

Appendix A

CalEEMod Results

Houghton Park Community Center Improvements Project - Los Angeles-South Coast County, Annual

Houghton Park Community Center Improvements Project
Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government (Civic Center)	6.48	1000sqft	0.80	6,480.00	0
Parking Lot	27.00	Space	0.50	10,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	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 - Start date Jan 2018

Land Use - Total project site 1.3 acres

Construction Phase - Construction to last 16 months.

Demolition - 5,886 sf demolition

Vehicle Trips - 20 daily trips based on trip generation analysis prepared by LLG

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Area Coating - SCAQMD Rule 1113 - limit VOC paint to 50 g/L

Construction Off-road Equipment Mitigation - SCAQMD Rule 403 - water exposed areas twice daily

Off-road Equipment - Revised to expected construction equipment.

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Off-road Equipment -

Grading - Site prep area would not require multiple equipment passes.

Energy Use -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	100	50
tblAreaCoating	Area_EF_Nonresidential_Interior	100	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	NumDays	200.00	230.00
tblConstructionPhase	NumDays	4.00	15.00
tblConstructionPhase	NumDays	10.00	20.00

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tblConstructionPhase	NumDays	2.00	15.00
tblConstructionPhase	PhaseEndDate	6/20/2018	3/22/2018
tblConstructionPhase	PhaseEndDate	6/6/2018	1/25/2019
tblConstructionPhase	PhaseEndDate	1/12/2018	1/26/2018
tblConstructionPhase	PhaseEndDate	1/17/2018	3/9/2018
tblConstructionPhase	PhaseEndDate	6/13/2018	2/22/2019
tblConstructionPhase	PhaseEndDate	1/15/2018	2/16/2018
tblConstructionPhase	PhaseStartDate	6/14/2018	2/23/2018
tblConstructionPhase	PhaseStartDate	1/18/2018	3/12/2018
tblConstructionPhase	PhaseStartDate	1/16/2018	2/19/2018
tblConstructionPhase	PhaseStartDate	6/7/2018	1/28/2019
tblConstructionPhase	PhaseStartDate	1/13/2018	1/29/2018
tblGrading	AcresOfGrading	7.50	0.50
tblLandUse	LotAcreage	0.15	0.80
tblLandUse	LotAcreage	0.24	0.50
tblOffRoadEquipment	OffRoadEquipmentType	Rubber Tired Dozers	Concrete/Industrial Saws
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblProjectCharacteristics	OperationalYear	2018	2020
tblTripsAndVMT	WorkerTripNumber	8.00	5.00
tblTripsAndVMT	WorkerTripNumber	13.00	10.00
tblTripsAndVMT	WorkerTripNumber	20.00	18.00
tblVehicleTrips	ST_TR	0.00	20.00
tblVehicleTrips	SU_TR	0.00	20.00

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tblVehicleTrips	WD_TR	27.92	20.00
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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					
2018	0.4027	2.7876	2.1067	3.4400e-003	0.0923	0.1670	0.2593	0.0446	0.1593	0.2038	0.0000	296.1628	296.1628	0.0630	0.0000	297.7379
2019	0.0368	0.2831	0.2611	4.3000e-004	2.8800e-003	0.0162	0.0191	7.7000e-004	0.0153	0.0161	0.0000	36.7192	36.7192	8.2600e-003	0.0000	36.9256
Maximum	0.4027	2.7876	2.1067	3.4400e-003	0.0923	0.1670	0.2593	0.0446	0.1593	0.2038	0.0000	296.1628	296.1628	0.0630	0.0000	297.7379

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					
2018	0.4027	2.7876	2.1067	3.4400e-003	0.0486	0.1670	0.2156	0.0220	0.1593	0.1812	0.0000	296.1625	296.1625	0.0630	0.0000	297.7376
2019	0.0368	0.2831	0.2611	4.3000e-004	2.8800e-003	0.0162	0.0191	7.7000e-004	0.0153	0.0161	0.0000	36.7191	36.7191	8.2600e-003	0.0000	36.9255
Maximum	0.4027	2.7876	2.1067	3.4400e-003	0.0486	0.1670	0.2156	0.0220	0.1593	0.1812	0.0000	296.1625	296.1625	0.0630	0.0000	297.7376

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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	45.97	0.00	15.71	49.89	0.00	10.29	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-1-2018	3-31-2018	0.7809	0.7809
2	4-1-2018	6-30-2018	0.7786	0.7786
3	7-1-2018	9-30-2018	0.7871	0.7871
4	10-1-2018	12-31-2018	0.7874	0.7874
5	1-1-2019	3-31-2019	0.2993	0.2993
		Highest	0.7874	0.7874

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	0.0258	0.0000	4.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	8.3000e-004	8.3000e-004	0.0000	0.0000	8.9000e-004
Energy	3.7000e-004	3.3200e-003	2.7900e-003	2.0000e-005		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004	0.0000	34.1466	34.1466	1.3300e-003	3.3000e-004	34.2773
Mobile	0.0450	0.2291	0.6052	1.9500e-003	0.1519	2.0200e-003	0.1539	0.0407	1.8900e-003	0.0426	0.0000	179.4377	179.4377	0.0101	0.0000	179.6902
Waste						0.0000	0.0000		0.0000	0.0000	7.4985	0.0000	7.4985	0.4432	0.0000	18.5772
Water						0.0000	0.0000		0.0000	0.0000	0.4084	8.1337	8.5421	0.0423	1.0600e-003	9.9151
Total	0.0712	0.2324	0.6084	1.9700e-003	0.1519	2.2700e-003	0.1542	0.0407	2.1400e-003	0.0429	7.9069	221.7188	229.6257	0.4969	1.3900e-003	242.4607

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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	0.0258	0.0000	4.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	8.3000e-004	8.3000e-004	0.0000	0.0000	8.9000e-004
Energy	3.7000e-004	3.3200e-003	2.7900e-003	2.0000e-005		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004	0.0000	34.1466	34.1466	1.3300e-003	3.3000e-004	34.2773
Mobile	0.0450	0.2291	0.6052	1.9500e-003	0.1519	2.0200e-003	0.1539	0.0407	1.8900e-003	0.0426	0.0000	179.4377	179.4377	0.0101	0.0000	179.6902
Waste						0.0000	0.0000		0.0000	0.0000	7.4985	0.0000	7.4985	0.4432	0.0000	18.5772
Water						0.0000	0.0000		0.0000	0.0000	0.4084	8.1337	8.5421	0.0423	1.0600e-003	9.9151
Total	0.0712	0.2324	0.6084	1.9700e-003	0.1519	2.2700e-003	0.1542	0.0407	2.1400e-003	0.0429	7.9069	221.7188	229.6257	0.4969	1.3900e-003	242.4607

	ROG	NOx	CO	SO2	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

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2018	1/26/2018	5	20	
2	Site Preparation	Site Preparation	1/29/2018	2/16/2018	5	15	
3	Grading	Grading	2/19/2018	3/9/2018	5	15	
4	Building Construction	Building Construction	3/12/2018	1/25/2019	5	230	
5	Paving	Paving	1/28/2019	2/22/2019	5	20	
6	Architectural Coating	Architectural Coating	2/23/2018	3/22/2018	5	20	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 5.63

Acres of Paving: 0.5

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 9,720; Non-Residential Outdoor: 3,240; Striped Parking Area: 648 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Paving	Paving Equipment	1	8.00	132	0.36
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Building Construction	Welders	3	8.00	46	0.45

Trips and VMT

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Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	1.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	7.00	3.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	4	10.00	0.00	27.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	5	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.9000e-003	0.0000	2.9000e-003	4.4000e-004	0.0000	4.4000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0222	0.2173	0.1277	2.1000e-004		0.0125	0.0125		0.0117	0.0117	0.0000	18.8548	18.8548	4.6100e-003	0.0000	18.9701
Total	0.0222	0.2173	0.1277	2.1000e-004	2.9000e-003	0.0125	0.0154	4.4000e-004	0.0117	0.0122	0.0000	18.8548	18.8548	4.6100e-003	0.0000	18.9701

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3.2 Demolition - 2018

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	1.4000e-004	4.5100e-003	9.3000e-004	1.0000e-005	2.3000e-004	2.0000e-005	2.5000e-004	6.0000e-005	2.0000e-005	8.0000e-005	0.0000	1.0648	1.0648	8.0000e-005	0.0000	1.0667
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.5000e-004	4.7000e-004	5.1000e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	1.0888	1.0888	4.0000e-005	0.0000	1.0898
Total	6.9000e-004	4.9800e-003	6.0300e-003	2.0000e-005	1.3300e-003	3.0000e-005	1.3600e-003	3.5000e-004	3.0000e-005	3.8000e-004	0.0000	2.1536	2.1536	1.2000e-004	0.0000	2.1565

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.3000e-003	0.0000	1.3000e-003	2.0000e-004	0.0000	2.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0222	0.2173	0.1277	2.1000e-004		0.0125	0.0125		0.0117	0.0117	0.0000	18.8548	18.8548	4.6100e-003	0.0000	18.9701
Total	0.0222	0.2173	0.1277	2.1000e-004	1.3000e-003	0.0125	0.0138	2.0000e-004	0.0117	0.0119	0.0000	18.8548	18.8548	4.6100e-003	0.0000	18.9701

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3.2 Demolition - 2018

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	1.4000e-004	4.5100e-003	9.3000e-004	1.0000e-005	2.3000e-004	2.0000e-005	2.5000e-004	6.0000e-005	2.0000e-005	8.0000e-005	0.0000	1.0648	1.0648	8.0000e-005	0.0000	1.0667
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.5000e-004	4.7000e-004	5.1000e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	1.0888	1.0888	4.0000e-005	0.0000	1.0898
Total	6.9000e-004	4.9800e-003	6.0300e-003	2.0000e-005	1.3300e-003	3.0000e-005	1.3600e-003	3.5000e-004	3.0000e-005	3.8000e-004	0.0000	2.1536	2.1536	1.2000e-004	0.0000	2.1565

