

APPENDIX F – GREENHOUSE GASES



Peters Canyon Regional Park - Phase 1 - Orange County, Annual

Peters Canyon Regional Park - Phase 1
Orange County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	11.00	Acre	11.00	479,160.00	0

1.2 Other Project Characteristics

Urbanization Urban Wind Speed (m/s) 2.2 Precipitation Freq (Days) 30
 Climate Zone 8 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

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Project Characteristics - Phase 1 opening year 2020.

Land Use - 11 AC City Park with 2,300 square feet of building area.

Construction Phase - 40 days Demo, 40 days Grading, 300 days Construction, 32 days Paving, 28 days Painting.

Off-road Equipment -

Off-road Equipment - Construction - 2 cranes, 6 forklifts, 5 tractors/loaders/backhoes and default equipment.

Off-road Equipment -

Off-road Equipment - Grading - 2 graders, 4 tractors/loaders/backhoes and default equipment.

Off-road Equipment -

Trips and VMT - Default worker and vendor trips used as worst case. 166 Demo haul trips + 500 Grading haul trips = Phase 1 total of 666 haul trips. 31 paving haul trips.

Demolition - 420 CY of demo material x 1.4 tons per CY = 588 tons of demolition material.

Grading - 1,330 CY material exported from site and 1,890 CY material imported to site.

Vehicle Trips - Default operational vehicle trips utilized as worst case.

Energy Use -

Construction Off-road Equipment Mitigation - Per SCAQMD Rule 403 minimum requirements, water exposure 3x per day selected.

Architectural Coating - 2,300 square feet of building area.

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Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	239,580.00	2,300.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	718,740.00	2,300.00
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstructionPhase	NumDays	20.00	28.00
tblConstructionPhase	NumDays	20.00	40.00
tblConstructionPhase	NumDays	30.00	40.00
tblConstructionPhase	NumDays	20.00	32.00
tblConstructionPhase	PhaseEndDate	2/6/2020	2/7/2020
tblConstructionPhase	PhaseEndDate	9/19/2019	11/14/2019
tblConstructionPhase	PhaseEndDate	11/14/2019	12/30/2019
tblConstructionPhase	PhaseStartDate	11/15/2019	1/1/2020
tblConstructionPhase	PhaseStartDate	9/20/2019	11/15/2019
tblGrading	MaterialExported	0.00	1,330.00
tblGrading	MaterialImported	0.00	1,890.00
tblLandUse	BuildingSpacesSquareFeet	0.00	479,160.00
tblLandUse	GreenSpaceSquareFeet	479,160.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	5.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblProjectCharacteristics	OperationalYear	2018	2020
tblTripsAndVMT	HaulingTripNumber	58.00	166.00
tblTripsAndVMT	HaulingTripNumber	403.00	500.00
tblTripsAndVMT	HaulingTripNumber	0.00	31.00

2.0 Emissions Summary

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2.1 Overall Construction
Unmitigated Construction

Year	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
2018	0.3991	4.0788	2.6921	5.6600e-003	0.3030	0.1957	0.4987	0.1044	0.1816	0.2860	0.0000	520.0057	520.0057	0.1096	0.0000	522.7451
2019	0.5751	5.3185	4.3558	9.9100e-003	0.3112	0.2633	0.5745	0.0839	0.2455	0.3294	0.0000	904.3154	904.3154	0.1495	0.0000	908.0522
2020	0.0162	0.0251	0.0430	1.0000e-004	6.1500e-003	1.5900e-003	7.7400e-003	1.6300e-003	1.5900e-003	3.2200e-003	0.0000	8.8955	8.8955	4.0000e-004	0.0000	8.9054
Maximum	0.5751	5.3185	4.3558	9.9100e-003	0.3112	0.2633	0.5745	0.1044	0.2455	0.3294	0.0000	904.3154	904.3154	0.1495	0.0000	908.0522

