

APPENDIX C

Air Quality, Energy, and Greenhouse Gas Emissions Calculations

California State University, Long Beach Housing Expansion Phase 1 – Housing Administration and Commo - South Coast AQMD Air District, Summer

**California State University, Long Beach Housing Expansion Phase 1 – Housing Administration and Commo
South Coast AQMD Air District, Summer**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	4.50	1000sqft	0.10	4,500.00	0
Library	4.00	1000sqft	0.09	4,000.00	0
Apartments Low Rise	5.00	Dwelling Unit	0.31	4,000.00	7

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	9			Operational Year	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	592.74	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

California State University, Long Beach Housing Expansion Phase 1 – Housing Administration and Commo - South Coast AQMD Air District, Summer

Project Characteristics - Compliance with SCE 2020 33% RPS

Land Use - From Project Description

Construction Phase - Based on construction schedule from Project Description

Off-road Equipment -

Off-road Equipment - Construction phased equipment based on Contractor's projections of construction assumptions.

Off-road Equipment - Construction phased equipment based on Contractor's projections of construction assumptions.

Off-road Equipment - Construction phased equipment based on Contractor's projections of construction assumptions.

Energy Use - Project would be able to fully generate its energy needs. No Electricity or natural gas would be used.

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstructionPhase	NumDays	100.00	190.00
tblConstructionPhase	NumDays	10.00	45.00
tblConstructionPhase	NumDays	1.00	20.00
tblEnergyUse	LightingElect	810.36	0.00
tblEnergyUse	LightingElect	3.77	0.00
tblEnergyUse	LightingElect	3.10	0.00
tblEnergyUse	NT24E	3,172.76	0.00
tblEnergyUse	NT24E	4.62	0.00
tblEnergyUse	NT24E	5.75	0.00
tblEnergyUse	NT24NG	6,384.00	0.00
tblEnergyUse	NT24NG	0.39	0.00
tblEnergyUse	NT24NG	4.45	0.00
tblEnergyUse	T24E	257.27	0.00
tblEnergyUse	T24E	4.60	0.00
tblEnergyUse	T24E	2.25	0.00
tblEnergyUse	T24NG	9,955.77	0.00

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tblEnergyUse	T24NG	10.02	0.00
tblEnergyUse	T24NG	13.65	0.00
tblFireplaces	FireplaceDayYear	25.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	4.25	0.00
tblFireplaces	NumberNoFireplace	0.50	0.00
tblFireplaces	NumberWood	0.25	0.00
tblGrading	AcresOfGrading	10.00	3.00
tblGrading	MaterialExported	0.00	4,000.00
tblLandUse	LandUseSquareFeet	5,000.00	4,000.00
tblLandUse	Population	14.00	7.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	4.00	8.00
tblOffRoadEquipment	UsageHours	6.00	4.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	592.74
tblSequestration	NumberOfNewTrees	0.00	27.00
tblTripsAndVMT	HaulingTripLength	20.00	23.00
tblTripsAndVMT	HaulingTripLength	20.00	23.00
tblTripsAndVMT	HaulingTripLength	20.00	23.00
tblTripsAndVMT	HaulingTripLength	20.00	23.00
tblTripsAndVMT	HaulingTripNumber	105.00	30.00
tblTripsAndVMT	HaulingTripNumber	500.00	10.00
tblTripsAndVMT	HaulingTripNumber	0.00	10.00
tblTripsAndVMT	WorkerTripNumber	15.00	100.00

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tblTripsAndVMT	WorkerTripNumber	18.00	100.00
tblTripsAndVMT	WorkerTripNumber	7.00	200.00
tblTripsAndVMT	WorkerTripNumber	1.00	40.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TTP	48.00	0.00
tblVehicleTrips	CC_TTP	43.00	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	5.00	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	52.00	0.00
tblVehicleTrips	DV_TP	11.00	0.00
tblVehicleTrips	DV_TP	19.00	0.00
tblVehicleTrips	DV_TP	44.00	0.00
tblVehicleTrips	HO_TL	8.70	0.00
tblVehicleTrips	HO_TTP	40.60	0.00
tblVehicleTrips	HS_TL	5.90	0.00
tblVehicleTrips	HS_TTP	19.20	0.00
tblVehicleTrips	HW_TL	14.70	0.00
tblVehicleTrips	HW_TTP	40.20	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PB_TP	12.00	0.00

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tblVehicleTrips	PR_TP	86.00	0.00
tblVehicleTrips	PR_TP	77.00	0.00
tblVehicleTrips	PR_TP	44.00	0.00
tblVehicleTrips	ST_TR	7.16	0.00
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	46.55	0.00
tblVehicleTrips	SU_TR	6.07	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	25.49	0.00
tblVehicleTrips	WD_TR	6.59	0.00
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	56.24	0.00
tblWater	IndoorWaterUseRate	325,770.13	0.00
tblWater	IndoorWaterUseRate	799,801.87	0.00
tblWater	IndoorWaterUseRate	125,155.63	0.00
tblWoodstoves	NumberCatalytic	0.25	0.00
tblWoodstoves	NumberNoncatalytic	0.25	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

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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	0.2886	4.7800e-003	0.4143	2.0000e-005		2.2800e-003	2.2800e-003		2.2800e-003	2.2800e-003	0.0000	0.7446	0.7446	7.2000e-004	0.0000	0.7627
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	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		0.0000	0.0000	0.0000		0.0000
Total	0.2886	4.7800e-003	0.4143	2.0000e-005	0.0000	2.2800e-003	2.2800e-003	0.0000	2.2800e-003	2.2800e-003	0.0000	0.7446	0.7446	7.2000e-004	0.0000	0.7627

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	0.2886	4.7800e-003	0.4143	2.0000e-005		2.2800e-003	2.2800e-003		2.2800e-003	2.2800e-003	0.0000	0.7446	0.7446	7.2000e-004	0.0000	0.7627
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	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		0.0000	0.0000	0.0000		0.0000
Total	0.2886	4.7800e-003	0.4143	2.0000e-005	0.0000	2.2800e-003	2.2800e-003	0.0000	2.2800e-003	2.2800e-003	0.0000	0.7446	0.7446	7.2000e-004	0.0000	0.7627

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	5/4/2020	7/3/2020	5	45	
2	Site Preparation	Site Preparation	7/6/2020	7/31/2020	5	20	
3	Building Construction	Building Construction	8/3/2020	4/23/2021	5	190	
4	Architectural Coating	Architectural Coating	4/26/2021	4/30/2021	5	5	

Acres of Grading (Site Preparation Phase): 3

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 8,100; Residential Outdoor: 2,700; Non-Residential Indoor: 12,750; Non-Residential Outdoor: 4,250; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	1	8.00	158	0.38
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Demolition	Rubber Tired Loaders	1	8.00	203	0.36
Demolition	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Site Preparation	Excavators	1	8.00	158	0.38
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Plate Compactors	1	8.00	8	0.43
Site Preparation	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Rubber Tired Loaders	1	8.00	203	0.36
Site Preparation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	1	4.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	100.00	0.00	30.00	14.70	6.90	23.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	100.00	0.00	10.00	14.70	6.90	23.00	LD_Mix	HDT_Mix	HHDT
Building Construction	4	200.00	2.00	10.00	14.70	6.90	23.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	40.00	0.00	0.00	14.70	6.90	23.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

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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					0.5041	0.0000	0.5041	0.0763	0.0000	0.0763			0.0000			0.0000
Off-Road	1.5912	15.7476	13.6656	0.0250		0.7970	0.7970		0.7491	0.7491		2,402.8978	2,402.8978	0.6230		2,418.4731
Total	1.5912	15.7476	13.6656	0.0250	0.5041	0.7970	1.3011	0.0763	0.7491	0.8254		2,402.8978	2,402.8978	0.6230		2,418.4731

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	5.6500e-003	0.1989	0.0404	5.8000e-004	0.0134	6.7000e-004	0.0141	3.6700e-003	6.4000e-004	4.3100e-003		63.0675	63.0675	4.1300e-003		63.1707
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	0.4524	0.3041	4.0882	0.0115	1.1178	8.4800e-003	1.1262	0.2964	7.8100e-003	0.3043		1,144.4175	1,144.4175	0.0329		1,145.2400
Total	0.4581	0.5030	4.1286	0.0121	1.1312	9.1500e-003	1.1403	0.3001	8.4500e-003	0.3086		1,207.4850	1,207.4850	0.0370		1,208.4107

