600001	7.36E-02	0.02646001	0.009

Construction Phase		Regional Emissions (pounds/day)					
		PM10			PM2.5		
	VMT	RD	BW	TW	RD	BW	TW
On Road - Diesel	31413579	20766.13	6625.79	1647.27	5097.14	2839.63	411.82
On Road - Gasoline	477712477	315794.62	38704.22	8425.41	77513.23	16587.52	2106.35
Off Road - Diesel	67280	44.48	14.19	3.53	10.92	6.08	0.88
Off Road - Gasoline	1827	1.21	0.15	0.03	0.30	0.06	0.01
Off Road - Natural Gas	37398	24.72	5.09	2.97	6.07	2.18	0.74

Diamond Bar Construction
Road Dust

Paved Road Dust Emission Factors (Assumes No Precipitation)

Formula: $EF_{Dust,P} = (k\ (sL)^{0.91} \times (W)^{1.02})$

Where:

$EF_{Dust,P}$ =	Paved Road Dust Emission Factor (having the same units as k)
k =	particle size multiplier
sL =	road surface silt loading (g/m^2)
W =	average fleet vehicle weight (tons) (CARB uses 2.4 tons as a fleet average vehicle weight factor)

	Emission Factor (grams per VMT)	
	PM10	PM2.5
k	0.9979	0.2449
sL	0.1	0.1
W	2.4	2.4
$EF_{Dust,P}$	3.00E-01	7.36E-02

Unpaved Road Dust Emission Factors (Assumes No Precipitation)

Formula: $EF_{Dust,U} = (k\ (\ s / 12)^{1} \times (Sp / 30)^{0.5} / (M / 0.5)^{0.2}) - C)$

Where:

$EF_{Dust,U}$ =	Unpaved Road Dust Emission Factor (having the same units as k)
k =	particle size multiplier
s =	surface material silt content (%)
Sp =	mean vehicle speed (mph)
M =	surface material moisture content (%)
C =	Emission Factor for 1980s vehicle fleet exhaust, brake wear, and tire wear

	Emission Factor (grams per VMT)	
	PM10	PM2.5
k	816.47	81.65
s	4.3%	4.3%
Sp	15	15
M	0.5%	0.5%
C	0.00047	0.00036
$EF_{Dust,U}$	5.20E+00	5.19E-01

Sources:

SCAQMD, CalEEMod, Version 2011.1.

CARB, *Entrained Dust from Paved Road Travel: Emission Estimation Methodology Background Document*, (1997).

USEPA, *AP-42* , Fifth Edition, Volume I, Chapter 13.2.1 - Paved Roads, (2011).

PCR Services Corporation, 2013.

Air Quality

6. EMFAC2017

b. Operational

2. 2040 Buildout

Diamond Bar Construction

2040 Total On-Road Emissions

Construction Phase	Daily One-Way Trips	(Years)	VMT	Idling per Day (minutes)
On Road - Diesel	5,771,465	1	50,331,196	25
On Road - Gasoline	97,813,959	1	490,679,754	0
Off Road - Diesel	6,201	1	81,856	25
Off Road - Gasoline	638	1	3,799	25
Off Road - Natural Gas	5,194	1	54,289	25
Total Annual				
Total Daily				

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2040 T

Diamond Bar Construction

2040 Total On-Road Emissions

Construction Phase	Regional Emissions (pounds/day)									
	ROG	NOX	CO	SO2	PM10 Dust	PM10 Exh	Total PM10	PM2.5 Dust	PM2.5 Exh	Total PM2.5
On Road - Diesel	34,073	609,007	508,690	1,546	46,537	1,491	48,028	13,380	517	13,897
On Road - Gasoline	3,292	21,125	501,172	2,393	372,776	815	373,591	98,819	750	99,568
Off Road - Diesel	37	766	556	2	76	2	78	22	1	23
Off Road - Gasoline	0	0	4	0	3	0	3	1	0	1
Off Road - Natural Gas	11	296	1,991	0	48	1	48	13	0	13
Total Annual	37,413	631,193	1,012,412	3,941	419,439	2,309	421,748	112,234	1,267	113,502
Total Daily	102.50	1,729.30	2,773.73	10.80	1,149.15	6.33	1,155.47	307.49	3.47	310.96

Diamond Bar Construction
2040 Running Emissions

	Running Emissions Factor (grams/mile)					
	ROG	NOX	CO	SO2	PM10	PM2.5
Diesel	0.01318468	1.816876064	0.149421922	0.00831876	0.01209591	0.00337763
Gasoline	0.00304277	0.019527894	0.46329131	0.0022124	0.00075366	0.00069296
Natural Gas	0.09050967	0.714524752	14.533911	0	0.00348206	0
GWP	N/A	N/A	N/A	N/A	N/A	N/A