Mitigated Construction

Year	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
2018	0.3991	4.0788	2.6921	5.6600e-003	0.1868	0.1957	0.3825	0.0592	0.1816	0.2409	0.0000	520.0053	520.0053	0.1096	0.0000	522.7447
2019	0.5751	5.3185	4.3558	9.9100e-003	0.3112	0.2633	0.5745	0.0839	0.2455	0.3294	0.0000	904.3149	904.3149	0.1495	0.0000	908.0517
2020	0.0162	0.0251	0.0430	1.0000e-004	6.1500e-003	1.5900e-003	7.7400e-003	1.6300e-003	1.5900e-003	3.2200e-003	0.0000	8.8955	8.8955	4.0000e-004	0.0000	8.9054
Maximum	0.5751	5.3185	4.3558	9.9100e-003	0.3112	0.2633	0.5745	0.0839	0.2455	0.3294	0.0000	904.3149	904.3149	0.1495	0.0000	908.0517

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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
0.00	0.00	0.00	0.00	18.74	0.00	10.75	23.79	0.00	7.30	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	6-1-2018	8-31-2018	1.9275	1.9275
2	9-1-2018	11-30-2018	1.9644	1.9644
3	12-1-2018	2-28-2019	1.6384	1.6384
4	3-1-2019	5-31-2019	1.6131	1.6131
5	6-1-2019	8-31-2019	1.6111	1.6111
6	9-1-2019	11-30-2019	1.4141	1.4141
7	12-1-2019	2-29-2020	0.2236	0.2236
		Highest	1.9644	1.9644

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2.2 Overall Operational
Unmitigated Operational

Category	tons/yr										MT/yr						
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Area	1.9536	0.0000	1.4000e-004	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	2.7000e-004	2.7000e-004	0.0000	0.0000	0.0000	2.9000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0214	0.0924	0.2759	9.7000e-004	0.0639	9.8000e-004	0.0849	0.0225	9.2000e-004	0.0234	0.0000	89.1526	89.1526	3.8900e-003	0.0000	0.0000	89.2498
Waste						0.0000	0.0000	0.0000	0.0000	0.0000	0.1928	0.0000	0.1928	0.0114	0.0000	0.4778	
Water						0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	46.3948	46.3948	1.9200e-003	4.0000e-004	46.5607	
Total	1.9749	0.0924	0.2761	9.7000e-004	0.0639	9.8000e-004	0.0849	0.0225	9.2000e-004	0.0234	0.1928	135.5476	135.7405	0.0172	4.0000e-004	136.2886	

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2.2 Overall Operational

Mitigated Operational

Category	tons/yr											MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Area	1.9536	0.0000	1.4000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	2.7000e-004	2.7000e-004	0.0000	0.0000	0.0000	2.9000e-004
Energy	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0214	0.0924	0.2759	9.7000e-004	0.0639	9.8000e-004	0.0849	0.0225	9.2000e-004	0.0234	0.0000	89.1526	89.1526	3.8900e-003	0.0000	0.0000	89.2498
Waste						0.0000	0.0000	0.0000	0.0000	0.0000	0.1928	0.0000	0.1928	0.0114	0.0000	0.4778	
Water						0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	46.3948	46.3948	1.9200e-003	4.0000e-004	46.5607	
Total	1.9749	0.0924	0.2761	9.7000e-004	0.0639	9.8000e-004	0.0849	0.0225	9.2000e-004	0.0234	0.1928	135.5476	135.7405	0.0172	4.0000e-004	136.2886	

Percent Reduction	tons/yr											MT/yr				
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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	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	6/1/2018	7/26/2018	5	40	
2	Grading	Grading	7/27/2018	9/20/2018	5	40	
3	Building Construction	Building Construction	9/21/2018	11/14/2019	5	300	
4	Paving	Paving	11/15/2019	12/30/2019	5	32	
5	Architectural Coating	Architectural Coating	1/1/2020	2/7/2020	5	28	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 120

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 2,300; Non-Residential Outdoor: 2,300; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	2	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Building Construction	Cranes	2	7.00	231	0.29
Building Construction	Forklifts	6	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	5	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	166.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	11	28.00	0.00	500.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	15	201.00	79.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	31.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	40.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

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3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2018

Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
tons/yr																	
MT/yr																	
Fugitive Dust					6.2900e-003	0.0000	6.2900e-003	9.5000e-004	0.0000	9.5000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0744	0.7665	0.4461	7.8000e-004		0.0388	0.0388		0.0361	0.0361	0.0000	70.2482	70.2482	0.0194	0.0000	70.7320	
Total	0.0744	0.7665	0.4461	7.8000e-004	6.2900e-003	0.0388	0.0451	9.5000e-004	0.0361	0.0371	0.0000	70.2482	70.2482	0.0194	0.0000	70.7320	