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3.2 Demolition - 2020

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					0.2268	0.0000	0.2268	0.0343	0.0000	0.0343			0.0000			0.0000
Off-Road	1.5912	15.7476	13.6656	0.0250		0.7970	0.7970		0.7491	0.7491	0.0000	2,402.8978	2,402.8978	0.6230		2,418.4731
Total	1.5912	15.7476	13.6656	0.0250	0.2268	0.7970	1.0238	0.0343	0.7491	0.7834	0.0000	2,402.8978	2,402.8978	0.6230		2,418.4731

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	5.6500e-003	0.1989	0.0404	5.8000e-004	0.0134	6.7000e-004	0.0141	3.6700e-003	6.4000e-004	4.3100e-003		63.0675	63.0675	4.1300e-003		63.1707
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	0.4524	0.3041	4.0882	0.0115	1.1178	8.4800e-003	1.1262	0.2964	7.8100e-003	0.3043		1,144.4175	1,144.4175	0.0329		1,145.2400
Total	0.4581	0.5030	4.1286	0.0121	1.1312	9.1500e-003	1.1403	0.3001	8.4500e-003	0.3086		1,207.4850	1,207.4850	0.0370		1,208.4107

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3.3 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					6.2038	0.0000	6.2038	3.3308	0.0000	3.3308			0.0000			0.0000
Off-Road	2.6335	28.9416	15.6192	0.0333		1.2965	1.2965		1.1935	1.1935		3,211.3559	3,211.3559	1.0311		3,237.1321
Total	2.6335	28.9416	15.6192	0.0333	6.2038	1.2965	7.5002	3.3308	1.1935	4.5244		3,211.3559	3,211.3559	1.0311		3,237.1321

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	4.2400e-003	0.1491	0.0303	4.4000e-004	0.0101	5.0000e-004	0.0106	2.7500e-003	4.8000e-004	3.2300e-003		47.3006	47.3006	3.0900e-003		47.3780
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	0.4524	0.3041	4.0882	0.0115	1.1178	8.4800e-003	1.1262	0.2964	7.8100e-003	0.3043		1,144.4175	1,144.4175	0.0329		1,145.2400
Total	0.4567	0.4533	4.1185	0.0119	1.1278	8.9800e-003	1.1368	0.2992	8.2900e-003	0.3075		1,191.7181	1,191.7181	0.0360		1,192.6180

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3.3 Site Preparation - 2020

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					2.7917	0.0000	2.7917	1.4989	0.0000	1.4989			0.0000			0.0000
Off-Road	2.6335	28.9416	15.6192	0.0333		1.2965	1.2965		1.1935	1.1935	0.0000	3,211.3559	3,211.3559	1.0311		3,237.1321
Total	2.6335	28.9416	15.6192	0.0333	2.7917	1.2965	4.0882	1.4989	1.1935	2.6924	0.0000	3,211.3559	3,211.3559	1.0311		3,237.1321

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	4.2400e-003	0.1491	0.0303	4.4000e-004	0.0101	5.0000e-004	0.0106	2.7500e-003	4.8000e-004	3.2300e-003		47.3006	47.3006	3.0900e-003		47.3780
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	0.4524	0.3041	4.0882	0.0115	1.1178	8.4800e-003	1.1262	0.2964	7.8100e-003	0.3043		1,144.4175	1,144.4175	0.0329		1,145.2400
Total	0.4567	0.4533	4.1185	0.0119	1.1278	8.9800e-003	1.1368	0.2992	8.2900e-003	0.3075		1,191.7181	1,191.7181	0.0360		1,192.6180

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3.4 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	0.9444	10.2506	7.2649	0.0127		0.5368	0.5368		0.4939	0.4939		1,234.342 1	1,234.342 1	0.3992		1,244.322 3
Total	0.9444	10.2506	7.2649	0.0127		0.5368	0.5368		0.4939	0.4939		1,234.342 1	1,234.342 1	0.3992		1,244.322 3

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	4.5000e-004	0.0157	3.1900e-003	5.0000e-005	1.6500e-003	5.0000e-005	1.7000e-003	4.4000e-004	5.0000e-005	4.9000e-004		4.9790	4.9790	3.3000e-004		4.9872
Vendor	6.5700e-003	0.2099	0.0500	5.1000e-004	0.0128	1.0400e-003	0.0138	3.6900e-003	9.9000e-004	4.6800e-003		54.8897	54.8897	3.4500e-003		54.9759
Worker	0.9049	0.6083	8.1764	0.0230	2.2355	0.0170	2.2525	0.5929	0.0156	0.6085		2,288.834 9	2,288.834 9	0.0658		2,290.480 1
Total	0.9119	0.8338	8.2295	0.0235	2.2500	0.0181	2.2680	0.5970	0.0167	0.6137		2,348.703 6	2,348.703 6	0.0696		2,350.443 1

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3.4 Building Construction - 2020

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	0.9444	10.2506	7.2649	0.0127		0.5368	0.5368		0.4939	0.4939	0.0000	1,234.342 1	1,234.342 1	0.3992		1,244.322 3
Total	0.9444	10.2506	7.2649	0.0127		0.5368	0.5368		0.4939	0.4939	0.0000	1,234.342 1	1,234.342 1	0.3992		1,244.322 3

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	4.5000e-004	0.0157	3.1900e-003	5.0000e-005	1.6500e-003	5.0000e-005	1.7000e-003	4.4000e-004	5.0000e-005	4.9000e-004		4.9790	4.9790	3.3000e-004		4.9872
Vendor	6.5700e-003	0.2099	0.0500	5.1000e-004	0.0128	1.0400e-003	0.0138	3.6900e-003	9.9000e-004	4.6800e-003		54.8897	54.8897	3.4500e-003		54.9759
Worker	0.9049	0.6083	8.1764	0.0230	2.2355	0.0170	2.2525	0.5929	0.0156	0.6085		2,288.834 9	2,288.834 9	0.0658		2,290.480 1
Total	0.9119	0.8338	8.2295	0.0235	2.2500	0.0181	2.2680	0.5970	0.0167	0.6137		2,348.703 6	2,348.703 6	0.0696		2,350.443 1

California State University, Long Beach Housing Expansion Phase 1 – Housing Administration and Commo - South Coast AQMD Air District, Summer

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8521	9.2305	7.0872	0.0128		0.4623	0.4623		0.4253	0.4253		1,234.5543	1,234.5543	0.3993		1,244.5363
Total	0.8521	9.2305	7.0872	0.0128		0.4623	0.4623		0.4253	0.4253		1,234.5543	1,234.5543	0.3993		1,244.5363

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	4.3000e-004	0.0146	3.1600e-003	5.0000e-005	2.1300e-003	5.0000e-005	2.1800e-003	5.5000e-004	5.0000e-005	6.0000e-004		4.9267	4.9267	3.2000e-004		4.9347
Vendor	5.5700e-003	0.1908	0.0453	5.1000e-004	0.0128	3.8000e-004	0.0132	3.6900e-003	3.7000e-004	4.0500e-003		54.4877	54.4877	3.3000e-003		54.5701
Worker	0.8442	0.5475	7.5345	0.0222	2.2355	0.0165	2.2520	0.5929	0.0152	0.6080		2,214.8066	2,214.8066	0.0596		2,216.2956
Total	0.8502	0.7528	7.5829	0.0228	2.2505	0.0169	2.2673	0.5971	0.0156	0.6127		2,274.2210	2,274.2210	0.0632		2,275.8004

California State University, Long Beach Housing Expansion Phase 1 – Housing Administration and Commo - South Coast AQMD Air District, Summer

3.4 Building Construction - 2021

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	0.8521	9.2305	7.0872	0.0128		0.4623	0.4623		0.4253	0.4253	0.0000	1,234.5543	1,234.5543	0.3993		1,244.5363
Total	0.8521	9.2305	7.0872	0.0128		0.4623	0.4623		0.4253	0.4253	0.0000	1,234.5543	1,234.5543	0.3993		1,244.5363