3.3 Site Preparation - 2018

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					0.0398	0.0000	0.0398	0.0218	0.0000	0.0218	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0136	0.1556	0.0606	1.3000e-004		7.1400e-003	7.1400e-003		6.5700e-003	6.5700e-003	0.0000	11.8072	11.8072	3.6800e-003	0.0000	11.8991
Total	0.0136	0.1556	0.0606	1.3000e-004	0.0398	7.1400e-003	0.0469	0.0218	6.5700e-003	0.0283	0.0000	11.8072	11.8072	3.6800e-003	0.0000	11.8991

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3.3 Site Preparation - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1000e-004	1.8000e-004	1.9100e-003	0.0000	4.1000e-004	0.0000	4.1000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.4083	0.4083	2.0000e-005	0.0000	0.4087
Total	2.1000e-004	1.8000e-004	1.9100e-003	0.0000	4.1000e-004	0.0000	4.1000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.4083	0.4083	2.0000e-005	0.0000	0.4087

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					0.0179	0.0000	0.0179	9.7900e-003	0.0000	9.7900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0136	0.1556	0.0606	1.3000e-004		7.1400e-003	7.1400e-003		6.5700e-003	6.5700e-003	0.0000	11.8072	11.8072	3.6800e-003	0.0000	11.8991
Total	0.0136	0.1556	0.0606	1.3000e-004	0.0179	7.1400e-003	0.0250	9.7900e-003	6.5700e-003	0.0164	0.0000	11.8072	11.8072	3.6800e-003	0.0000	11.8991

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3.3 Site Preparation - 2018

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	1.8000e-004	1.9100e-003	0.0000	4.1000e-004	0.0000	4.1000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.4083	0.4083	2.0000e-005	0.0000	0.4087
Total	2.1000e-004	1.8000e-004	1.9100e-003	0.0000	4.1000e-004	0.0000	4.1000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.4083	0.4083	2.0000e-005	0.0000	0.4087

3.4 Grading - 2018

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					0.0369	0.0000	0.0369	0.0189	0.0000	0.0189	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0169	0.1746	0.0940	1.7000e-004		9.1900e-003	9.1900e-003		8.6100e-003	8.6100e-003	0.0000	15.5646	15.5646	3.9000e-003	0.0000	15.6622
Total	0.0169	0.1746	0.0940	1.7000e-004	0.0369	9.1900e-003	0.0461	0.0189	8.6100e-003	0.0276	0.0000	15.5646	15.5646	3.9000e-003	0.0000	15.6622

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3.4 Grading - 2018

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	3.6000e-004	3.8200e-003	1.0000e-005	8.2000e-004	1.0000e-005	8.3000e-004	2.2000e-004	1.0000e-005	2.3000e-004	0.0000	0.8166	0.8166	3.0000e-005	0.0000	0.8174
Total	4.2000e-004	3.6000e-004	3.8200e-003	1.0000e-005	8.2000e-004	1.0000e-005	8.3000e-004	2.2000e-004	1.0000e-005	2.3000e-004	0.0000	0.8166	0.8166	3.0000e-005	0.0000	0.8174

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					0.0166	0.0000	0.0166	8.5200e-003	0.0000	8.5200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0169	0.1746	0.0940	1.7000e-004		9.1900e-003	9.1900e-003		8.6100e-003	8.6100e-003	0.0000	15.5646	15.5646	3.9000e-003	0.0000	15.6621
Total	0.0169	0.1746	0.0940	1.7000e-004	0.0166	9.1900e-003	0.0258	8.5200e-003	8.6100e-003	0.0171	0.0000	15.5646	15.5646	3.9000e-003	0.0000	15.6621

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3.4 Grading - 2018

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	3.6000e-004	3.8200e-003	1.0000e-005	8.2000e-004	1.0000e-005	8.3000e-004	2.2000e-004	1.0000e-005	2.3000e-004	0.0000	0.8166	0.8166	3.0000e-005	0.0000	0.8174
Total	4.2000e-004	3.6000e-004	3.8200e-003	1.0000e-005	8.2000e-004	1.0000e-005	8.3000e-004	2.2000e-004	1.0000e-005	2.3000e-004	0.0000	0.8166	0.8166	3.0000e-005	0.0000	0.8174

3.5 Building Construction - 2018

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	0.3086	2.1713	1.7447	2.6900e-003		0.1363	0.1363		0.1305	0.1305	0.0000	227.8579	227.8579	0.0496	0.0000	229.0968
Total	0.3086	2.1713	1.7447	2.6900e-003		0.1363	0.1363		0.1305	0.1305	0.0000	227.8579	227.8579	0.0496	0.0000	229.0968

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3.5 Building Construction - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.4800e-003	0.0396	0.0111	8.0000e-005	1.9900e-003	2.8000e-004	2.2700e-003	5.8000e-004	2.6000e-004	8.4000e-004	0.0000	7.9969	7.9969	5.5000e-004	0.0000	8.0106
Worker	4.0900e-003	3.5000e-003	0.0377	9.0000e-005	8.0900e-003	7.0000e-005	8.1700e-003	2.1500e-003	7.0000e-005	2.2200e-003	0.0000	8.0408	8.0408	3.0000e-004	0.0000	8.0483
Total	5.5700e-003	0.0431	0.0488	1.7000e-004	0.0101	3.5000e-004	0.0104	2.7300e-003	3.3000e-004	3.0600e-003	0.0000	16.0376	16.0376	8.5000e-004	0.0000	16.0589

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	0.3086	2.1713	1.7447	2.6900e-003		0.1363	0.1363		0.1305	0.1305	0.0000	227.8576	227.8576	0.0496	0.0000	229.0965
Total	0.3086	2.1713	1.7447	2.6900e-003		0.1363	0.1363		0.1305	0.1305	0.0000	227.8576	227.8576	0.0496	0.0000	229.0965

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3.5 Building Construction - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.4800e-003	0.0396	0.0111	8.0000e-005	1.9900e-003	2.8000e-004	2.2700e-003	5.8000e-004	2.6000e-004	8.4000e-004	0.0000	7.9969	7.9969	5.5000e-004	0.0000	8.0106
Worker	4.0900e-003	3.5000e-003	0.0377	9.0000e-005	8.0900e-003	7.0000e-005	8.1700e-003	2.1500e-003	7.0000e-005	2.2200e-003	0.0000	8.0408	8.0408	3.0000e-004	0.0000	8.0483
Total	5.5700e-003	0.0431	0.0488	1.7000e-004	0.0101	3.5000e-004	0.0104	2.7300e-003	3.3000e-004	3.0600e-003	0.0000	16.0376	16.0376	8.5000e-004	0.0000	16.0589

3.5 Building Construction - 2019

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	0.0244	0.1786	0.1530	2.4000e-004		0.0106	0.0106		0.0102	0.0102	0.0000	20.3578	20.3578	4.2800e-003	0.0000	20.4648
Total	0.0244	0.1786	0.1530	2.4000e-004		0.0106	0.0106		0.0102	0.0102	0.0000	20.3578	20.3578	4.2800e-003	0.0000	20.4648

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3.5 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.2000e-004	3.3700e-003	9.2000e-004	1.0000e-005	1.8000e-004	2.0000e-005	2.0000e-004	5.0000e-005	2.0000e-005	7.0000e-005	0.0000	0.7127	0.7127	5.0000e-005	0.0000	0.7139
Worker	3.3000e-004	2.8000e-004	3.0200e-003	1.0000e-005	7.3000e-004	1.0000e-005	7.4000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.7005	0.7005	2.0000e-005	0.0000	0.7011
Total	4.5000e-004	3.6500e-003	3.9400e-003	2.0000e-005	9.1000e-004	3.0000e-005	9.4000e-004	2.4000e-004	3.0000e-005	2.7000e-004	0.0000	1.4132	1.4132	7.0000e-005	0.0000	1.4150

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	0.0244	0.1786	0.1530	2.4000e-004		0.0106	0.0106		0.0102	0.0102	0.0000	20.3578	20.3578	4.2800e-003	0.0000	20.4648
Total	0.0244	0.1786	0.1530	2.4000e-004		0.0106	0.0106		0.0102	0.0102	0.0000	20.3578	20.3578	4.2800e-003	0.0000	20.4648

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3.5 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.2000e-004	3.3700e-003	9.2000e-004	1.0000e-005	1.8000e-004	2.0000e-005	2.0000e-004	5.0000e-005	2.0000e-005	7.0000e-005	0.0000	0.7127	0.7127	5.0000e-005	0.0000	0.7139
Worker	3.3000e-004	2.8000e-004	3.0200e-003	1.0000e-005	7.3000e-004	1.0000e-005	7.4000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.7005	0.7005	2.0000e-005	0.0000	0.7011
Total	4.5000e-004	3.6500e-003	3.9400e-003	2.0000e-005	9.1000e-004	3.0000e-005	9.4000e-004	2.4000e-004	3.0000e-005	2.7000e-004	0.0000	1.4132	1.4132	7.0000e-005	0.0000	1.4150

3.6 Paving - 2019

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	0.0104	0.1000	0.0960	1.5000e-004		5.5500e-003	5.5500e-003		5.1400e-003	5.1400e-003	0.0000	13.0522	13.0522	3.8400e-003	0.0000	13.1481
Paving	6.6000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0110	0.1000	0.0960	1.5000e-004		5.5500e-003	5.5500e-003		5.1400e-003	5.1400e-003	0.0000	13.0522	13.0522	3.8400e-003	0.0000	13.1481

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3.6 Paving - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.0000e-004	7.5000e-004	8.1700e-003	2.0000e-005	1.9700e-003	2.0000e-005	1.9900e-003	5.2000e-004	2.0000e-005	5.4000e-004	0.0000	1.8960	1.8960	7.0000e-005	0.0000	1.8977
Total	9.0000e-004	7.5000e-004	8.1700e-003	2.0000e-005	1.9700e-003	2.0000e-005	1.9900e-003	5.2000e-004	2.0000e-005	5.4000e-004	0.0000	1.8960	1.8960	7.0000e-005	0.0000	1.8977

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	0.0104	0.1000	0.0960	1.5000e-004		5.5500e-003	5.5500e-003		5.1400e-003	5.1400e-003	0.0000	13.0522	13.0522	3.8400e-003	0.0000	13.1481
Paving	6.6000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0110	0.1000	0.0960	1.5000e-004		5.5500e-003	5.5500e-003		5.1400e-003	5.1400e-003	0.0000	13.0522	13.0522	3.8400e-003	0.0000	13.1481