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3.2 Demolition - 2018

Unmitigated Construction Off-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Hauling	7.2000e-004	0.0268	6.0700e-003	6.0000e-005	1.4200e-003	1.0000e-004	1.5300e-003	3.9000e-004	1.0000e-004	4.9000e-004	0.0000	6.5130	6.5130	6.9000e-004	0.0000	6.5303
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3600e-003	1.0300e-003	0.0112	3.0000e-005	3.2900e-003	2.0000e-005	3.3200e-003	8.7000e-004	2.0000e-005	9.0000e-004	0.0000	3.0250	3.0250	8.0000e-005	0.0000	3.0270
Total	2.0800e-003	0.0278	0.0173	9.0000e-005	4.7100e-003	1.2000e-004	4.8500e-003	1.2600e-003	1.2000e-004	1.3900e-003	0.0000	9.5379	9.5379	7.7000e-004	0.0000	9.5572

Mitigated Construction On-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Fugitive Dust					2.4500e-003	0.0000	2.4500e-003	3.7000e-004	0.0000	3.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0744	0.7665	0.4461	7.8000e-004	0.0388	0.0388	0.0388	0.0361	0.0361	0.0361	0.0000	70.2481	70.2481	0.0194	0.0000	70.7319
Total	0.0744	0.7665	0.4461	7.8000e-004	2.4500e-003	0.0388	0.0412	0.0361	0.0361	0.0365	0.0000	70.2481	70.2481	0.0194	0.0000	70.7319

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3.2 Demolition - 2018

Mitigated Construction Off-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Hauling	7.2000e-004	0.0268	6.0700e-003	6.0000e-005	1.4200e-003	1.0000e-004	1.5300e-003	3.9000e-004	1.0000e-004	4.9000e-004	0.0000	6.5130	6.5130	6.9000e-004	0.0000	6.5303
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3600e-003	1.0300e-003	0.0112	3.0000e-005	3.2900e-003	2.0000e-005	3.3200e-003	8.7000e-004	2.0000e-005	9.0000e-004	0.0000	3.0250	3.0250	8.0000e-005	0.0000	3.0270
Total	2.0800e-003	0.0278	0.0173	9.0000e-005	4.7100e-003	1.2000e-004	4.8500e-003	1.2600e-003	1.2000e-004	1.3900e-003	0.0000	9.5379	9.5379	7.7000e-004	0.0000	9.5572

3.3 Grading - 2018

Unmitigated Construction On-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Fugitive Dust					0.1843	0.0000	0.1843	0.0731	0.0000	0.0731	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1228	1.4382	0.8336	1.5000e-003		0.0648	0.0648	0.0596	0.0596	0.0596	0.0000	136.8019	136.8019	0.0426	0.0000	137.8666
Total	0.1228	1.4382	0.8336	1.5000e-003	0.1843	0.0648	0.2490	0.0731	0.0596	0.1327	0.0000	136.8019	136.8019	0.0426	0.0000	137.8666

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3.3 Grading - 2018

Unmitigated Construction Off-Site

Category	tons/yr										MT/yr						
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Hauling	2.1800e-003	0.0807	0.0183	2.0000e-004	4.2900e-003	3.1000e-004	4.6000e-003	1.1800e-003	3.0000e-004	1.4700e-003	0.0000	19.6173	19.6173	2.0900e-003	0.0000	0.0000	19.6695
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	0.0000
Worker	2.5400e-003	1.9200e-003	0.0209	6.0000e-005	6.1500e-003	4.0000e-005	6.1900e-003	1.6300e-003	4.0000e-005	1.6700e-003	0.0000	5.6466	5.6466	1.5000e-004	0.0000	0.0000	5.6503
Total	4.7200e-003	0.0826	0.0392	2.6000e-004	0.0104	3.5000e-004	0.0108	2.8100e-003	3.4000e-004	3.1400e-003	0.0000	25.2639	25.2639	2.2400e-003	0.0000	0.0000	25.3198