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	4.3000e-004	0.0146	3.1600e-003	5.0000e-005	2.1300e-003	5.0000e-005	2.1800e-003	5.5000e-004	5.0000e-005	6.0000e-004		4.9267	4.9267	3.2000e-004		4.9347
Vendor	5.5700e-003	0.1908	0.0453	5.1000e-004	0.0128	3.8000e-004	0.0132	3.6900e-003	3.7000e-004	4.0500e-003		54.4877	54.4877	3.3000e-003		54.5701
Worker	0.8442	0.5475	7.5345	0.0222	2.2355	0.0165	2.2520	0.5929	0.0152	0.6080		2,214.8066	2,214.8066	0.0596		2,216.2956
Total	0.8502	0.7528	7.5829	0.0228	2.2505	0.0169	2.2673	0.5971	0.0156	0.6127		2,274.2210	2,274.2210	0.0632		2,275.8004

California State University, Long Beach Housing Expansion Phase 1 – Housing Administration and Commo - South Coast AQMD Air District, Summer

3.5 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	20.7648					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	20.9837	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309

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	0.1689	0.1095	1.5069	4.4500e-003	0.4471	3.2900e-003	0.4504	0.1186	3.0300e-003	0.1216		442.9613	442.9613	0.0119		443.2591
Total	0.1689	0.1095	1.5069	4.4500e-003	0.4471	3.2900e-003	0.4504	0.1186	3.0300e-003	0.1216		442.9613	442.9613	0.0119		443.2591

California State University, Long Beach Housing Expansion Phase 1 – Housing Administration and Commo - South Coast AQMD Air District, Summer

3.5 Architectural Coating - 2021

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	20.7648					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309
Total	20.9837	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309

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	0.1689	0.1095	1.5069	4.4500e-003	0.4471	3.2900e-003	0.4504	0.1186	3.0300e-003	0.1216		442.9613	442.9613	0.0119		443.2591
Total	0.1689	0.1095	1.5069	4.4500e-003	0.4471	3.2900e-003	0.4504	0.1186	3.0300e-003	0.1216		442.9613	442.9613	0.0119		443.2591

4.0 Operational Detail - Mobile

California State University, Long Beach Housing Expansion Phase 1 – Housing Administration and Commo - South Coast AQMD Air District, Summer

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		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		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	0.00	0.00	0.00		
General Office Building	0.00	0.00	0.00		
Library	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	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
Library	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

California State University, Long Beach Housing Expansion Phase 1 – Housing Administration and Commo - South Coast AQMD Air District, Summer

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.548858	0.043235	0.200706	0.120309	0.016131	0.005851	0.021034	0.033479	0.002070	0.001877	0.004817	0.000707	0.000925
General Office Building	0.548858	0.043235	0.200706	0.120309	0.016131	0.005851	0.021034	0.033479	0.002070	0.001877	0.004817	0.000707	0.000925
Library	0.548858	0.043235	0.200706	0.120309	0.016131	0.005851	0.021034	0.033479	0.002070	0.001877	0.004817	0.000707	0.000925

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

Kilowatt Hours of Renewable Electricity Generated

Percent of Electricity Use Generated with Renewable 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		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		0.0000	0.0000	0.0000	0.0000	0.0000

California State University, Long Beach Housing Expansion Phase 1 – Housing Administration and Commo - South Coast AQMD Air District, Summer

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Library	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Library	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

California State University, Long Beach Housing Expansion Phase 1 – Housing Administration and Commo - South Coast AQMD Air District, Summer

6.1 Mitigation Measures Area

- Use Low VOC Paint - Residential Interior
- Use Low VOC Paint - Residential Exterior
- Use Low VOC Paint - Non-Residential Interior
- Use Low VOC Paint - Non-Residential Exterior
- No Hearths Installed
- Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.2886	4.7800e-003	0.4143	2.0000e-005		2.2800e-003	2.2800e-003		2.2800e-003	2.2800e-003	0.0000	0.7446	0.7446	7.2000e-004	0.0000	0.7627
Unmitigated	0.2886	4.7800e-003	0.4143	2.0000e-005		2.2800e-003	2.2800e-003		2.2800e-003	2.2800e-003	0.0000	0.7446	0.7446	7.2000e-004	0.0000	0.7627

California State University, Long Beach Housing Expansion Phase 1 – Housing Administration and Commo - South Coast AQMD Air District, Summer

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0284					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2475					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0126	4.7800e-003	0.4143	2.0000e-005		2.2800e-003	2.2800e-003		2.2800e-003	2.2800e-003		0.7446	0.7446	7.2000e-004		0.7627
Total	0.2886	4.7800e-003	0.4143	2.0000e-005		2.2800e-003	2.2800e-003		2.2800e-003	2.2800e-003	0.0000	0.7446	0.7446	7.2000e-004	0.0000	0.7627

California State University, Long Beach Housing Expansion Phase 1 – Housing Administration and Commo - South Coast AQMD Air District, Summer

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0284					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2475					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0126	4.7800e-003	0.4143	2.0000e-005		2.2800e-003	2.2800e-003		2.2800e-003	2.2800e-003		0.7446	0.7446	7.2000e-004		0.7627
Total	0.2886	4.7800e-003	0.4143	2.0000e-005		2.2800e-003	2.2800e-003		2.2800e-003	2.2800e-003	0.0000	0.7446	0.7446	7.2000e-004	0.0000	0.7627

7.0 Water Detail

7.1 Mitigation Measures Water

- Use Reclaimed Water
- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Use Water Efficient Irrigation System
- Use Water Efficient Landscaping

8.0 Waste Detail

California State University, Long Beach Housing Expansion Phase 1 - Earl Warren Drive - South Coast AQMD Air District, Summer

**California State University, Long Beach Housing Expansion Phase 1 - Earl Warren Drive
South Coast AQMD Air District, Summer**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	0.75	Acre	0.75	32,670.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	9			Operational Year	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	592.74	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Compliance with SCE 2020 33% RPS

Land Use - Demolition and Construction of Earl Warren Drive would disturb approximately 0.75 acres.

Construction Phase - From Project Description. Demolition and construction would last approximately seven months

Off-road Equipment - From Construction Assumptions

Off-road Equipment - From Construction Assumptions

Off-road Equipment - 2 loaders/backhoe required for site preparation

Grading - Demolition and construction of Earl Warren Drive would disturb approximately 0.75 acres. Limited utility trenching requires excavation of 6 feet for 370 feet (assumes 6ft in width) - 260 cubic yards of material

Vehicle Trips - Earl Warren Drive will accommodate an existing student population. No new trip generation anticipated.

Energy Use -

Mobile Land Use Mitigation -

Operational Off-Road Equipment - No off-road equipment

Trips and VMT - Number of construction workers required for project not included in PD. Assume 10 workers/day for demolition, 20 workers/day for site prep, and 10 workers/day for service

Area Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	5.00
tblConstructionPhase	NumDays	1.00	125.00
tblGrading	AcresOfGrading	10.00	0.75
tblGrading	MaterialExported	0.00	360.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	592.74
tblTripsAndVMT	HaulingTripLength	20.00	23.00
tblTripsAndVMT	HaulingTripLength	20.00	23.00
tblTripsAndVMT	HaulingTripLength	20.00	23.00
tblTripsAndVMT	HaulingTripNumber	45.00	46.00
tblTripsAndVMT	VendorTripNumber	0.00	6.00
tblTripsAndVMT	WorkerTripNumber	10.00	20.00
tblTripsAndVMT	WorkerTripNumber	5.00	40.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CW_TL	16.60	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					
2021	1.4620	9.9275	11.1187	0.0200	0.4612	0.4824	0.8761	0.1213	0.4473	0.5176	0.0000	1,903.3857	1,903.3857	0.4737	0.0000	1,915.2272
Maximum	1.4620	9.9275	11.1187	0.0200	0.4612	0.4824	0.8761	0.1213	0.4473	0.5176	0.0000	1,903.3857	1,903.3857	0.4737	0.0000	1,915.2272

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					
2021	1.4620	9.9275	11.1187	0.0200	0.4612	0.4824	0.8761	0.1213	0.4473	0.5176	0.0000	1,903.3857	1,903.3857	0.4737	0.0000	1,915.2272
Maximum	1.4620	9.9275	11.1187	0.0200	0.4612	0.4824	0.8761	0.1213	0.4473	0.5176	0.0000	1,903.3857	1,903.3857	0.4737	0.0000	1,915.2272