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3.6 Paving - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.0000e-004	7.5000e-004	8.1700e-003	2.0000e-005	1.9700e-003	2.0000e-005	1.9900e-003	5.2000e-004	2.0000e-005	5.4000e-004	0.0000	1.8960	1.8960	7.0000e-005	0.0000	1.8977
Total	9.0000e-004	7.5000e-004	8.1700e-003	2.0000e-005	1.9700e-003	2.0000e-005	1.9900e-003	5.2000e-004	2.0000e-005	5.4000e-004	0.0000	1.8960	1.8960	7.0000e-005	0.0000	1.8977

3.7 Architectural Coating - 2018

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	0.0315					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.9900e-003	0.0201	0.0185	3.0000e-005		1.5100e-003	1.5100e-003		1.5100e-003	1.5100e-003	0.0000	2.5533	2.5533	2.4000e-004	0.0000	2.5593
Total	0.0345	0.0201	0.0185	3.0000e-005		1.5100e-003	1.5100e-003		1.5100e-003	1.5100e-003	0.0000	2.5533	2.5533	2.4000e-004	0.0000	2.5593

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3.7 Architectural Coating - 2018

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	6.0000e-005	5.0000e-005	5.1000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1089	0.1089	0.0000	0.0000	0.1090
Total	6.0000e-005	5.0000e-005	5.1000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1089	0.1089	0.0000	0.0000	0.1090

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	0.0315					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.9900e-003	0.0201	0.0185	3.0000e-005		1.5100e-003	1.5100e-003		1.5100e-003	1.5100e-003	0.0000	2.5533	2.5533	2.4000e-004	0.0000	2.5593
Total	0.0345	0.0201	0.0185	3.0000e-005		1.5100e-003	1.5100e-003		1.5100e-003	1.5100e-003	0.0000	2.5533	2.5533	2.4000e-004	0.0000	2.5593

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3.7 Architectural Coating - 2018

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	6.0000e-005	5.0000e-005	5.1000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1089	0.1089	0.0000	0.0000	0.1090
Total	6.0000e-005	5.0000e-005	5.1000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1089	0.1089	0.0000	0.0000	0.1090

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0450	0.2291	0.6052	1.9500e-003	0.1519	2.0200e-003	0.1539	0.0407	1.8900e-003	0.0426	0.0000	179.4377	179.4377	0.0101	0.0000	179.6902
Unmitigated	0.0450	0.2291	0.6052	1.9500e-003	0.1519	2.0200e-003	0.1539	0.0407	1.8900e-003	0.0426	0.0000	179.4377	179.4377	0.0101	0.0000	179.6902

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Government (Civic Center)	129.60	129.60	129.60	400,222	400,222
Parking Lot	0.00	0.00	0.00		
Total	129.60	129.60	129.60	400,222	400,222

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
Government (Civic Center)	16.60	8.40	6.90	75.00	20.00	5.00	50	34	16
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Government (Civic Center)	0.547726	0.045437	0.201480	0.122768	0.016614	0.006090	0.019326	0.029174	0.002438	0.002359	0.005005	0.000677	0.000907
Parking Lot	0.547726	0.045437	0.201480	0.122768	0.016614	0.006090	0.019326	0.029174	0.002438	0.002359	0.005005	0.000677	0.000907

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5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	30.5295	30.5295	1.2600e-003	2.6000e-004	30.6388
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	30.5295	30.5295	1.2600e-003	2.6000e-004	30.6388
NaturalGas Mitigated	3.7000e-004	3.3200e-003	2.7900e-003	2.0000e-005		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004	0.0000	3.6170	3.6170	7.0000e-005	7.0000e-005	3.6385
NaturalGas Unmitigated	3.7000e-004	3.3200e-003	2.7900e-003	2.0000e-005		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004	0.0000	3.6170	3.6170	7.0000e-005	7.0000e-005	3.6385

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5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Government (Civic Center)	67780.8	3.7000e-004	3.3200e-003	2.7900e-003	2.0000e-005		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004	0.0000	3.6170	3.6170	7.0000e-005	7.0000e-005	3.6385
Parking Lot	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		3.7000e-004	3.3200e-003	2.7900e-003	2.0000e-005		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004	0.0000	3.6170	3.6170	7.0000e-005	7.0000e-005	3.6385

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Government (Civic Center)	67780.8	3.7000e-004	3.3200e-003	2.7900e-003	2.0000e-005		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004	0.0000	3.6170	3.6170	7.0000e-005	7.0000e-005	3.6385
Parking Lot	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		3.7000e-004	3.3200e-003	2.7900e-003	2.0000e-005		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004	0.0000	3.6170	3.6170	7.0000e-005	7.0000e-005	3.6385

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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			
Government (Civic Center)	86313.6	27.5014	1.1400e-003	2.3000e-004	27.5998
Parking Lot	9504	3.0282	1.3000e-004	3.0000e-005	3.0390
Total		30.5295	1.2700e-003	2.6000e-004	30.6388

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Government (Civic Center)	86313.6	27.5014	1.1400e-003	2.3000e-004	27.5998
Parking Lot	9504	3.0282	1.3000e-004	3.0000e-005	3.0390
Total		30.5295	1.2700e-003	2.6000e-004	30.6388

6.0 Area Detail

6.1 Mitigation Measures Area

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0258	0.0000	4.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	8.3000e-004	8.3000e-004	0.0000	0.0000	8.9000e-004
Unmitigated	0.0258	0.0000	4.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	8.3000e-004	8.3000e-004	0.0000	0.0000	8.9000e-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	tons/yr										MT/yr					
Architectural Coating	1.6500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0241					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.0000e-005	0.0000	4.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	8.3000e-004	8.3000e-004	0.0000	0.0000	8.9000e-004
Total	0.0258	0.0000	4.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	8.3000e-004	8.3000e-004	0.0000	0.0000	8.9000e-004

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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	1.6500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0241					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.0000e-005	0.0000	4.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	8.3000e-004	8.3000e-004	0.0000	0.0000	8.9000e-004
Total	0.0258	0.0000	4.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	8.3000e-004	8.3000e-004	0.0000	0.0000	8.9000e-004

7.0 Water Detail

7.1 Mitigation Measures Water

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	8.5421	0.0423	1.0600e-003	9.9151
Unmitigated	8.5421	0.0423	1.0600e-003	9.9151

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Government (Civic Center)	1.28731 / 0.788999	8.5421	0.0423	1.0600e-003	9.9151
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		8.5421	0.0423	1.0600e-003	9.9151

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7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Government (Civic Center)	1.28731 / 0.788999	8.5421	0.0423	1.0600e-003	9.9151
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		8.5421	0.0423	1.0600e-003	9.9151

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	7.4985	0.4432	0.0000	18.5772
Unmitigated	7.4985	0.4432	0.0000	18.5772

Houghton Park Community Center Improvements Project - Los Angeles-South Coast County, Annual

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Government (Civic Center)	36.94	7.4985	0.4432	0.0000	18.5772
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		7.4985	0.4432	0.0000	18.5772

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Government (Civic Center)	36.94	7.4985	0.4432	0.0000	18.5772
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		7.4985	0.4432	0.0000	18.5772

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

Houghton Park Community Center Improvements Project - Los Angeles-South Coast County, Summer

Houghton Park Community Center Improvements Project
Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government (Civic Center)	6.48	1000sqft	0.80	6,480.00	0
Parking Lot	27.00	Space	0.50	10,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Houghton Park Community Center Improvements Project - Los Angeles-South Coast County, Summer

Project Characteristics - Start date Jan 2018

Land Use - Total project site 1.3 acres

Construction Phase - Construction to last 16 months.

Demolition - 5,886 sf demolition

Vehicle Trips - 20 daily trips based on trip generation analysis prepared by LLG

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Area Coating - SCAQMD Rule 1113 - limit VOC paint to 50 g/L

Construction Off-road Equipment Mitigation - SCAQMD Rule 403 - water exposed areas twice daily

Off-road Equipment - Revised to expected construction equipment.

Off-road Equipment - Revised to expected construction equipment.

Off-road Equipment - Revised to expected construction equipment.

Off-road Equipment - Revised to expected construction equipment.

Off-road Equipment - Revised to expected construction equipment.

Off-road Equipment -

Grading - Site prep area would not require multiple equipment passes.

Energy Use -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	100	50
tblAreaCoating	Area_EF_Nonresidential_Interior	100	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	NumDays	200.00	230.00
tblConstructionPhase	NumDays	4.00	15.00
tblConstructionPhase	NumDays	10.00	20.00

Houghton Park Community Center Improvements Project - Los Angeles-South Coast County, Summer

tblConstructionPhase	NumDays	2.00	15.00
tblConstructionPhase	PhaseEndDate	6/20/2018	3/22/2018
tblConstructionPhase	PhaseEndDate	6/6/2018	1/25/2019
tblConstructionPhase	PhaseEndDate	1/12/2018	1/26/2018
tblConstructionPhase	PhaseEndDate	1/17/2018	3/9/2018
tblConstructionPhase	PhaseEndDate	6/13/2018	2/22/2019
tblConstructionPhase	PhaseEndDate	1/15/2018	2/16/2018
tblConstructionPhase	PhaseStartDate	6/14/2018	2/23/2018
tblConstructionPhase	PhaseStartDate	1/18/2018	3/12/2018
tblConstructionPhase	PhaseStartDate	1/16/2018	2/19/2018
tblConstructionPhase	PhaseStartDate	6/7/2018	1/28/2019
tblConstructionPhase	PhaseStartDate	1/13/2018	1/29/2018
tblGrading	AcresOfGrading	7.50	0.50
tblLandUse	LotAcreage	0.15	0.80
tblLandUse	LotAcreage	0.24	0.50
tblOffRoadEquipment	OffRoadEquipmentType	Rubber Tired Dozers	Concrete/Industrial Saws
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblProjectCharacteristics	OperationalYear	2018	2020
tblTripsAndVMT	WorkerTripNumber	8.00	5.00
tblTripsAndVMT	WorkerTripNumber	13.00	10.00
tblTripsAndVMT	WorkerTripNumber	20.00	18.00
tblVehicleTrips	ST_TR	0.00	20.00
tblVehicleTrips	SU_TR	0.00	20.00