Mitigated Construction On-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Fugitive Dust					0.0719	0.0000	0.0719	0.0285	0.0000	0.0285	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1228	1.4382	0.8336	1.5000e-003		0.0648	0.0648	0.0596	0.0596	0.0596	0.0000	136.8018	136.8018	0.0426	0.0000	137.8665
Total	0.1228	1.4382	0.8336	1.5000e-003	0.0719	0.0648	0.1366	0.0285	0.0596	0.0881	0.0000	136.8018	136.8018	0.0426	0.0000	137.8665

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3.3 Grading - 2018

Mitigated Construction Off-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Hauling	2.1800e-003	0.0807	0.0183	2.0000e-004	4.2900e-003	3.1000e-004	4.6000e-003	1.1800e-003	3.0000e-004	1.4700e-003	0.0000	19.6173	19.6173	2.0900e-003	0.0000	19.6695
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	2.5400e-003	1.9200e-003	0.0209	6.0000e-005	6.1500e-003	4.0000e-005	6.1900e-003	1.6300e-003	4.0000e-005	1.6700e-003	0.0000	5.6466	5.6466	1.5000e-004	0.0000	5.6503
Total	4.7200e-003	0.0826	0.0392	2.6000e-004	0.0104	3.5000e-004	0.0108	2.8100e-003	3.4000e-004	3.1400e-003	0.0000	25.2639	25.2639	2.2400e-003	0.0000	25.3198

3.4 Building Construction - 2018

Unmitigated Construction On-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Off-Road	0.1504	1.3926	0.9904	1.5100e-003		0.0886	0.0886		0.0826	0.0826	0.0000	135.1310	135.1310	0.0364	0.0000	136.0408
Total	0.1504	1.3926	0.9904	1.5100e-003		0.0886	0.0886		0.0826	0.0826	0.0000	135.1310	135.1310	0.0364	0.0000	136.0408

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3.4 Building Construction - 2018
Unmitigated Construction Off-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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	0.0117	0.3463	0.0956	7.1000e-004	0.0179	2.5300e-003	0.0204	5.1600e-003	2.4200e-003	7.5800e-003	0.0000	70.0610	70.0610	6.2900e-003	0.0000	70.2183
Worker	0.0328	0.0248	0.2701	8.1000e-004	0.0794	5.3000e-004	0.0800	0.0211	4.9000e-004	0.0216	0.0000	72.9618	72.9618	1.9400e-003	0.0000	73.0103
Total	0.0446	0.3711	0.3657	1.5200e-003	0.0974	3.0600e-003	0.1004	0.0263	2.9100e-003	0.0292	0.0000	143.0228	143.0228	8.2300e-003	0.0000	143.2286

Mitigated Construction On-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Off-Road	0.1504	1.3926	0.9904	1.5100e-003		0.0886	0.0886		0.0826	0.0826	0.0000	135.1309	135.1309	0.0364	0.0000	136.0407
Total	0.1504	1.3926	0.9904	1.5100e-003		0.0886	0.0886		0.0826	0.0826	0.0000	135.1309	135.1309	0.0364	0.0000	136.0407

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3.4 Building Construction - 2018
Mitigated Construction Off-Site

Category	tons/yr										MT/yr						
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
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	0.0000
Vendor	0.0117	0.3463	0.0956	7.1000e-004	0.0179	2.5300e-003	0.0204	5.1600e-003	2.4200e-003	7.5800e-003	0.0000	70.0610	70.0610	6.2900e-003	0.0000	0.0000	70.2183
Worker	0.0328	0.0248	0.2701	8.1000e-004	0.0794	5.3000e-004	0.0800	0.0211	4.9000e-004	0.0216	0.0000	72.9618	72.9618	1.9400e-003	0.0000	0.0000	73.0103
Total	0.0446	0.3711	0.3657	1.5200e-003	0.0974	3.0600e-003	0.1004	0.0263	2.9100e-003	0.0292	0.0000	143.0228	143.0228	8.2300e-003	0.0000	0.0000	143.2286

3.4 Building Construction - 2019
Unmitigated Construction On-Site

Category	tons/yr										MT/yr						
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Off-Road	0.4206	3.9570	3.0532	4.7800e-003		0.2414	0.2414		0.2251	0.2251	0.0000	422.3168	422.3168	0.1141	0.0000	0.0000	425.1695
Total	0.4206	3.9570	3.0532	4.7800e-003		0.2414	0.2414		0.2251	0.2251	0.0000	422.3168	422.3168	0.1141	0.0000	0.0000	425.1695