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

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
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Category	lb/day										lb/day				
	Area	Energy	Mobile	Total	Area	Energy	Mobile	Total	Area	Energy	Mobile	Total			
Area	0.0141	0.0000	8.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.6000e-004	1.6000e-004	0.0000	1.8000e-004	
Energy	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	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	0.0000	0.0000	0.0000	0.0000	
Total	0.0141	0.0000	8.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.6000e-004	1.6000e-004	0.0000	1.8000e-004	

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	0.0141	0.0000	8.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.6000e-004	1.6000e-004	0.0000		1.8000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	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		0.0000	0.0000	0.0000		0.0000
Total	0.0141	0.0000	8.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		1.6000e-004	1.6000e-004	0.0000	0.0000	1.8000e-004

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/4/2021	1/8/2021	5	5	

2	Site Preparation	Site Preparation	2/1/2021	7/23/2021	5	125
3	Paving	Paving	7/26/2021	7/30/2021	5	5

Acres of Grading (Site Preparation Phase): 0.75

Acres of Grading (Grading Phase): 0

Acres of Paving: 0.75

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	20.00	0.00	0.00	14.70	6.90	23.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	40.00	0.00	46.00	14.70	6.90	23.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	6.00	0.00	14.70	6.90	23.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7965	7.2530	7.5691	0.0120		0.4073	0.4073		0.3886	0.3886		1,147.4338	1,147.4338	0.2138		1,152.7797
Total	0.7965	7.2530	7.5691	0.0120		0.4073	0.4073		0.3886	0.3886		1,147.4338	1,147.4338	0.2138		1,152.7797

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	0.0844	0.0548	0.7535	2.2200e-003	0.2236	1.6500e-003	0.2252	0.0593	1.5200e-003	0.0608		221.4807	221.4807	5.9600e-003		221.6296
Total	0.0844	0.0548	0.7535	2.2200e-003	0.2236	1.6500e-003	0.2252	0.0593	1.5200e-003	0.0608		221.4807	221.4807	5.9600e-003		221.6296

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	0.7965	7.2530	7.5691	0.0120		0.4073	0.4073		0.3886	0.3886	0.0000	1,147.4338	1,147.4338	0.2138		1,152.7797
Total	0.7965	7.2530	7.5691	0.0120		0.4073	0.4073		0.3886	0.3886	0.0000	1,147.4338	1,147.4338	0.2138		1,152.7797

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	0.0844	0.0548	0.7535	2.2200e-003	0.2236	1.6500e-003	0.2252	0.0593	1.5200e-003	0.0608		221.4807	221.4807	5.9600e-003		221.6296
Total	0.0844	0.0548	0.7535	2.2200e-003	0.2236	1.6500e-003	0.2252	0.0593	1.5200e-003	0.0608		221.4807	221.4807	5.9600e-003		221.6296

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.6900e-003	0.0000	6.6900e-003	7.4000e-004	0.0000	7.4000e-004			0.0000			0.0000

Off-Road	0.8275	9.7162	6.2877	0.0128		0.4112	0.4112		0.3783	0.3783		1,243.4843	1,243.4843	0.4022		1,253.5385
Total	0.8275	9.7162	6.2877	0.0128	6.6900e-003	0.4112	0.4179	7.4000e-004	0.3783	0.3791		1,243.4843	1,243.4843	0.4022		1,253.5385

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	2.9800e-003	0.1018	0.0221	3.2000e-004	7.3900e-003	3.3000e-004	7.7200e-003	2.0300e-003	3.2000e-004	2.3400e-003		34.4474	34.4474	2.2400e-003		34.5035
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	0.1689	0.1095	1.5069	4.4500e-003	0.4471	3.2900e-003	0.4504	0.1186	3.0300e-003	0.1216		442.9613	442.9613	0.0119		443.2591
Total	0.1718	0.2113	1.5290	4.7700e-003	0.4545	3.6200e-003	0.4581	0.1206	3.3500e-003	0.1240		477.4087	477.4087	0.0142		477.7626

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					6.6900e-003	0.0000	6.6900e-003	7.4000e-004	0.0000	7.4000e-004			0.0000			0.0000
Off-Road	0.8275	9.7162	6.2877	0.0128		0.4112	0.4112		0.3783	0.3783	0.0000	1,243.4843	1,243.4843	0.4022		1,253.5385
Total	0.8275	9.7162	6.2877	0.0128	6.6900e-003	0.4112	0.4179	7.4000e-004	0.3783	0.3791	0.0000	1,243.4843	1,243.4843	0.4022		1,253.5385

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	2.9800e-003	0.1018	0.0221	3.2000e-004	7.3900e-003	3.3000e-004	7.7200e-003	2.0300e-003	3.2000e-004	2.3400e-003		34.4474	34.4474	2.2400e-003			34.5035
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	0.1689	0.1095	1.5069	4.4500e-003	0.4471	3.2900e-003	0.4504	0.1186	3.0300e-003	0.1216		442.9613	442.9613	0.0119			443.2591
Total	0.1718	0.2113	1.5290	4.7700e-003	0.4545	3.6200e-003	0.4581	0.1206	3.3500e-003	0.1240		477.4087	477.4087	0.0142			477.7626

3.4 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	0.9679	9.2229	10.2294	0.0163		0.4796	0.4796		0.4447	0.4447		1,518.4420	1,518.4420	0.4578			1,529.8873
Paving	0.3930					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	1.3609	9.2229	10.2294	0.0163		0.4796	0.4796		0.4447	0.4447		1,518.4420	1,518.4420	0.4578			1,529.8873

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
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Category	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
Vendor	0.0167	0.5723	0.1358	1.5300e-003	0.0384	1.1500e-003	0.0396	0.0111	1.1000e-003	0.0122	163.4631	163.4631	9.8900e-003	163.7103
Worker	0.0844	0.0548	0.7535	2.2200e-003	0.2236	1.6500e-003	0.2252	0.0593	1.5200e-003	0.0608	221.4807	221.4807	5.9600e-003	221.6296
Total	0.1011	0.6270	0.8893	3.7500e-003	0.2620	2.8000e-003	0.2648	0.0704	2.6200e-003	0.0730	384.9437	384.9437	0.0159	385.3398

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	0.9679	9.2229	10.2294	0.0163		0.4796	0.4796		0.4447	0.4447	0.0000	1,518.4420	1,518.4420	0.4578		1,529.8873
Paving	0.3930					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.3609	9.2229	10.2294	0.0163		0.4796	0.4796		0.4447	0.4447	0.0000	1,518.4420	1,518.4420	0.4578		1,529.8873

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	0.0167	0.5723	0.1358	1.5300e-003	0.0384	1.1500e-003	0.0396	0.0111	1.1000e-003	0.0122		163.4631	163.4631	9.8900e-003		163.7103

Worker	0.0844	0.0548	0.7535	2.2200e-003	0.2236	1.6500e-003	0.2252	0.0593	1.5200e-003	0.0608		221.4807	221.4807	5.9600e-003		221.6296
Total	0.1011	0.6270	0.8893	3.7500e-003	0.2620	2.8000e-003	0.2648	0.0704	2.6200e-003	0.0730		384.9437	384.9437	0.0159		385.3398

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		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		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	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
Other Asphalt Surfaces	0.548858	0.043235	0.200706	0.120309	0.016131	0.005851	0.021034	0.033479	0.002070	0.001877	0.004817	0.000707	0.000925

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		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		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					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

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	0.0141	0.0000	8.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.6000e-004	1.6000e-004	0.0000		1.8000e-004
Unmitigated	0.0141	0.0000	8.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.6000e-004	1.6000e-004	0.0000		1.8000e-004

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	2.4900e-003					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Consumer Products	0.0116					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Landscaping	1.0000e-005	0.0000	8.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.6000e-004	1.6000e-004	0.0000			1.8000e-004
Total	0.0141	0.0000	8.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.6000e-004	1.6000e-004	0.0000			1.8000e-004

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	2.4900e-003					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Consumer Products	0.0116					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Landscaping	1.0000e-005	0.0000	8.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.6000e-004	1.6000e-004	0.0000			1.8000e-004
Total	0.0141	0.0000	8.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.6000e-004	1.6000e-004	0.0000			1.8000e-004

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
	0	0.00	0			Diesel

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

California State University, Long Beach Housing Expansion Phase 1 – Housing Administration and Commo - South Coast AQMD Air District, Summer

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

User Defined Equipment

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

11.0 Vegetation

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**California State University, Long Beach Housing Expansion Phase 1 – Housing Administration and Commo
South Coast AQMD Air District, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	4.50	1000sqft	0.10	4,500.00	0
Library	4.00	1000sqft	0.09	4,000.00	0
Apartments Low Rise	5.00	Dwelling Unit	0.31	4,000.00	7

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	9			Operational Year	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	592.74	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

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Project Characteristics - Compliance with SCE 2020 33% RPS

Land Use - From Project Description

Construction Phase - Based on construction schedule from Project Description

Off-road Equipment -

Off-road Equipment - Construction phased equipment based on Contractor's projections of construction assumptions.