Houghton Park Community Center Improvements Project - Los Angeles-South Coast County, Summer

tblVehicleTrips	WD_TR	27.92	20.00
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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					
2018	6.4354	25.3342	18.9244	0.0303	5.3606	1.4459	6.4139	2.9151	1.3906	3.8579	0.0000	2,847.009 1	2,847.009 1	0.6055	0.0000	2,860.854 9
2019	2.6141	19.1774	16.5393	0.0272	0.2012	1.1187	1.2162	0.0534	1.0713	1.0976	0.0000	2,530.720 2	2,530.720 2	0.5051	0.0000	2,543.347 8
Maximum	6.4354	25.3342	18.9244	0.0303	5.3606	1.4459	6.4139	2.9151	1.3906	3.8579	0.0000	2,847.009 1	2,847.009 1	0.6055	0.0000	2,860.854 9

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					
2018	6.4354	25.3342	18.9244	0.0303	2.4430	1.4459	3.7109	1.3199	1.3906	2.4688	0.0000	2,847.009 1	2,847.009 1	0.6055	0.0000	2,860.854 9
2019	2.6141	19.1774	16.5393	0.0272	0.2012	1.1187	1.2162	0.0534	1.0713	1.0976	0.0000	2,530.720 2	2,530.720 2	0.5051	0.0000	2,543.347 8
Maximum	6.4354	25.3342	18.9244	0.0303	2.4430	1.4459	3.7109	1.3199	1.3906	2.4688	0.0000	2,847.009 1	2,847.009 1	0.6055	0.0000	2,860.854 9

Houghton Park Community Center Improvements Project - Los Angeles-South Coast County, Summer

	ROG	NOx	CO	SO2	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	52.46	0.00	35.43	53.74	0.00	28.03	0.00	0.00	0.00	0.00	0.00	0.00

Houghton Park Community Center Improvements Project - Los Angeles-South Coast County, Summer

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	0.1415	3.0000e-005	3.4400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		7.3300e-003	7.3300e-003	2.0000e-005		7.8200e-003
Energy	2.0000e-003	0.0182	0.0153	1.1000e-004		1.3800e-003	1.3800e-003		1.3800e-003	1.3800e-003		21.8472	21.8472	4.2000e-004	4.0000e-004	21.9770
Mobile	0.2605	1.2038	3.4397	0.0111	0.8511	0.0111	0.8621	0.2278	0.0104	0.2382		1,126.6001	1,126.6001	0.0616		1,128.1409
Total	0.4040	1.2220	3.4584	0.0112	0.8511	0.0125	0.8635	0.2278	0.0118	0.2396		1,148.4546	1,148.4546	0.0621	4.0000e-004	1,150.1257

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	0.1415	3.0000e-005	3.4400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		7.3300e-003	7.3300e-003	2.0000e-005		7.8200e-003
Energy	2.0000e-003	0.0182	0.0153	1.1000e-004		1.3800e-003	1.3800e-003		1.3800e-003	1.3800e-003		21.8472	21.8472	4.2000e-004	4.0000e-004	21.9770
Mobile	0.2605	1.2038	3.4397	0.0111	0.8511	0.0111	0.8621	0.2278	0.0104	0.2382		1,126.6001	1,126.6001	0.0616		1,128.1409
Total	0.4040	1.2220	3.4584	0.0112	0.8511	0.0125	0.8635	0.2278	0.0118	0.2396		1,148.4546	1,148.4546	0.0621	4.0000e-004	1,150.1257

Houghton Park Community Center Improvements Project - Los Angeles-South Coast County, Summer

	ROG	NOx	CO	SO2	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	1/1/2018	1/26/2018	5	20	
2	Site Preparation	Site Preparation	1/29/2018	2/16/2018	5	15	
3	Grading	Grading	2/19/2018	3/9/2018	5	15	
4	Building Construction	Building Construction	3/12/2018	1/25/2019	5	230	
5	Paving	Paving	1/28/2019	2/22/2019	5	20	
6	Architectural Coating	Architectural Coating	2/23/2018	3/22/2018	5	20	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 5.63

Acres of Paving: 0.5

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 9,720; Non-Residential Outdoor: 3,240; Striped Parking Area: 648 (Architectural Coating – sqft)

OffRoad Equipment

Houghton Park Community Center Improvements Project - Los Angeles-South Coast County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Paving	Paving Equipment	1	8.00	132	0.36
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Building Construction	Welders	3	8.00	46	0.45

Trips and VMT

Houghton Park Community Center Improvements Project - Los Angeles-South Coast County, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	1.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	7.00	3.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	4	10.00	0.00	27.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	5	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2018

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					0.2897	0.0000	0.2897	0.0439	0.0000	0.0439			0.0000			0.0000
Off-Road	2.2177	21.7344	12.7740	0.0210		1.2502	1.2502		1.1715	1.1715		2,078.3899	2,078.3899	0.5084		2,091.1002
Total	2.2177	21.7344	12.7740	0.0210	0.2897	1.2502	1.5399	0.0439	1.1715	1.2154		2,078.3899	2,078.3899	0.5084		2,091.1002

Houghton Park Community Center Improvements Project - Los Angeles-South Coast County, Summer

3.2 Demolition - 2018

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	0.0134	0.4361	0.0902	1.0900e-003	0.0236	1.6600e-003	0.0253	6.4700e-003	1.5900e-003	8.0600e-003		118.2080	118.2080	8.1400e-003		118.4114
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	0.0553	0.0417	0.5401	1.2600e-003	0.1118	1.0000e-003	0.1128	0.0296	9.2000e-004	0.0306		125.3690	125.3690	4.7000e-003		125.4865
Total	0.0687	0.4778	0.6303	2.3500e-003	0.1354	2.6600e-003	0.1380	0.0361	2.5100e-003	0.0386		243.5770	243.5770	0.0128		243.8980

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					0.1304	0.0000	0.1304	0.0197	0.0000	0.0197			0.0000			0.0000
Off-Road	2.2177	21.7344	12.7740	0.0210		1.2502	1.2502		1.1715	1.1715	0.0000	2,078.3899	2,078.3899	0.5084		2,091.1002
Total	2.2177	21.7344	12.7740	0.0210	0.1304	1.2502	1.3805	0.0197	1.1715	1.1912	0.0000	2,078.3899	2,078.3899	0.5084		2,091.1002

Houghton Park Community Center Improvements Project - Los Angeles-South Coast County, Summer

3.2 Demolition - 2018

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	0.0134	0.4361	0.0902	1.0900e-003	0.0236	1.6600e-003	0.0253	6.4700e-003	1.5900e-003	8.0600e-003		118.2080	118.2080	8.1400e-003		118.4114
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	0.0553	0.0417	0.5401	1.2600e-003	0.1118	1.0000e-003	0.1128	0.0296	9.2000e-004	0.0306		125.3690	125.3690	4.7000e-003		125.4865
Total	0.0687	0.4778	0.6303	2.3500e-003	0.1354	2.6600e-003	0.1380	0.0361	2.5100e-003	0.0386		243.5770	243.5770	0.0128		243.8980

3.3 Site Preparation - 2018

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					5.3047	0.0000	5.3047	2.9003	0.0000	2.9003			0.0000			0.0000
Off-Road	1.8061	20.7472	8.0808	0.0172		0.9523	0.9523		0.8761	0.8761		1,735.3630	1,735.3630	0.5402		1,748.8690
Total	1.8061	20.7472	8.0808	0.0172	5.3047	0.9523	6.2569	2.9003	0.8761	3.7763		1,735.3630	1,735.3630	0.5402		1,748.8690

Houghton Park Community Center Improvements Project - Los Angeles-South Coast County, Summer

3.3 Site Preparation - 2018

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	0.0276	0.0209	0.2700	6.3000e-004	0.0559	5.0000e-004	0.0564	0.0148	4.6000e-004	0.0153		62.6845	62.6845	2.3500e-003		62.7433
Total	0.0276	0.0209	0.2700	6.3000e-004	0.0559	5.0000e-004	0.0564	0.0148	4.6000e-004	0.0153		62.6845	62.6845	2.3500e-003		62.7433

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					2.3871	0.0000	2.3871	1.3051	0.0000	1.3051			0.0000			0.0000
Off-Road	1.8061	20.7472	8.0808	0.0172		0.9523	0.9523		0.8761	0.8761	0.0000	1,735.3630	1,735.3630	0.5402		1,748.8690
Total	1.8061	20.7472	8.0808	0.0172	2.3871	0.9523	3.3394	1.3051	0.8761	2.1812	0.0000	1,735.3630	1,735.3630	0.5402		1,748.8690

Houghton Park Community Center Improvements Project - Los Angeles-South Coast County, Summer

3.3 Site Preparation - 2018

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	0.0276	0.0209	0.2700	6.3000e-004	0.0559	5.0000e-004	0.0564	0.0148	4.6000e-004	0.0153		62.6845	62.6845	2.3500e-003		62.7433
Total	0.0276	0.0209	0.2700	6.3000e-004	0.0559	5.0000e-004	0.0564	0.0148	4.6000e-004	0.0153		62.6845	62.6845	2.3500e-003		62.7433

3.4 Grading - 2018

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					4.9146	0.0000	4.9146	2.5257	0.0000	2.5257			0.0000			0.0000
Off-Road	2.2494	23.2826	12.5317	0.0231		1.2247	1.2247		1.1481	1.1481		2,287.6041	2,287.6041	0.5735		2,301.9427
Total	2.2494	23.2826	12.5317	0.0231	4.9146	1.2247	6.1393	2.5257	1.1481	3.6737		2,287.6041	2,287.6041	0.5735		2,301.9427

Houghton Park Community Center Improvements Project - Los Angeles-South Coast County, Summer

3.4 Grading - 2018

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	0.0553	0.0417	0.5401	1.2600e-003	0.1118	1.0000e-003	0.1128	0.0296	9.2000e-004	0.0306		125.3690	125.3690	4.7000e-003		125.4865
Total	0.0553	0.0417	0.5401	1.2600e-003	0.1118	1.0000e-003	0.1128	0.0296	9.2000e-004	0.0306		125.3690	125.3690	4.7000e-003		125.4865