Construction Phase		Regional Emissions (pounds/day)					
	VMT	ROG	NOX	CO	SO2	PM10	PM2.5
On Road - Diesel	50331196	1462.99	201602.90	16580.05	923.06	1342.18	374.79
On Road - Gasoline	490679754	3291.56	21124.57	501171.68	2393.29	815.28	749.62
Off Road - Diesel	81856	2.38	327.88	26.96	1.50	2.18	0.61
Off Road - Gasoline	3799	0.03	0.16	3.88	0.02	0.01	0.01
Off Road - Natural Gas	54289	10.83	85.52	1739.52	0.00	0.42	0.00

Diamond Bar Construction
2040 Idling Emissions

	Idling Emissions Factor (grams/minute)					
	ROG	NOX	CO	SO2	PM10	PM2.5
Diesel	0.10251441	1.280750947	1.54704099	0.00195742	0.00046725	0.00044704
Gasoline	0	0	0	0	0	0
NG	0.00089422	0.735524187	0.87805439	0	0.00044233	0.00042319
GWP	N/A	N/A	N/A	N/A	N/A	N/A

Construction Phase	Daily One-Way Trips	VMT	Regional Emissions (pounds/day)					
			ROG	NOX	CO	SO2	PM10	PM2.5
On Road - Diesel	5771465	25	32609.58	407403.72	492109.93	622.65	148.63	142.20
On Road - Gasoline	97813959	0	0.00	0.00	0.00	0.00	0.00	0.00
Off Road - Diesel	6201	25	35.04	437.72	528.73	0.67	0.16	0.15
Off Road - Gasoline	638	25	0.00	0.00	0.00	0.00	0.00	0.00
Off Road - Natural Gas	5194	25	0.26	210.56	251.36	0.00	0.13	0.12

Diamond Bar Construction
2040 Road Dust, Break Wear, and Tire wear Emissions

	Emission Factors (grams/mile)					
	PM10			PM2.5		
	RD	BW	TW	RD	BW	TW
Diesel	3.00E-01	0.095731452	0.02382008	7.36E-02	0.04102777	0.00595502
Gasoline	3.00E-01	0.036750011	0.008	7.36E-02	0.01575	0.002
NG	3.00E-01	0.061740018	0.03600001	7.36E-02	0.02646001	0.009

Construction Phase		Regional Emissions (pounds/day)					
		PM10			PM2.5		
	VMT	RD	BW	TW	RD	BW	TW
On Road - Diesel	50331196	33271.73	10622.49	2643.11	8166.70	4552.49	660.78
On Road - Gasoline	490679754	324366.72	39754.82	8654.11	79617.29	17037.78	2163.53
Off Road - Diesel	81856	54.11	17.28	4.30	13.28	7.40	1.07
Off Road - Gasoline	3799	2.51	0.31	0.07	0.62	0.13	0.02
Off Road - Natural Gas	54289	35.89	7.39	4.31	8.81	3.17	1.08

Diamond Bar Construction
Road Dust

Paved Road Dust Emission Factors (Assumes No Precipitation)

Formula: $EF_{Dust,P} = (k\ (sL)^{0.91} \times (W)^{1.02})$

Where:

$EF_{Dust,P}$ =	Paved Road Dust Emission Factor (having the same units as k)
k =	particle size multiplier
sL =	road surface silt loading (g/m^2)
W =	average fleet vehicle weight (tons) (CARB uses 2.4 tons as a fleet average vehicle weight factor)

	Emission Factor (grams per VMT)	
	PM10	PM2.5
k	0.9979	0.2449
sL	0.1	0.1
W	2.4	2.4
$EF_{Dust,P}$	3.00E-01	7.36E-02

Unpaved Road Dust Emission Factors (Assumes No Precipitation)

Formula: $EF_{Dust,U} = (k\ (\ s / 12)^{1} \times (Sp / 30)^{0.5} / (M / 0.5)^{0.2}) - C)$

Where:

$EF_{Dust,U}$ =	Unpaved Road Dust Emission Factor (having the same units as k)
k =	particle size multiplier
s =	surface material silt content (%)
Sp =	mean vehicle speed (mph)
M =	surface material moisture content (%)
C =	Emission Factor for 1980s vehicle fleet exhaust, brake wear, and tire wear

	Emission Factor (grams per VMT)	
	PM10	PM2.5
k	816.47	81.65
s	4.3%	4.3%
Sp	15	15
M	0.5%	0.5%
C	0.00047	0.00036
$EF_{Dust,U}$	5.20E+00	5.19E-01

Sources:

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