Off-road Equipment - Construction phased equipment based on Contractor's projections of construction assumptions.

Off-road Equipment - Construction phased equipment based on Contractor's projections of construction assumptions.

Energy Use - Project would be able to fully generate its energy needs. No Electricity or natural gas would be used.

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstructionPhase	NumDays	100.00	190.00
tblConstructionPhase	NumDays	10.00	45.00
tblConstructionPhase	NumDays	1.00	20.00
tblEnergyUse	LightingElect	810.36	0.00
tblEnergyUse	LightingElect	3.77	0.00
tblEnergyUse	LightingElect	3.10	0.00
tblEnergyUse	NT24E	3,172.76	0.00
tblEnergyUse	NT24E	4.62	0.00
tblEnergyUse	NT24E	5.75	0.00
tblEnergyUse	NT24NG	6,384.00	0.00
tblEnergyUse	NT24NG	0.39	0.00
tblEnergyUse	NT24NG	4.45	0.00
tblEnergyUse	T24E	257.27	0.00
tblEnergyUse	T24E	4.60	0.00
tblEnergyUse	T24E	2.25	0.00
tblEnergyUse	T24NG	9,955.77	0.00

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tblEnergyUse	T24NG	10.02	0.00
tblEnergyUse	T24NG	13.65	0.00
tblFireplaces	FireplaceDayYear	25.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	4.25	0.00
tblFireplaces	NumberNoFireplace	0.50	0.00
tblFireplaces	NumberWood	0.25	0.00
tblGrading	AcresOfGrading	10.00	3.00
tblGrading	MaterialExported	0.00	4,000.00
tblLandUse	LandUseSquareFeet	5,000.00	4,000.00
tblLandUse	Population	14.00	7.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	4.00	8.00
tblOffRoadEquipment	UsageHours	6.00	4.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	592.74
tblSequestration	NumberOfNewTrees	0.00	27.00
tblTripsAndVMT	HaulingTripLength	20.00	23.00
tblTripsAndVMT	HaulingTripLength	20.00	23.00
tblTripsAndVMT	HaulingTripLength	20.00	23.00
tblTripsAndVMT	HaulingTripLength	20.00	23.00
tblTripsAndVMT	HaulingTripNumber	105.00	30.00
tblTripsAndVMT	HaulingTripNumber	500.00	10.00
tblTripsAndVMT	HaulingTripNumber	0.00	10.00
tblTripsAndVMT	WorkerTripNumber	15.00	100.00

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tblTripsAndVMT	WorkerTripNumber	18.00	100.00
tblTripsAndVMT	WorkerTripNumber	7.00	200.00
tblTripsAndVMT	WorkerTripNumber	1.00	40.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TTP	48.00	0.00
tblVehicleTrips	CC_TTP	43.00	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	5.00	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	52.00	0.00
tblVehicleTrips	DV_TP	11.00	0.00
tblVehicleTrips	DV_TP	19.00	0.00
tblVehicleTrips	DV_TP	44.00	0.00
tblVehicleTrips	HO_TL	8.70	0.00
tblVehicleTrips	HO_TTP	40.60	0.00
tblVehicleTrips	HS_TL	5.90	0.00
tblVehicleTrips	HS_TTP	19.20	0.00
tblVehicleTrips	HW_TL	14.70	0.00
tblVehicleTrips	HW_TTP	40.20	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PB_TP	12.00	0.00

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tblVehicleTrips	PR_TP	86.00	0.00
tblVehicleTrips	PR_TP	77.00	0.00
tblVehicleTrips	PR_TP	44.00	0.00
tblVehicleTrips	ST_TR	7.16	0.00
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	46.55	0.00
tblVehicleTrips	SU_TR	6.07	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	25.49	0.00
tblVehicleTrips	WD_TR	6.59	0.00
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	56.24	0.00
tblWater	IndoorWaterUseRate	325,770.13	0.00
tblWater	IndoorWaterUseRate	799,801.87	0.00
tblWater	IndoorWaterUseRate	125,155.63	0.00
tblWoodstoves	NumberCatalytic	0.25	0.00
tblWoodstoves	NumberNoncatalytic	0.25	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	5-4-2020	8-3-2020	0.7049	0.7049
2	8-4-2020	11-3-2020	0.4269	0.4269
3	11-4-2020	2-3-2021	0.4144	0.4144
4	2-4-2021	5-3-2021	0.3730	0.3730
		Highest	0.7049	0.7049

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0519	6.0000e-004	0.0518	0.0000		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004	0.0000	0.0844	0.0844	8.0000e-005	0.0000	0.0865
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	2.0644	0.0000	2.0644	0.1220	0.0000	5.1145
Water						0.0000	0.0000		0.0000	0.0000	0.0000	2.6625	2.6625	1.3000e-004	3.0000e-005	2.6738
Total	0.0519	6.0000e-004	0.0518	0.0000	0.0000	2.9000e-004	2.9000e-004	0.0000	2.9000e-004	2.9000e-004	2.0644	2.7469	4.8113	0.1222	3.0000e-005	7.8748

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0519	6.0000e-004	0.0518	0.0000		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004	0.0000	0.0844	0.0844	8.0000e-005	0.0000	0.0865
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	-0.0239	-0.0239	0.0000	0.0000	-0.0240
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	2.0644	0.0000	2.0644	0.1220	0.0000	5.1145
Water						0.0000	0.0000		0.0000	0.0000	0.0000	2.5001	2.5001	1.2000e-004	3.0000e-005	2.5107
Total	0.0519	6.0000e-004	0.0518	0.0000	0.0000	2.9000e-004	2.9000e-004	0.0000	2.9000e-004	2.9000e-004	2.0644	2.5606	4.6250	0.1222	3.0000e-005	7.6876

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.78	3.87	0.01	0.00	2.38

2.3 Vegetation

Vegetation

	CO2e
Category	MT
New Trees	19.1160
Total	19.1160

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	5/4/2020	7/3/2020	5	45	
2	Site Preparation	Site Preparation	7/6/2020	7/31/2020	5	20	
3	Building Construction	Building Construction	8/3/2020	4/23/2021	5	190	
4	Architectural Coating	Architectural Coating	4/26/2021	4/30/2021	5	5	

Acres of Grading (Site Preparation Phase): 3

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 8,100; Residential Outdoor: 2,700; Non-Residential Indoor: 12,750; Non-Residential Outdoor: 4,250; Striped Parking Area: 0 (Architectural Coating – sqft)

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OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	1	8.00	158	0.38
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Demolition	Rubber Tired Loaders	1	8.00	203	0.36
Demolition	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Site Preparation	Excavators	1	8.00	158	0.38
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Plate Compactors	1	8.00	8	0.43
Site Preparation	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Rubber Tired Loaders	1	8.00	203	0.36
Site Preparation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	1	4.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	100.00	0.00	30.00	14.70	6.90	23.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	100.00	0.00	10.00	14.70	6.90	23.00	LD_Mix	HDT_Mix	HHDT
Building Construction	4	200.00	2.00	10.00	14.70	6.90	23.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	40.00	0.00	0.00	14.70	6.90	23.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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Water Exposed Area

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	tons/yr										MT/yr					
Fugitive Dust					0.0113	0.0000	0.0113	1.7200e-003	0.0000	1.7200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0358	0.3543	0.3075	5.6000e-004		0.0179	0.0179		0.0169	0.0169	0.0000	49.0471	49.0471	0.0127	0.0000	49.3650
Total	0.0358	0.3543	0.3075	5.6000e-004	0.0113	0.0179	0.0293	1.7200e-003	0.0169	0.0186	0.0000	49.0471	49.0471	0.0127	0.0000	49.3650