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					2.2116	0.0000	2.2116	1.1365	0.0000	1.1365			0.0000			0.0000
Off-Road	2.2494	23.2826	12.5317	0.0231		1.2247	1.2247		1.1481	1.1481	0.0000	2,287.6041	2,287.6041	0.5735		2,301.9427
Total	2.2494	23.2826	12.5317	0.0231	2.2116	1.2247	3.4363	1.1365	1.1481	2.2846	0.0000	2,287.6041	2,287.6041	0.5735		2,301.9427

Houghton Park Community Center Improvements Project - Los Angeles-South Coast County, Summer

3.4 Grading - 2018

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	0.0553	0.0417	0.5401	1.2600e-003	0.1118	1.0000e-003	0.1128	0.0296	9.2000e-004	0.0306		125.3690	125.3690	4.7000e-003		125.4865
Total	0.0553	0.0417	0.5401	1.2600e-003	0.1118	1.0000e-003	0.1128	0.0296	9.2000e-004	0.0306		125.3690	125.3690	4.7000e-003		125.4865

3.5 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.9251	20.5811	16.5376	0.0255		1.2920	1.2920		1.2368	1.2368		2,380.7615	2,380.7615	0.5178		2,393.7056
Total	2.9251	20.5811	16.5376	0.0255		1.2920	1.2920		1.2368	1.2368		2,380.7615	2,380.7615	0.5178		2,393.7056

Houghton Park Community Center Improvements Project - Los Angeles-South Coast County, Summer

3.5 Building Construction - 2018

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	0.0138	0.3677	0.1005	7.9000e-004	0.0192	2.5900e-003	0.0218	5.5300e-003	2.4800e-003	8.0100e-003		84.5038	84.5038	5.5600e-003		84.6429
Worker	0.0387	0.0292	0.3781	8.8000e-004	0.0782	7.0000e-004	0.0789	0.0208	6.4000e-004	0.0214		87.7583	87.7583	3.2900e-003		87.8406
Total	0.0525	0.3969	0.4786	1.6700e-003	0.0975	3.2900e-003	0.1007	0.0263	3.1200e-003	0.0294		172.2621	172.2621	8.8500e-003		172.4835

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	2.9251	20.5811	16.5376	0.0255		1.2920	1.2920		1.2368	1.2368	0.0000	2,380.7615	2,380.7615	0.5178		2,393.7056
Total	2.9251	20.5811	16.5376	0.0255		1.2920	1.2920		1.2368	1.2368	0.0000	2,380.7615	2,380.7615	0.5178		2,393.7056

Houghton Park Community Center Improvements Project - Los Angeles-South Coast County, Summer

3.5 Building Construction - 2018

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	0.0138	0.3677	0.1005	7.9000e-004	0.0192	2.5900e-003	0.0218	5.5300e-003	2.4800e-003	8.0100e-003		84.5038	84.5038	5.5600e-003		84.6429
Worker	0.0387	0.0292	0.3781	8.8000e-004	0.0782	7.0000e-004	0.0789	0.0208	6.4000e-004	0.0214		87.7583	87.7583	3.2900e-003		87.8406
Total	0.0525	0.3969	0.4786	1.6700e-003	0.0975	3.2900e-003	0.1007	0.0263	3.1200e-003	0.0294		172.2621	172.2621	8.8500e-003		172.4835

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.5667	18.8045	16.1097	0.0255		1.1159	1.1159		1.0686	1.0686		2,362.1691	2,362.1691	0.4968		2,374.5898
Total	2.5667	18.8045	16.1097	0.0255		1.1159	1.1159		1.0686	1.0686		2,362.1691	2,362.1691	0.4968		2,374.5898

Houghton Park Community Center Improvements Project - Los Angeles-South Coast County, Summer

3.5 Building Construction - 2019

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	0.0125	0.3472	0.0921	7.8000e-004	0.0192	2.2100e-003	0.0214	5.5300e-003	2.1200e-003	7.6500e-003		83.6444	83.6444	5.3600e-003		83.7784
Worker	0.0350	0.0257	0.3375	8.5000e-004	0.0782	6.7000e-004	0.0789	0.0208	6.2000e-004	0.0214		84.9067	84.9067	2.9200e-003		84.9796
Total	0.0474	0.3729	0.4296	1.6300e-003	0.0975	2.8800e-003	0.1003	0.0263	2.7400e-003	0.0290		168.5511	168.5511	8.2800e-003		168.7580

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	2.5667	18.8045	16.1097	0.0255		1.1159	1.1159		1.0686	1.0686	0.0000	2,362.1691	2,362.1691	0.4968		2,374.5898
Total	2.5667	18.8045	16.1097	0.0255		1.1159	1.1159		1.0686	1.0686	0.0000	2,362.1691	2,362.1691	0.4968		2,374.5898

Houghton Park Community Center Improvements Project - Los Angeles-South Coast County, Summer

3.5 Building Construction - 2019

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	0.0125	0.3472	0.0921	7.8000e-004	0.0192	2.2100e-003	0.0214	5.5300e-003	2.1200e-003	7.6500e-003		83.6444	83.6444	5.3600e-003		83.7784
Worker	0.0350	0.0257	0.3375	8.5000e-004	0.0782	6.7000e-004	0.0789	0.0208	6.2000e-004	0.0214		84.9067	84.9067	2.9200e-003		84.9796
Total	0.0474	0.3729	0.4296	1.6300e-003	0.0975	2.8800e-003	0.1003	0.0263	2.7400e-003	0.0290		168.5511	168.5511	8.2800e-003		168.7580

3.6 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0360	10.0027	9.5964	0.0151		0.5549	0.5549		0.5139	0.5139		1,438.7570	1,438.7570	0.4230		1,449.3319
Paving	0.0655					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.1015	10.0027	9.5964	0.0151		0.5549	0.5549		0.5139	0.5139		1,438.7570	1,438.7570	0.4230		1,449.3319

Houghton Park Community Center Improvements Project - Los Angeles-South Coast County, Summer

3.6 Paving - 2019

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	0.0899	0.0661	0.8679	2.1900e-003	0.2012	1.7300e-003	0.2029	0.0534	1.6000e-003	0.0550		218.3315	218.3315	7.5000e-003		218.5190
Total	0.0899	0.0661	0.8679	2.1900e-003	0.2012	1.7300e-003	0.2029	0.0534	1.6000e-003	0.0550		218.3315	218.3315	7.5000e-003		218.5190

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0360	10.0027	9.5964	0.0151		0.5549	0.5549		0.5139	0.5139	0.0000	1,438.7570	1,438.7570	0.4230		1,449.3318
Paving	0.0655					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.1015	10.0027	9.5964	0.0151		0.5549	0.5549		0.5139	0.5139	0.0000	1,438.7570	1,438.7570	0.4230		1,449.3318

Houghton Park Community Center Improvements Project - Los Angeles-South Coast County, Summer

3.6 Paving - 2019

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	0.0899	0.0661	0.8679	2.1900e-003	0.2012	1.7300e-003	0.2029	0.0534	1.6000e-003	0.0550		218.3315	218.3315	7.5000e-003		218.5190
Total	0.0899	0.0661	0.8679	2.1900e-003	0.2012	1.7300e-003	0.2029	0.0534	1.6000e-003	0.0550		218.3315	218.3315	7.5000e-003		218.5190

3.7 Architectural Coating - 2018

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	3.1537					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.1171
Total	3.4523	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.1171

Houghton Park Community Center Improvements Project - Los Angeles-South Coast County, Summer

3.7 Architectural Coating - 2018

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	5.5200e-003	4.1700e-003	0.0540	1.3000e-004	0.0112	1.0000e-004	0.0113	2.9600e-003	9.0000e-005	3.0600e-003		12.5369	12.5369	4.7000e-004		12.5487
Total	5.5200e-003	4.1700e-003	0.0540	1.3000e-004	0.0112	1.0000e-004	0.0113	2.9600e-003	9.0000e-005	3.0600e-003		12.5369	12.5369	4.7000e-004		12.5487

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	3.1537					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267		282.1171
Total	3.4523	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267		282.1171

Houghton Park Community Center Improvements Project - Los Angeles-South Coast County, Summer

3.7 Architectural Coating - 2018

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	5.5200e-003	4.1700e-003	0.0540	1.3000e-004	0.0112	1.0000e-004	0.0113	2.9600e-003	9.0000e-005	3.0600e-003		12.5369	12.5369	4.7000e-004		12.5487
Total	5.5200e-003	4.1700e-003	0.0540	1.3000e-004	0.0112	1.0000e-004	0.0113	2.9600e-003	9.0000e-005	3.0600e-003		12.5369	12.5369	4.7000e-004		12.5487

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Houghton Park Community Center Improvements Project - Los Angeles-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.2605	1.2038	3.4397	0.0111	0.8511	0.0111	0.8621	0.2278	0.0104	0.2382		1,126.600 1	1,126.600 1	0.0616		1,128.140 9
Unmitigated	0.2605	1.2038	3.4397	0.0111	0.8511	0.0111	0.8621	0.2278	0.0104	0.2382		1,126.600 1	1,126.600 1	0.0616		1,128.140 9

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Government (Civic Center)	129.60	129.60	129.60	400,222	400,222
Parking Lot	0.00	0.00	0.00		
Total	129.60	129.60	129.60	400,222	400,222

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
Government (Civic Center)	16.60	8.40	6.90	75.00	20.00	5.00	50	34	16
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Government (Civic Center)	0.547726	0.045437	0.201480	0.122768	0.016614	0.006090	0.019326	0.029174	0.002438	0.002359	0.005005	0.000677	0.000907
Parking Lot	0.547726	0.045437	0.201480	0.122768	0.016614	0.006090	0.019326	0.029174	0.002438	0.002359	0.005005	0.000677	0.000907

Houghton Park Community Center Improvements Project - Los Angeles-South Coast County, Summer

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	2.0000e-003	0.0182	0.0153	1.1000e-004		1.3800e-003	1.3800e-003		1.3800e-003	1.3800e-003		21.8472	21.8472	4.2000e-004	4.0000e-004	21.9770
NaturalGas Unmitigated	2.0000e-003	0.0182	0.0153	1.1000e-004		1.3800e-003	1.3800e-003		1.3800e-003	1.3800e-003		21.8472	21.8472	4.2000e-004	4.0000e-004	21.9770