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3.4 Building Construction - 2019
Unmitigated Construction Off-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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	0.0344	1.0423	0.2636	2.2400e-003	0.0567	6.9600e-003	0.0637	0.0164	6.6600e-003	0.0230	0.0000	220.7491	220.7491	0.0193	0.0000	221.2308
Worker	0.0957	0.0698	0.7751	2.4900e-003	0.2516	1.7100e-003	0.2533	0.0668	1.5800e-003	0.0684	0.0000	224.9281	224.9281	5.5400e-003	0.0000	225.0666
Total	0.1301	1.1121	1.0587	4.7300e-003	0.3083	8.6700e-003	0.3169	0.0832	8.2400e-003	0.0914	0.0000	445.6771	445.6771	0.0248	0.0000	446.2974

Mitigated Construction On-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Off-Road	0.4206	3.9570	3.0532	4.7800e-003		0.2414	0.2414		0.2251	0.2251	0.0000	422.3163	422.3163	0.1141	0.0000	425.1690
Total	0.4206	3.9570	3.0532	4.7800e-003		0.2414	0.2414		0.2251	0.2251	0.0000	422.3163	422.3163	0.1141	0.0000	425.1690

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3.4 Building Construction - 2019
Mitigated Construction Off-Site

Category	tons/yr										MT/yr						
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
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	0.0000
Vendor	0.0344	1.0423	0.2636	2.2400e-003	0.0567	6.9600e-003	0.0637	0.0164	6.6600e-003	0.0230	0.0000	220.7491	220.7491	0.0193	0.0000	221.2308	
Worker	0.0957	0.0698	0.7751	2.4900e-003	0.2516	1.7100e-003	0.2533	0.0668	1.5800e-003	0.0684	0.0000	224.9281	224.9281	5.5400e-003	0.0000	225.0666	
Total	0.1301	1.1121	1.0587	4.7300e-003	0.3083	8.6700e-003	0.3169	0.0832	8.2400e-003	0.0914	0.0000	445.6771	445.6771	0.0248	0.0000	446.2974	

3.5 Paving - 2019
Unmitigated Construction On-Site

Category	tons/yr										MT/yr						
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Off-Road	0.0233	0.2439	0.2346	3.6000e-004		0.0132	0.0132		0.0121	0.0121	0.0000	32.7603	32.7603	0.0104	0.0000	33.0194	
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Total	0.0233	0.2439	0.2346	3.6000e-004		0.0132	0.0132		0.0121	0.0121	0.0000	32.7603	32.7603	0.0104	0.0000	33.0194	

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3.5 Paving - 2019

Unmitigated Construction Off-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Hauling	1.3000e-004	4.7400e-003	1.1300e-003	1.0000e-005	2.7000e-004	2.0000e-005	2.8000e-004	7.0000e-005	2.0000e-005	9.0000e-005	0.0000	1.2054	1.2054	1.3000e-004	0.0000	1.2086
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-003	7.3000e-004	8.1200e-003	3.0000e-005	2.6300e-003	2.0000e-005	2.6500e-003	7.0000e-004	2.0000e-005	7.2000e-004	0.0000	2.3559	2.3559	6.0000e-005	0.0000	2.3573
Total	1.1300e-003	5.4700e-003	9.2500e-003	4.0000e-005	2.9000e-003	4.0000e-005	2.9300e-003	7.7000e-004	4.0000e-005	8.1000e-004	0.0000	3.5612	3.5612	1.9000e-004	0.0000	3.5659

Mitigated Construction On-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Off-Road	0.0233	0.2439	0.2346	3.6000e-004		0.0132	0.0132		0.0121	0.0121	0.0000	32.7603	32.7603	0.0104	0.0000	33.0194
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0233	0.2439	0.2346	3.6000e-004		0.0132	0.0132		0.0121	0.0121	0.0000	32.7603	32.7603	0.0104	0.0000	33.0194