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.3000e-004	4.6200e-003	9.4000e-004	1.0000e-005	3.0000e-004	2.0000e-005	3.1000e-004	8.0000e-005	1.0000e-005	1.0000e-004	0.0000	1.2785	1.2785	9.0000e-005	0.0000	1.2806
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0100	7.7000e-003	0.0852	2.5000e-004	0.0247	1.9000e-004	0.0249	6.5600e-003	1.8000e-004	6.7300e-003	0.0000	22.2225	22.2225	6.4000e-004	0.0000	22.2384
Total	0.0102	0.0123	0.0862	2.6000e-004	0.0250	2.1000e-004	0.0252	6.6400e-003	1.9000e-004	6.8300e-003	0.0000	23.5010	23.5010	7.3000e-004	0.0000	23.5191

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3.2 Demolition - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.1000e-003	0.0000	5.1000e-003	7.7000e-004	0.0000	7.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0358	0.3543	0.3075	5.6000e-004		0.0179	0.0179		0.0169	0.0169	0.0000	49.0471	49.0471	0.0127	0.0000	49.3650
Total	0.0358	0.3543	0.3075	5.6000e-004	5.1000e-003	0.0179	0.0230	7.7000e-004	0.0169	0.0176	0.0000	49.0471	49.0471	0.0127	0.0000	49.3650

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.3000e-004	4.6200e-003	9.4000e-004	1.0000e-005	3.0000e-004	2.0000e-005	3.1000e-004	8.0000e-005	1.0000e-005	1.0000e-004	0.0000	1.2785	1.2785	9.0000e-005	0.0000	1.2806
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0100	7.7000e-003	0.0852	2.5000e-004	0.0247	1.9000e-004	0.0249	6.5600e-003	1.8000e-004	6.7300e-003	0.0000	22.2225	22.2225	6.4000e-004	0.0000	22.2384
Total	0.0102	0.0123	0.0862	2.6000e-004	0.0250	2.1000e-004	0.0252	6.6400e-003	1.9000e-004	6.8300e-003	0.0000	23.5010	23.5010	7.3000e-004	0.0000	23.5191

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3.3 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	tons/yr										MT/yr					
Fugitive Dust					0.0620	0.0000	0.0620	0.0333	0.0000	0.0333	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0263	0.2894	0.1562	3.3000e-004		0.0130	0.0130		0.0119	0.0119	0.0000	29.1329	29.1329	9.3500e-003	0.0000	29.3668
Total	0.0263	0.2894	0.1562	3.3000e-004	0.0620	0.0130	0.0750	0.0333	0.0119	0.0453	0.0000	29.1329	29.1329	9.3500e-003	0.0000	29.3668

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.0000e-005	1.5400e-003	3.1000e-004	0.0000	1.0000e-004	1.0000e-005	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.4262	0.4262	3.0000e-005	0.0000	0.4269
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.4600e-003	3.4200e-003	0.0379	1.1000e-004	0.0110	8.0000e-005	0.0111	2.9100e-003	8.0000e-005	2.9900e-003	0.0000	9.8767	9.8767	2.8000e-004	0.0000	9.8838
Total	4.5000e-003	4.9600e-003	0.0382	1.1000e-004	0.0111	9.0000e-005	0.0112	2.9400e-003	8.0000e-005	3.0200e-003	0.0000	10.3028	10.3028	3.1000e-004	0.0000	10.3106

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3.3 Site Preparation - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0279	0.0000	0.0279	0.0150	0.0000	0.0150	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0263	0.2894	0.1562	3.3000e-004		0.0130	0.0130		0.0119	0.0119	0.0000	29.1329	29.1329	9.3500e-003	0.0000	29.3667
Total	0.0263	0.2894	0.1562	3.3000e-004	0.0279	0.0130	0.0409	0.0150	0.0119	0.0269	0.0000	29.1329	29.1329	9.3500e-003	0.0000	29.3667

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.0000e-005	1.5400e-003	3.1000e-004	0.0000	1.0000e-004	1.0000e-005	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.4262	0.4262	3.0000e-005	0.0000	0.4269
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.4600e-003	3.4200e-003	0.0379	1.1000e-004	0.0110	8.0000e-005	0.0111	2.9100e-003	8.0000e-005	2.9900e-003	0.0000	9.8767	9.8767	2.8000e-004	0.0000	9.8838
Total	4.5000e-003	4.9600e-003	0.0382	1.1000e-004	0.0111	9.0000e-005	0.0112	2.9400e-003	8.0000e-005	3.0200e-003	0.0000	10.3028	10.3028	3.1000e-004	0.0000	10.3106

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3.4 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	tons/yr										MT/yr					
Off-Road	0.0515	0.5587	0.3959	6.9000e-004		0.0293	0.0293		0.0269	0.0269	0.0000	61.0278	61.0278	0.0197	0.0000	61.5213
Total	0.0515	0.5587	0.3959	6.9000e-004		0.0293	0.0293		0.0269	0.0269	0.0000	61.0278	61.0278	0.0197	0.0000	61.5213

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-005	8.8000e-004	1.8000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	3.0000e-005	0.0000	0.2445	0.2445	2.0000e-005	0.0000	0.2449
Vendor	3.7000e-004	0.0116	2.8800e-003	3.0000e-005	6.9000e-004	6.0000e-005	7.4000e-004	2.0000e-004	5.0000e-005	2.5000e-004	0.0000	2.6809	2.6809	1.8000e-004	0.0000	2.6853
Worker	0.0487	0.0373	0.4128	1.1900e-003	0.1196	9.2000e-004	0.1205	0.0318	8.5000e-004	0.0326	0.0000	107.6556	107.6556	3.0900e-003	0.0000	107.7328
Total	0.0491	0.0498	0.4159	1.2200e-003	0.1204	9.8000e-004	0.1213	0.0320	9.0000e-004	0.0329	0.0000	110.5810	110.5810	3.2900e-003	0.0000	110.6630

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3.4 Building Construction - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0515	0.5587	0.3959	6.9000e-004		0.0293	0.0293		0.0269	0.0269	0.0000	61.0277	61.0277	0.0197	0.0000	61.5212
Total	0.0515	0.5587	0.3959	6.9000e-004		0.0293	0.0293		0.0269	0.0269	0.0000	61.0277	61.0277	0.0197	0.0000	61.5212

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-005	8.8000e-004	1.8000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	3.0000e-005	0.0000	0.2445	0.2445	2.0000e-005	0.0000	0.2449
Vendor	3.7000e-004	0.0116	2.8800e-003	3.0000e-005	6.9000e-004	6.0000e-005	7.4000e-004	2.0000e-004	5.0000e-005	2.5000e-004	0.0000	2.6809	2.6809	1.8000e-004	0.0000	2.6853
Worker	0.0487	0.0373	0.4128	1.1900e-003	0.1196	9.2000e-004	0.1205	0.0318	8.5000e-004	0.0326	0.0000	107.6556	107.6556	3.0900e-003	0.0000	107.7328
Total	0.0491	0.0498	0.4159	1.2200e-003	0.1204	9.8000e-004	0.1213	0.0320	9.0000e-004	0.0329	0.0000	110.5810	110.5810	3.2900e-003	0.0000	110.6630

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3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0345	0.3738	0.2870	5.2000e-004		0.0187	0.0187		0.0172	0.0172	0.0000	45.3587	45.3587	0.0147	0.0000	45.7255
Total	0.0345	0.3738	0.2870	5.2000e-004		0.0187	0.0187		0.0172	0.0172	0.0000	45.3587	45.3587	0.0147	0.0000	45.7255

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-005	6.1000e-004	1.3000e-004	0.0000	8.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.1798	0.1798	1.0000e-005	0.0000	0.1801
Vendor	2.3000e-004	7.8400e-003	1.9400e-003	2.0000e-005	5.1000e-004	2.0000e-005	5.3000e-004	1.5000e-004	2.0000e-005	1.6000e-004	0.0000	1.9776	1.9776	1.3000e-004	0.0000	1.9807
Worker	0.0338	0.0250	0.2823	8.6000e-004	0.0889	6.7000e-004	0.0895	0.0236	6.1000e-004	0.0242	0.0000	77.4085	77.4085	2.0800e-003	0.0000	77.4604
Total	0.0340	0.0334	0.2843	8.8000e-004	0.0895	6.9000e-004	0.0902	0.0238	6.3000e-004	0.0244	0.0000	79.5658	79.5658	2.2200e-003	0.0000	79.6211