Houghton Park Community Center Improvements Project - Los Angeles-South Coast County, 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					
Government (Civic Center)	185.701	2.0000e-003	0.0182	0.0153	1.1000e-004		1.3800e-003	1.3800e-003		1.3800e-003	1.3800e-003		21.8472	21.8472	4.2000e-004	4.0000e-004	21.9770
Parking Lot	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		2.0000e-003	0.0182	0.0153	1.1000e-004		1.3800e-003	1.3800e-003		1.3800e-003	1.3800e-003		21.8472	21.8472	4.2000e-004	4.0000e-004	21.9770

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					
Government (Civic Center)	0.185701	2.0000e-003	0.0182	0.0153	1.1000e-004		1.3800e-003	1.3800e-003		1.3800e-003	1.3800e-003		21.8472	21.8472	4.2000e-004	4.0000e-004	21.9770
Parking Lot	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		2.0000e-003	0.0182	0.0153	1.1000e-004		1.3800e-003	1.3800e-003		1.3800e-003	1.3800e-003		21.8472	21.8472	4.2000e-004	4.0000e-004	21.9770

6.0 Area Detail

6.1 Mitigation Measures Area

Houghton Park Community Center Improvements Project - Los Angeles-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.1415	3.0000e-005	3.4400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		7.3300e-003	7.3300e-003	2.0000e-005		7.8200e-003
Unmitigated	0.1415	3.0000e-005	3.4400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		7.3300e-003	7.3300e-003	2.0000e-005		7.8200e-003

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	9.0500e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1321					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.2000e-004	3.0000e-005	3.4400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		7.3300e-003	7.3300e-003	2.0000e-005		7.8200e-003
Total	0.1415	3.0000e-005	3.4400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		7.3300e-003	7.3300e-003	2.0000e-005		7.8200e-003

Houghton Park Community Center Improvements Project - Los Angeles-South Coast County, 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	9.0500e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1321					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.2000e-004	3.0000e-005	3.4400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		7.3300e-003	7.3300e-003	2.0000e-005		7.8200e-003
Total	0.1415	3.0000e-005	3.4400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		7.3300e-003	7.3300e-003	2.0000e-005		7.8200e-003

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
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Houghton Park Community Center Improvements Project - Los Angeles-South Coast County, Summer

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

Houghton Park Community Center Improvements Project - Los Angeles-South Coast County, Winter

Houghton Park Community Center Improvements Project
Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government (Civic Center)	6.48	1000sqft	0.80	6,480.00	0
Parking Lot	27.00	Space	0.50	10,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Houghton Park Community Center Improvements Project - Los Angeles-South Coast County, Winter

Project Characteristics - Start date Jan 2018

Land Use - Total project site 1.3 acres

Construction Phase - Construction to last 16 months.

Demolition - 5,886 sf demolition

Vehicle Trips - 20 daily trips based on trip generation analysis prepared by LLG

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Area Coating - SCAQMD Rule 1113 - limit VOC paint to 50 g/L

Construction Off-road Equipment Mitigation - SCAQMD Rule 403 - water exposed areas twice daily

Off-road Equipment - Revised to expected construction equipment.

Off-road Equipment - Revised to expected construction equipment.

Off-road Equipment - Revised to expected construction equipment.

Off-road Equipment - Revised to expected construction equipment.

Off-road Equipment - Revised to expected construction equipment.

Off-road Equipment -

Grading - Site prep area would not require multiple equipment passes.

Energy Use -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	100	50
tblAreaCoating	Area_EF_Nonresidential_Interior	100	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	NumDays	200.00	230.00
tblConstructionPhase	NumDays	4.00	15.00
tblConstructionPhase	NumDays	10.00	20.00

Houghton Park Community Center Improvements Project - Los Angeles-South Coast County, Winter

tblConstructionPhase	NumDays	2.00	15.00
tblConstructionPhase	PhaseEndDate	6/20/2018	3/22/2018
tblConstructionPhase	PhaseEndDate	6/6/2018	1/25/2019
tblConstructionPhase	PhaseEndDate	1/12/2018	1/26/2018
tblConstructionPhase	PhaseEndDate	1/17/2018	3/9/2018
tblConstructionPhase	PhaseEndDate	6/13/2018	2/22/2019
tblConstructionPhase	PhaseEndDate	1/15/2018	2/16/2018
tblConstructionPhase	PhaseStartDate	6/14/2018	2/23/2018
tblConstructionPhase	PhaseStartDate	1/18/2018	3/12/2018
tblConstructionPhase	PhaseStartDate	1/16/2018	2/19/2018
tblConstructionPhase	PhaseStartDate	6/7/2018	1/28/2019
tblConstructionPhase	PhaseStartDate	1/13/2018	1/29/2018
tblGrading	AcresOfGrading	7.50	0.50
tblLandUse	LotAcreage	0.15	0.80
tblLandUse	LotAcreage	0.24	0.50
tblOffRoadEquipment	OffRoadEquipmentType	Rubber Tired Dozers	Concrete/Industrial Saws
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblProjectCharacteristics	OperationalYear	2018	2020
tblTripsAndVMT	WorkerTripNumber	8.00	5.00
tblTripsAndVMT	WorkerTripNumber	13.00	10.00
tblTripsAndVMT	WorkerTripNumber	20.00	18.00
tblVehicleTrips	ST_TR	0.00	20.00
tblVehicleTrips	SU_TR	0.00	20.00

Houghton Park Community Center Improvements Project - Los Angeles-South Coast County, Winter

tblVehicleTrips	WD_TR	27.92	20.00
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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					
2018	6.4407	25.3391	18.9001	0.0302	5.3606	1.4460	6.4139	2.9151	1.3906	3.8579	0.0000	2,838.901 1	2,838.901 1	0.6052	0.0000	2,852.751 0
2019	2.6184	19.1806	16.5210	0.0271	0.2012	1.1188	1.2162	0.0534	1.0714	1.0976	0.0000	2,523.501 4	2,523.501 4	0.5053	0.0000	2,536.133 8
Maximum	6.4407	25.3391	18.9001	0.0302	5.3606	1.4460	6.4139	2.9151	1.3906	3.8579	0.0000	2,838.901 1	2,838.901 1	0.6052	0.0000	2,852.751 0

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					
2018	6.4407	25.3391	18.9001	0.0302	2.4430	1.4460	3.7109	1.3199	1.3906	2.4688	0.0000	2,838.901 1	2,838.901 1	0.6052	0.0000	2,852.751 0
2019	2.6184	19.1806	16.5210	0.0271	0.2012	1.1188	1.2162	0.0534	1.0714	1.0976	0.0000	2,523.501 4	2,523.501 4	0.5053	0.0000	2,536.133 8
Maximum	6.4407	25.3391	18.9001	0.0302	2.4430	1.4460	3.7109	1.3199	1.3906	2.4688	0.0000	2,838.901 1	2,838.901 1	0.6052	0.0000	2,852.751 0

Houghton Park Community Center Improvements Project - Los Angeles-South Coast County, Winter

	ROG	NOx	CO	SO2	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	52.46	0.00	35.43	53.74	0.00	28.03	0.00	0.00	0.00	0.00	0.00	0.00

Houghton Park Community Center Improvements Project - Los Angeles-South Coast County, Winter

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	0.1415	3.0000e-005	3.4400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		7.3300e-003	7.3300e-003	2.0000e-005		7.8200e-003
Energy	2.0000e-003	0.0182	0.0153	1.1000e-004		1.3800e-003	1.3800e-003		1.3800e-003	1.3800e-003		21.8472	21.8472	4.2000e-004	4.0000e-004	21.9770
Mobile	0.2535	1.2355	3.2815	0.0105	0.8511	0.0111	0.8622	0.2278	0.0104	0.2382		1,071.5406	1,071.5406	0.0614		1,073.0761
Total	0.3970	1.2537	3.3002	0.0107	0.8511	0.0125	0.8636	0.2278	0.0118	0.2396		1,093.3951	1,093.3951	0.0619	4.0000e-004	1,095.0609

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	0.1415	3.0000e-005	3.4400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		7.3300e-003	7.3300e-003	2.0000e-005		7.8200e-003
Energy	2.0000e-003	0.0182	0.0153	1.1000e-004		1.3800e-003	1.3800e-003		1.3800e-003	1.3800e-003		21.8472	21.8472	4.2000e-004	4.0000e-004	21.9770
Mobile	0.2535	1.2355	3.2815	0.0105	0.8511	0.0111	0.8622	0.2278	0.0104	0.2382		1,071.5406	1,071.5406	0.0614		1,073.0761
Total	0.3970	1.2537	3.3002	0.0107	0.8511	0.0125	0.8636	0.2278	0.0118	0.2396		1,093.3951	1,093.3951	0.0619	4.0000e-004	1,095.0609

Houghton Park Community Center Improvements Project - Los Angeles-South Coast County, Winter

	ROG	NOx	CO	SO2	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	1/1/2018	1/26/2018	5	20	
2	Site Preparation	Site Preparation	1/29/2018	2/16/2018	5	15	
3	Grading	Grading	2/19/2018	3/9/2018	5	15	
4	Building Construction	Building Construction	3/12/2018	1/25/2019	5	230	
5	Paving	Paving	1/28/2019	2/22/2019	5	20	
6	Architectural Coating	Architectural Coating	2/23/2018	3/22/2018	5	20	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 5.63

Acres of Paving: 0.5

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 9,720; Non-Residential Outdoor: 3,240; Striped Parking Area: 648 (Architectural Coating – sqft)

OffRoad Equipment

Houghton Park Community Center Improvements Project - Los Angeles-South Coast County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Paving	Paving Equipment	1	8.00	132	0.36
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Building Construction	Welders	3	8.00	46	0.45

Trips and VMT

Houghton Park Community Center Improvements Project - Los Angeles-South Coast County, Winter

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	1.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	7.00	3.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	4	10.00	0.00	27.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	5	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2018

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					0.2897	0.0000	0.2897	0.0439	0.0000	0.0439			0.0000			0.0000
Off-Road	2.2177	21.7344	12.7740	0.0210		1.2502	1.2502		1.1715	1.1715		2,078.3899	2,078.3899	0.5084		2,091.1002
Total	2.2177	21.7344	12.7740	0.0210	0.2897	1.2502	1.5399	0.0439	1.1715	1.2154		2,078.3899	2,078.3899	0.5084		2,091.1002

Houghton Park Community Center Improvements Project - Los Angeles-South Coast County, Winter

3.2 Demolition - 2018

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	0.0137	0.4421	0.0965	1.0800e-003	0.0236	1.6900e-003	0.0253	6.4700e-003	1.6200e-003	8.0900e-003		116.2300	116.2300	8.4600e-003		116.4414
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	0.0612	0.0462	0.4973	1.1900e-003	0.1118	1.0000e-003	0.1128	0.0296	9.2000e-004	0.0306		118.0576	118.0576	4.4400e-003		118.1687
Total	0.0749	0.4883	0.5938	2.2700e-003	0.1354	2.6900e-003	0.1381	0.0361	2.5400e-003	0.0387		234.2876	234.2876	0.0129		234.6101

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					0.1304	0.0000	0.1304	0.0197	0.0000	0.0197			0.0000			0.0000
Off-Road	2.2177	21.7344	12.7740	0.0210		1.2502	1.2502		1.1715	1.1715	0.0000	2,078.3899	2,078.3899	0.5084		2,091.1002
Total	2.2177	21.7344	12.7740	0.0210	0.1304	1.2502	1.3805	0.0197	1.1715	1.1912	0.0000	2,078.3899	2,078.3899	0.5084		2,091.1002

Houghton Park Community Center Improvements Project - Los Angeles-South Coast County, Winter

3.2 Demolition - 2018

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	0.0137	0.4421	0.0965	1.0800e-003	0.0236	1.6900e-003	0.0253	6.4700e-003	1.6200e-003	8.0900e-003		116.2300	116.2300	8.4600e-003		116.4414
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	0.0612	0.0462	0.4973	1.1900e-003	0.1118	1.0000e-003	0.1128	0.0296	9.2000e-004	0.0306		118.0576	118.0576	4.4400e-003		118.1687
Total	0.0749	0.4883	0.5938	2.2700e-003	0.1354	2.6900e-003	0.1381	0.0361	2.5400e-003	0.0387		234.2876	234.2876	0.0129		234.6101

3.3 Site Preparation - 2018

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					5.3047	0.0000	5.3047	2.9003	0.0000	2.9003			0.0000			0.0000
Off-Road	1.8061	20.7472	8.0808	0.0172		0.9523	0.9523		0.8761	0.8761		1,735.3630	1,735.3630	0.5402		1,748.8690
Total	1.8061	20.7472	8.0808	0.0172	5.3047	0.9523	6.2569	2.9003	0.8761	3.7763		1,735.3630	1,735.3630	0.5402		1,748.8690

Houghton Park Community Center Improvements Project - Los Angeles-South Coast County, Winter

3.3 Site Preparation - 2018

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	0.0306	0.0231	0.2486	5.9000e-004	0.0559	5.0000e-004	0.0564	0.0148	4.6000e-004	0.0153		59.0288	59.0288	2.2200e-003		59.0843
Total	0.0306	0.0231	0.2486	5.9000e-004	0.0559	5.0000e-004	0.0564	0.0148	4.6000e-004	0.0153		59.0288	59.0288	2.2200e-003		59.0843

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					2.3871	0.0000	2.3871	1.3051	0.0000	1.3051			0.0000			0.0000
Off-Road	1.8061	20.7472	8.0808	0.0172		0.9523	0.9523		0.8761	0.8761	0.0000	1,735.3630	1,735.3630	0.5402		1,748.8690
Total	1.8061	20.7472	8.0808	0.0172	2.3871	0.9523	3.3394	1.3051	0.8761	2.1812	0.0000	1,735.3630	1,735.3630	0.5402		1,748.8690

Houghton Park Community Center Improvements Project - Los Angeles-South Coast County, Winter

3.3 Site Preparation - 2018

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	0.0306	0.0231	0.2486	5.9000e-004	0.0559	5.0000e-004	0.0564	0.0148	4.6000e-004	0.0153		59.0288	59.0288	2.2200e-003		59.0843
Total	0.0306	0.0231	0.2486	5.9000e-004	0.0559	5.0000e-004	0.0564	0.0148	4.6000e-004	0.0153		59.0288	59.0288	2.2200e-003		59.0843

3.4 Grading - 2018

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					4.9146	0.0000	4.9146	2.5257	0.0000	2.5257			0.0000			0.0000
Off-Road	2.2494	23.2826	12.5317	0.0231		1.2247	1.2247		1.1481	1.1481		2,287.6041	2,287.6041	0.5735		2,301.9427
Total	2.2494	23.2826	12.5317	0.0231	4.9146	1.2247	6.1393	2.5257	1.1481	3.6737		2,287.6041	2,287.6041	0.5735		2,301.9427

Houghton Park Community Center Improvements Project - Los Angeles-South Coast County, Winter

3.4 Grading - 2018

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	0.0612	0.0462	0.4973	1.1900e-003	0.1118	1.0000e-003	0.1128	0.0296	9.2000e-004	0.0306		118.0576	118.0576	4.4400e-003		118.1687
Total	0.0612	0.0462	0.4973	1.1900e-003	0.1118	1.0000e-003	0.1128	0.0296	9.2000e-004	0.0306		118.0576	118.0576	4.4400e-003		118.1687

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					2.2116	0.0000	2.2116	1.1365	0.0000	1.1365			0.0000			0.0000
Off-Road	2.2494	23.2826	12.5317	0.0231		1.2247	1.2247		1.1481	1.1481	0.0000	2,287.6041	2,287.6041	0.5735		2,301.9427
Total	2.2494	23.2826	12.5317	0.0231	2.2116	1.2247	3.4363	1.1365	1.1481	2.2846	0.0000	2,287.6041	2,287.6041	0.5735		2,301.9427

Houghton Park Community Center Improvements Project - Los Angeles-South Coast County, Winter

3.4 Grading - 2018

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	0.0612	0.0462	0.4973	1.1900e-003	0.1118	1.0000e-003	0.1128	0.0296	9.2000e-004	0.0306		118.0576	118.0576	4.4400e-003		118.1687
Total	0.0612	0.0462	0.4973	1.1900e-003	0.1118	1.0000e-003	0.1128	0.0296	9.2000e-004	0.0306		118.0576	118.0576	4.4400e-003		118.1687

3.5 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.9251	20.5811	16.5376	0.0255		1.2920	1.2920		1.2368	1.2368		2,380.7615	2,380.7615	0.5178		2,393.7056
Total	2.9251	20.5811	16.5376	0.0255		1.2920	1.2920		1.2368	1.2368		2,380.7615	2,380.7615	0.5178		2,393.7056

Houghton Park Community Center Improvements Project - Los Angeles-South Coast County, Winter

3.5 Building Construction - 2018

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	0.0144	0.3685	0.1105	7.7000e-004	0.0192	2.6300e-003	0.0218	5.5300e-003	2.5200e-003	8.0500e-003		82.2450	82.2450	5.9300e-003		82.3933
Worker	0.0428	0.0323	0.3481	8.3000e-004	0.0782	7.0000e-004	0.0789	0.0208	6.4000e-004	0.0214		82.6403	82.6403	3.1100e-003		82.7181
Total	0.0572	0.4008	0.4586	1.6000e-003	0.0975	3.3300e-003	0.1008	0.0263	3.1600e-003	0.0294		164.8853	164.8853	9.0400e-003		165.1114

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	2.9251	20.5811	16.5376	0.0255		1.2920	1.2920		1.2368	1.2368	0.0000	2,380.7615	2,380.7615	0.5178		2,393.7056
Total	2.9251	20.5811	16.5376	0.0255		1.2920	1.2920		1.2368	1.2368	0.0000	2,380.7615	2,380.7615	0.5178		2,393.7056

Houghton Park Community Center Improvements Project - Los Angeles-South Coast County, Winter

3.5 Building Construction - 2018

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	0.0144	0.3685	0.1105	7.7000e-004	0.0192	2.6300e-003	0.0218	5.5300e-003	2.5200e-003	8.0500e-003		82.2450	82.2450	5.9300e-003		82.3933
Worker	0.0428	0.0323	0.3481	8.3000e-004	0.0782	7.0000e-004	0.0789	0.0208	6.4000e-004	0.0214		82.6403	82.6403	3.1100e-003		82.7181
Total	0.0572	0.4008	0.4586	1.6000e-003	0.0975	3.3300e-003	0.1008	0.0263	3.1600e-003	0.0294		164.8853	164.8853	9.0400e-003		165.1114

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.5667	18.8045	16.1097	0.0255		1.1159	1.1159		1.0686	1.0686		2,362.1691	2,362.1691	0.4968		2,374.5898
Total	2.5667	18.8045	16.1097	0.0255		1.1159	1.1159		1.0686	1.0686		2,362.1691	2,362.1691	0.4968		2,374.5898

Houghton Park Community Center Improvements Project - Los Angeles-South Coast County, Winter

3.5 Building Construction - 2019

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	0.0130	0.3477	0.1015	7.6000e-004	0.0192	2.2500e-003	0.0215	5.5300e-003	2.1500e-003	7.6800e-003		81.3831	81.3831	5.7200e-003		81.5261
Worker	0.0388	0.0285	0.3097	8.0000e-004	0.0782	6.7000e-004	0.0789	0.0208	6.2000e-004	0.0214		79.9492	79.9492	2.7500e-003		80.0179
Total	0.0518	0.3761	0.4113	1.5600e-003	0.0975	2.9200e-003	0.1004	0.0263	2.7700e-003	0.0291		161.3323	161.3323	8.4700e-003		161.5440

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	2.5667	18.8045	16.1097	0.0255		1.1159	1.1159		1.0686	1.0686	0.0000	2,362.1691	2,362.1691	0.4968		2,374.5898
Total	2.5667	18.8045	16.1097	0.0255		1.1159	1.1159		1.0686	1.0686	0.0000	2,362.1691	2,362.1691	0.4968		2,374.5898

Houghton Park Community Center Improvements Project - Los Angeles-South Coast County, Winter