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3.4 Building Construction - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0345	0.3738	0.2870	5.2000e-004		0.0187	0.0187		0.0172	0.0172	0.0000	45.3587	45.3587	0.0147	0.0000	45.7254
Total	0.0345	0.3738	0.2870	5.2000e-004		0.0187	0.0187		0.0172	0.0172	0.0000	45.3587	45.3587	0.0147	0.0000	45.7254

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-005	6.1000e-004	1.3000e-004	0.0000	8.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.1798	0.1798	1.0000e-005	0.0000	0.1801
Vendor	2.3000e-004	7.8400e-003	1.9400e-003	2.0000e-005	5.1000e-004	2.0000e-005	5.3000e-004	1.5000e-004	2.0000e-005	1.6000e-004	0.0000	1.9776	1.9776	1.3000e-004	0.0000	1.9807
Worker	0.0338	0.0250	0.2823	8.6000e-004	0.0889	6.7000e-004	0.0895	0.0236	6.1000e-004	0.0242	0.0000	77.4085	77.4085	2.0800e-003	0.0000	77.4604
Total	0.0340	0.0334	0.2843	8.8000e-004	0.0895	6.9000e-004	0.0902	0.0238	6.3000e-004	0.0244	0.0000	79.5658	79.5658	2.2200e-003	0.0000	79.6211

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3.5 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0519					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.5000e-004	3.8200e-003	4.5400e-003	1.0000e-005		2.4000e-004	2.4000e-004		2.4000e-004	2.4000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6394
Total	0.0525	3.8200e-003	4.5400e-003	1.0000e-005		2.4000e-004	2.4000e-004		2.4000e-004	2.4000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6394

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.2000e-004	3.1000e-004	3.4800e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.9557	0.9557	3.0000e-005	0.0000	0.9563
Total	4.2000e-004	3.1000e-004	3.4800e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.9557	0.9557	3.0000e-005	0.0000	0.9563

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3.5 Architectural Coating - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0519					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.5000e-004	3.8200e-003	4.5400e-003	1.0000e-005		2.4000e-004	2.4000e-004		2.4000e-004	2.4000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6394
Total	0.0525	3.8200e-003	4.5400e-003	1.0000e-005		2.4000e-004	2.4000e-004		2.4000e-004	2.4000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6394

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.2000e-004	3.1000e-004	3.4800e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.9557	0.9557	3.0000e-005	0.0000	0.9563
Total	4.2000e-004	3.1000e-004	3.4800e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.9557	0.9557	3.0000e-005	0.0000	0.9563

4.0 Operational Detail - Mobile

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4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	0.00	0.00	0.00		
General Office Building	0.00	0.00	0.00		
Library	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	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
Library	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	0	0.0000	0.0000	0.0000	0.0000
General Office Building	0	0.0000	0.0000	0.0000	0.0000
Library	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	-29.6667	-0.0080	0.0000	0.0000	-0.0080
General Office Building	-29.6667	-0.0080	0.0000	0.0000	-0.0080
Library	-29.6667	-0.0080	0.0000	0.0000	-0.0080
Total		-0.0239	0.0000	0.0000	-0.0240

6.0 Area Detail

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6.1 Mitigation Measures Area

- Use Low VOC Paint - Residential Interior
- Use Low VOC Paint - Residential Exterior
- Use Low VOC Paint - Non-Residential Interior
- Use Low VOC Paint - Non-Residential Exterior
- No Hearths Installed
- Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0519	6.0000e-004	0.0518	0.0000		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004	0.0000	0.0844	0.0844	8.0000e-005	0.0000	0.0865
Unmitigated	0.0519	6.0000e-004	0.0518	0.0000		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004	0.0000	0.0844	0.0844	8.0000e-005	0.0000	0.0865

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6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	5.1900e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0452					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.5800e-003	6.0000e-004	0.0518	0.0000		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004	0.0000	0.0844	0.0844	8.0000e-005	0.0000	0.0865
Total	0.0519	6.0000e-004	0.0518	0.0000		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004	0.0000	0.0844	0.0844	8.0000e-005	0.0000	0.0865

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	5.1900e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0452					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.5800e-003	6.0000e-004	0.0518	0.0000		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004	0.0000	0.0844	0.0844	8.0000e-005	0.0000	0.0865
Total	0.0519	6.0000e-004	0.0518	0.0000		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004	0.0000	0.0844	0.0844	8.0000e-005	0.0000	0.0865

7.0 Water Detail

7.1 Mitigation Measures Water

- Use Reclaimed Water
- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Use Water Efficient Irrigation System
- Use Water Efficient Landscaping

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	2.5001	1.2000e-004	3.0000e-005	2.5107
Unmitigated	2.6625	1.3000e-004	3.0000e-005	2.6738

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	0 / 0.205377	0.6135	3.0000e-005	1.0000e-005	0.6161
General Office Building	0 / 0.490201	1.4643	7.0000e-005	1.0000e-005	1.4705
Library	0 / 0.195756	0.5847	3.0000e-005	1.0000e-005	0.5872
Total		2.6625	1.3000e-004	3.0000e-005	2.6738

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7.2 Water by Land Use**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	0 / 0.192849	0.5761	3.0000e-005	1.0000e-005	0.5785
General Office Building	0 / 0.460299	1.3749	7.0000e-005	1.0000e-005	1.3808
Library	0 / 0.183815	0.5491	3.0000e-005	1.0000e-005	0.5514
Total		2.5001	1.3000e-004	3.0000e-005	2.5107

8.0 Waste Detail**8.1 Mitigation Measures Waste**

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Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	2.0644	0.1220	0.0000	5.1145
Unmitigated	2.0644	0.1220	0.0000	5.1145

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	2.3	0.4669	0.0276	0.0000	1.1567
General Office Building	4.19	0.8505	0.0503	0.0000	2.1072
Library	3.68	0.7470	0.0442	0.0000	1.8507
Total		2.0644	0.1220	0.0000	5.1145

California State University, Long Beach Housing Expansion Phase 1 – Housing Administration and Commo - South Coast AQMD Air District, Annual

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	2.3	0.4669	0.0276	0.0000	1.1567
General Office Building	4.19	0.8505	0.0503	0.0000	2.1072
Library	3.68	0.7470	0.0442	0.0000	1.8507
Total		2.0644	0.1220	0.0000	5.1145

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	19.1160	0.0000	0.0000	19.1160

11.2 Net New Trees

Species Class

	Number of Trees	Total CO2	CH4	N2O	CO2e
		MT			
Miscellaneous	27	19.1160	0.0000	0.0000	19.1160
Total		19.1160	0.0000	0.0000	19.1160

California State University, Long Beach Housing Expansion Phase 1 - Earl Warren Drive - South Coast AQMD Air District, Annual

**California State University, Long Beach Housing Expansion Phase 1 - Earl Warren Drive
South Coast AQMD Air District, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	0.75	Acre	0.75	32,670.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	9			Operational Year	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	592.74	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Compliance with SCE 2020 33% RPS

Land Use - Demolition and Construction of Earl Warren Drive would disturb approximately 0.75 acres.

Construction Phase - From Project Description. Demolition and construction would last approximately seven months

Off-road Equipment - From Construction Assumptions

Off-road Equipment - From Construction Assumptions

Off-road Equipment - 2 loaders/backhoe required for site preparation

Grading - Demolition and construction of Earl Warren Drive would disturb approximately 0.75 acres. Limited utility trenching requires excavation of 6 feet for 370 feet (assumes 6ft in width) - 200 cubic yards of material

Vehicle Trips - Earl Warren Drive will accommodate an existing student population. No new trip generation anticipated.