3.5 Building Construction - 2019

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	0.0130	0.3477	0.1015	7.6000e-004	0.0192	2.2500e-003	0.0215	5.5300e-003	2.1500e-003	7.6800e-003		81.3831	81.3831	5.7200e-003		81.5261
Worker	0.0388	0.0285	0.3097	8.0000e-004	0.0782	6.7000e-004	0.0789	0.0208	6.2000e-004	0.0214		79.9492	79.9492	2.7500e-003		80.0179
Total	0.0518	0.3761	0.4113	1.5600e-003	0.0975	2.9200e-003	0.1004	0.0263	2.7700e-003	0.0291		161.3323	161.3323	8.4700e-003		161.5440

3.6 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0360	10.0027	9.5964	0.0151		0.5549	0.5549		0.5139	0.5139		1,438.7570	1,438.7570	0.4230		1,449.3319
Paving	0.0655					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.1015	10.0027	9.5964	0.0151		0.5549	0.5549		0.5139	0.5139		1,438.7570	1,438.7570	0.4230		1,449.3319

Houghton Park Community Center Improvements Project - Los Angeles-South Coast County, Winter

3.6 Paving - 2019

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	0.0997	0.0732	0.7965	2.0700e-003	0.2012	1.7300e-003	0.2029	0.0534	1.6000e-003	0.0550		205.5836	205.5836	7.0700e-003		205.7604
Total	0.0997	0.0732	0.7965	2.0700e-003	0.2012	1.7300e-003	0.2029	0.0534	1.6000e-003	0.0550		205.5836	205.5836	7.0700e-003		205.7604

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0360	10.0027	9.5964	0.0151		0.5549	0.5549		0.5139	0.5139	0.0000	1,438.7570	1,438.7570	0.4230		1,449.3318
Paving	0.0655					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.1015	10.0027	9.5964	0.0151		0.5549	0.5549		0.5139	0.5139	0.0000	1,438.7570	1,438.7570	0.4230		1,449.3318

Houghton Park Community Center Improvements Project - Los Angeles-South Coast County, Winter

3.6 Paving - 2019

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	0.0997	0.0732	0.7965	2.0700e-003	0.2012	1.7300e-003	0.2029	0.0534	1.6000e-003	0.0550		205.5836	205.5836	7.0700e-003		205.7604
Total	0.0997	0.0732	0.7965	2.0700e-003	0.2012	1.7300e-003	0.2029	0.0534	1.6000e-003	0.0550		205.5836	205.5836	7.0700e-003		205.7604

3.7 Architectural Coating - 2018

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	3.1537					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.1171
Total	3.4523	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.1171

Houghton Park Community Center Improvements Project - Los Angeles-South Coast County, Winter

3.7 Architectural Coating - 2018

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	6.1100e-003	4.6200e-003	0.0497	1.2000e-004	0.0112	1.0000e-004	0.0113	2.9600e-003	9.0000e-005	3.0600e-003		11.8058	11.8058	4.4000e-004		11.8169
Total	6.1100e-003	4.6200e-003	0.0497	1.2000e-004	0.0112	1.0000e-004	0.0113	2.9600e-003	9.0000e-005	3.0600e-003		11.8058	11.8058	4.4000e-004		11.8169

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	3.1537					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267		282.1171
Total	3.4523	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267		282.1171

Houghton Park Community Center Improvements Project - Los Angeles-South Coast County, Winter

3.7 Architectural Coating - 2018

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	6.1100e-003	4.6200e-003	0.0497	1.2000e-004	0.0112	1.0000e-004	0.0113	2.9600e-003	9.0000e-005	3.0600e-003		11.8058	11.8058	4.4000e-004		11.8169
Total	6.1100e-003	4.6200e-003	0.0497	1.2000e-004	0.0112	1.0000e-004	0.0113	2.9600e-003	9.0000e-005	3.0600e-003		11.8058	11.8058	4.4000e-004		11.8169

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Houghton Park Community Center Improvements Project - Los Angeles-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.2535	1.2355	3.2815	0.0105	0.8511	0.0111	0.8622	0.2278	0.0104	0.2382		1,071.5406	1,071.5406	0.0614		1,073.0761
Unmitigated	0.2535	1.2355	3.2815	0.0105	0.8511	0.0111	0.8622	0.2278	0.0104	0.2382		1,071.5406	1,071.5406	0.0614		1,073.0761

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Government (Civic Center)	129.60	129.60	129.60	400,222	400,222
Parking Lot	0.00	0.00	0.00		
Total	129.60	129.60	129.60	400,222	400,222

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
Government (Civic Center)	16.60	8.40	6.90	75.00	20.00	5.00	50	34	16
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Government (Civic Center)	0.547726	0.045437	0.201480	0.122768	0.016614	0.006090	0.019326	0.029174	0.002438	0.002359	0.005005	0.000677	0.000907
Parking Lot	0.547726	0.045437	0.201480	0.122768	0.016614	0.006090	0.019326	0.029174	0.002438	0.002359	0.005005	0.000677	0.000907

Houghton Park Community Center Improvements Project - Los Angeles-South Coast County, Winter

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	2.0000e-003	0.0182	0.0153	1.1000e-004		1.3800e-003	1.3800e-003		1.3800e-003	1.3800e-003		21.8472	21.8472	4.2000e-004	4.0000e-004	21.9770
NaturalGas Unmitigated	2.0000e-003	0.0182	0.0153	1.1000e-004		1.3800e-003	1.3800e-003		1.3800e-003	1.3800e-003		21.8472	21.8472	4.2000e-004	4.0000e-004	21.9770

Houghton Park Community Center Improvements Project - Los Angeles-South Coast County, Winter

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					
Government (Civic Center)	185.701	2.0000e-003	0.0182	0.0153	1.1000e-004		1.3800e-003	1.3800e-003		1.3800e-003	1.3800e-003		21.8472	21.8472	4.2000e-004	4.0000e-004	21.9770
Parking Lot	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		2.0000e-003	0.0182	0.0153	1.1000e-004		1.3800e-003	1.3800e-003		1.3800e-003	1.3800e-003		21.8472	21.8472	4.2000e-004	4.0000e-004	21.9770

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					
Government (Civic Center)	0.185701	2.0000e-003	0.0182	0.0153	1.1000e-004		1.3800e-003	1.3800e-003		1.3800e-003	1.3800e-003		21.8472	21.8472	4.2000e-004	4.0000e-004	21.9770
Parking Lot	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		2.0000e-003	0.0182	0.0153	1.1000e-004		1.3800e-003	1.3800e-003		1.3800e-003	1.3800e-003		21.8472	21.8472	4.2000e-004	4.0000e-004	21.9770

6.0 Area Detail

6.1 Mitigation Measures Area

Houghton Park Community Center Improvements Project - Los Angeles-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.1415	3.0000e-005	3.4400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		7.3300e-003	7.3300e-003	2.0000e-005		7.8200e-003
Unmitigated	0.1415	3.0000e-005	3.4400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		7.3300e-003	7.3300e-003	2.0000e-005		7.8200e-003

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	9.0500e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1321					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.2000e-004	3.0000e-005	3.4400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		7.3300e-003	7.3300e-003	2.0000e-005		7.8200e-003
Total	0.1415	3.0000e-005	3.4400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		7.3300e-003	7.3300e-003	2.0000e-005		7.8200e-003

Houghton Park Community Center Improvements Project - Los Angeles-South Coast County, Winter

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	9.0500e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1321					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.2000e-004	3.0000e-005	3.4400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		7.3300e-003	7.3300e-003	2.0000e-005		7.8200e-003
Total	0.1415	3.0000e-005	3.4400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		7.3300e-003	7.3300e-003	2.0000e-005		7.8200e-003

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
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Houghton Park Community Center Improvements Project - Los Angeles-South Coast County, Winter

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

Greenhouse Gas Emission Worksheet
N2O Mobile Emissions

Houghton Park Community Center Improvements Project

From CalEEMod 2016.3.1 Vehicle Fleet Mix Output:

Annual VMT: 400,222

Vehicle Type	Percent Type	CH4 Emission Factor (g/mile)*	CH4 Emission (g/mile)**	N2O Emission Factor (g/mile)*	N2O Emission (g/mile)**
Light Auto	54.8%	0.04	0.021909	0.04	0.021909
Light Truck < 3750 lbs	4.5%	0.05	0.0022719	0.06	0.002726
Light Truck 3751-5750 lbs	20.1%	0.05	0.010074	0.06	0.012089
Med Truck 5751-8500 lbs	12.3%	0.12	0.0147322	0.2	0.024554
Lite-Heavy Truck 8501-10,000 lbs	1.7%	0.12	0.0019937	0.2	0.003323
Lite-Heavy Truck 10,001-14,000 lbs	0.6%	0.09	0.0005481	0.125	0.000761
Med-Heavy Truck 14,001-33,000 lbs	1.9%	0.06	0.0011596	0.05	0.000966
Heavy-Heavy Truck 33,001-60,000 lbs	2.9%	0.06	0.0017504	0.05	0.001459
Other Bus	0.2%	0.06	0.0001463	0.05	0.000122
Urban Bus	0.2%	0.06	0.0001415	0.05	0.000118
Motorcycle	0.5%	0.09	0.0004505	0.01	5.01E-05
School Bus	0.1%	0.06	4.062E-05	0.05	3.39E-05
Motor Home	0.1%	0.09	8.163E-05	0.125	0.000113
Total	100.0%		0.0552994		0.068224

Total Emissions (metric tons) =

Emission Factor by Vehicle Mix (g/mi) x Annual VMT(mi) x 0.000001 metric tons/g

Conversion to Carbon Dioxide Equivalency (CO2e) Units based on Global Warming Potential (GWP)

CH4 25 GWP
 N2O 298 GWP
 1 ton (short, US) = 0.90718474 metric ton

Annual Mobile Emissions:

	Total Emissions	Total CO2e units
N2O Emissions:	0.0273 metric tons N2O	8.14 metric tons CO2e
	Project Total: 8.14 metric tons CO2e	

References

* from Table C.4: Methane and Nitrous Oxide Emission Factors for Mobile Sources by Vehicle and Fuel Type (g/mile).

in California Climate Action Registry General Reporting Protocol, Reporting Entity-Wide Greenhouse Gas Emissions, Version 3.1, January 2009.

Assume Model year 2000-present, gasoline fueled.

** Source: California Climate Action Registry General Reporting Protocol, Reporting Entity-Wide Greenhouse Gas Emissions, Version 3.1, January 2009.