Energy Use -

Mobile Land Use Mitigation -

Operational Off-Road Equipment - No off-road equipment

Trips and VMT - Number of construction workers required for project not included in PD. Assume 10 workers/day for demolition, 20 workers/day for site prep, and 10 workers/day for paving

Area Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	5.00
tblConstructionPhase	NumDays	1.00	125.00
tblGrading	AcresOfGrading	10.00	0.75
tblGrading	MaterialExported	0.00	360.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	592.74
tblTripsAndVMT	HaulingTripLength	20.00	23.00
tblTripsAndVMT	HaulingTripLength	20.00	23.00
tblTripsAndVMT	HaulingTripLength	20.00	23.00
tblTripsAndVMT	HaulingTripNumber	45.00	46.00
tblTripsAndVMT	VendorTripNumber	0.00	6.00
tblTripsAndVMT	WorkerTripNumber	10.00	20.00
tblTripsAndVMT	WorkerTripNumber	5.00	40.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CW_TL	16.60	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0682	0.6645	0.5299	1.1700e-003	0.0295	0.0282	0.0577	7.7700e-003	0.0260	0.0337	0.0000	103.7035	103.7035	0.0251	0.0000	104.3322
Maximum	0.0682	0.6645	0.5299	1.1700e-003	0.0295	0.0282	0.0577	7.7700e-003	0.0260	0.0337	0.0000	103.7035	103.7035	0.0251	0.0000	104.3322

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0682	0.6645	0.5299	1.1700e-003	0.0295	0.0282	0.0577	7.7700e-003	0.0260	0.0337	0.0000	103.7035	103.7035	0.0251	0.0000	104.3321
Maximum	0.0682	0.6645	0.5299	1.1700e-003	0.0295	0.0282	0.0577	7.7700e-003	0.0260	0.0337	0.0000	103.7035	103.7035	0.0251	0.0000	104.3321

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
5	11-4-2020	2-3-2021	0.0264	0.0264
6	2-4-2021	5-3-2021	0.3479	0.3479
7	5-4-2021	8-3-2021	0.3363	0.3363
		Highest	0.3479	0.3479

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	2.5700e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	2.5700e-003	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	2.5700e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	2.5700e-003	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/4/2021	1/8/2021	5	5	
2	Site Preparation	Site Preparation	2/1/2021	7/23/2021	5	125	
3	Paving	Paving	7/26/2021	7/30/2021	5	5	

Acres of Grading (Site Preparation Phase): 0.75

Acres of Grading (Grading Phase): 0

Acres of Paving: 0.75

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1000e-004	1.5000e-004	1.7400e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4778	0.4778	1.0000e-005	0.0000	0.4782
Total	2.1000e-004	1.5000e-004	1.7400e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4778	0.4778	1.0000e-005	0.0000	0.4782

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.9900e-003	0.0181	0.0189	3.0000e-005		1.0200e-003	1.0200e-003		9.7000e-004	9.7000e-004	0.0000	2.6023	2.6023	4.8000e-004	0.0000	2.6145
Total	1.9900e-003	0.0181	0.0189	3.0000e-005		1.0200e-003	1.0200e-003		9.7000e-004	9.7000e-004	0.0000	2.6023	2.6023	4.8000e-004	0.0000	2.6145

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1000e-004	1.5000e-004	1.7400e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4778	0.4778	1.0000e-005	0.0000	0.4782
Total	2.1000e-004	1.5000e-004	1.7400e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4778	0.4778	1.0000e-005	0.0000	0.4782

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					4.2000e-004	0.0000	4.2000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0517	0.6073	0.3930	8.0000e-004		0.0257	0.0257		0.0237	0.0237	0.0000	70.5044	70.5044	0.0228	0.0000	71.0744
Total	0.0517	0.6073	0.3930	8.0000e-004	4.2000e-004	0.0257	0.0261	5.0000e-005	0.0237	0.0237	0.0000	70.5044	70.5044	0.0228	0.0000	71.0744

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.9000e-004	6.5700e-003	1.4200e-003	2.0000e-005	4.5000e-004	2.0000e-005	4.8000e-004	1.2000e-004	2.0000e-005	1.4000e-004	0.0000	1.9397	1.9397	1.3000e-004	0.0000	1.9429
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0104	7.7000e-003	0.0871	2.6000e-004	0.0274	2.1000e-004	0.0276	7.2800e-003	1.9000e-004	7.4700e-003	0.0000	23.8915	23.8915	6.4000e-004	0.0000	23.9075
Total	0.0106	0.0143	0.0885	2.8000e-004	0.0279	2.3000e-004	0.0281	7.4000e-003	2.1000e-004	7.6100e-003	0.0000	25.8312	25.8312	7.7000e-004	0.0000	25.8504

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	tons/yr										MT/yr					
Fugitive Dust					4.2000e-004	0.0000	4.2000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0517	0.6073	0.3930	8.0000e-004		0.0257	0.0257		0.0237	0.0237	0.0000	70.5043	70.5043	0.0228	0.0000	71.0744
Total	0.0517	0.6073	0.3930	8.0000e-004	4.2000e-004	0.0257	0.0261	5.0000e-005	0.0237	0.0237	0.0000	70.5043	70.5043	0.0228	0.0000	71.0744

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.9000e-004	6.5700e-003	1.4200e-003	2.0000e-005	4.5000e-004	2.0000e-005	4.8000e-004	1.2000e-004	2.0000e-005	1.4000e-004	0.0000	1.9397	1.9397	1.3000e-004	0.0000	1.9429
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0104	7.7000e-003	0.0871	2.6000e-004	0.0274	2.1000e-004	0.0276	7.2800e-003	1.9000e-004	7.4700e-003	0.0000	23.8915	23.8915	6.4000e-004	0.0000	23.9075
Total	0.0106	0.0143	0.0885	2.8000e-004	0.0279	2.3000e-004	0.0281	7.4000e-003	2.1000e-004	7.6100e-003	0.0000	25.8312	25.8312	7.7000e-004	0.0000	25.8504

3.4 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.4200e-003	0.0231	0.0256	4.0000e-005		1.2000e-003	1.2000e-003		1.1100e-003	1.1100e-003	0.0000	3.4438	3.4438	1.0400e-003	0.0000	3.4697
Paving	9.8000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Total	3.4000e-003	0.0231	0.0256	4.0000e-005		1.2000e-003	1.2000e-003		1.1100e-003	1.1100e-003	0.0000	3.4438	3.4438	1.0400e-003	0.0000	3.4697
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Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.0000e-005	1.4500e-003	3.6000e-004	0.0000	9.0000e-005	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.3662	0.3662	2.0000e-005	0.0000	0.3668
Worker	2.1000e-004	1.5000e-004	1.7400e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4778	0.4778	1.0000e-005	0.0000	0.4782
Total	2.5000e-004	1.6000e-003	2.1000e-003	1.0000e-005	6.4000e-004	0.0000	6.5000e-004	1.8000e-004	0.0000	1.8000e-004	0.0000	0.8441	0.8441	3.0000e-005	0.0000	0.8450

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.4200e-003	0.0231	0.0256	4.0000e-005		1.2000e-003	1.2000e-003		1.1100e-003	1.1100e-003	0.0000	3.4438	3.4438	1.0400e-003	0.0000	3.4697
Paving	9.8000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	3.4000e-003	0.0231	0.0256	4.0000e-005		1.2000e-003	1.2000e-003		1.1100e-003	1.1100e-003	0.0000	3.4438	3.4438	1.0400e-003	0.0000	3.4697

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.0000e-005	1.4500e-003	3.6000e-004	0.0000	9.0000e-005	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.3662	0.3662	2.0000e-005	0.0000	0.3668
Worker	2.1000e-004	1.5000e-004	1.7400e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4778	0.4778	1.0000e-005	0.0000	0.4782
Total	2.5000e-004	1.6000e-003	2.1000e-003	1.0000e-005	6.4000e-004	0.0000	6.5000e-004	1.8000e-004	0.0000	1.8000e-004	0.0000	0.8441	0.8441	3.0000e-005	0.0000	0.8450

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT

Other Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	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
Other Asphalt Surfaces	0.548858	0.043235	0.200706	0.120309	0.016131	0.005851	0.021034	0.033479	0.002070	0.001877	0.004817	0.000707	0.000925

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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

5.2 Energy by Land Use - NaturalGas

Unmitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000

Total		0.0000	0.0000	0.0000	0.0000
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Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		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	tons/yr										MT/yr					
Mitigated	2.5700e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Unmitigated	2.5700e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	4.5000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.1100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Total	2.5600e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	4.5000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.1100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Total	2.5600e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

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

Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
	0	0.00	0			Diesel

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