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3.5 Paving - 2019

Mitigated Construction Off-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Hauling	1.3000e-004	4.7400e-003	1.1300e-003	1.0000e-005	2.7000e-004	2.0000e-005	2.8000e-004	7.0000e-005	2.0000e-005	9.0000e-005	0.0000	1.2054	1.2054	1.3000e-004	0.0000	1.2086
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-003	7.3000e-004	8.1200e-003	3.0000e-005	2.6300e-003	2.0000e-005	2.6500e-003	7.0000e-004	2.0000e-005	7.2000e-004	0.0000	2.3559	2.3559	6.0000e-005	0.0000	2.3573
Total	1.1300e-003	5.4700e-003	9.2500e-003	4.0000e-005	2.9000e-003	4.0000e-005	2.9300e-003	7.7000e-004	4.0000e-005	8.1000e-004	0.0000	3.5612	3.5612	1.9000e-004	0.0000	3.5659

3.6 Architectural Coating - 2020

Unmitigated Construction On-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Archit. Coating	0.0107					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.3900e-003	0.0236	0.0256	4.0000e-005	1.5500e-003	1.5500e-003	1.5500e-003	1.5500e-003	1.5500e-003	1.5500e-003	0.0000	3.5746	3.5746	2.8000e-004	0.0000	3.5815
Total	0.0141	0.0236	0.0256	4.0000e-005	1.5500e-003	1.5500e-003	1.5500e-003	1.5500e-003	1.5500e-003	1.5500e-003	0.0000	3.5746	3.5746	2.8000e-004	0.0000	3.5815

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3.6 Architectural Coating - 2020
Unmitigated Construction Off-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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	2.1800e-003	1.5300e-003	0.0174	6.0000e-005	6.1500e-003	4.0000e-005	6.1900e-003	1.6300e-003	4.0000e-005	1.6700e-003	0.0000	5.3209	5.3209	1.2000e-004	0.0000	5.3239
Total	2.1800e-003	1.5300e-003	0.0174	6.0000e-005	6.1500e-003	4.0000e-005	6.1900e-003	1.6300e-003	4.0000e-005	1.6700e-003	0.0000	5.3209	5.3209	1.2000e-004	0.0000	5.3239

Mitigated Construction On-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Archit. Coating	0.0107					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.3900e-003	0.0236	0.0256	4.0000e-005		1.5500e-003	1.5500e-003	1.5500e-003	1.5500e-003	1.5500e-003	0.0000	3.5746	3.5746	2.8000e-004	0.0000	3.5815
Total	0.0141	0.0236	0.0256	4.0000e-005		1.5500e-003	1.5500e-003	1.5500e-003	1.5500e-003	1.5500e-003	0.0000	3.5746	3.5746	2.8000e-004	0.0000	3.5815

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3.6 Architectural Coating - 2020

Mitigated Construction Off-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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	2.1800e-003	1.5300e-003	0.0174	6.0000e-005	6.1500e-003	4.0000e-005	6.1900e-003	1.6300e-003	4.0000e-005	1.6700e-003	0.0000	5.3209	5.3209	1.2000e-004	0.0000	5.3239
Total	2.1800e-003	1.5300e-003	0.0174	6.0000e-005	6.1500e-003	4.0000e-005	6.1900e-003	1.6300e-003	4.0000e-005	1.6700e-003	0.0000	5.3209	5.3209	1.2000e-004	0.0000	5.3239

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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Category	tons/yr											MT/yr				
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Mitigated	0.0214	0.0924	0.2759	9.7000e-004	0.0839	9.8000e-004	0.0849	0.0225	9.2000e-004	0.0234	0.0000	89.1526	89.1526	3.8900e-003	0.0000	89.2498
Unmitigated	0.0214	0.0924	0.2759	9.7000e-004	0.0839	9.8000e-004	0.0849	0.0225	9.2000e-004	0.0234	0.0000	89.1526	89.1526	3.8900e-003	0.0000	89.2498

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	20.79	250.25	184.14	221,299	221,299
Total	20.79	250.25	184.14	221,299	221,299

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-C	H-O or C-NW	H-S or C-C	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.555968	0.043848	0.210359	0.116378	0.016765	0.005795	0.025008	0.016160	0.001677	0.001586	0.004867	0.000586	0.001002

5.0 Energy Detail

Historical Energy Use: N

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5.3 Energy by Land Use - Electricity

Mitigated

Land Use	Electricity Use kWh/yr	Total CO2	CH4	N2O	CO2e
City Park	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Mitigated	1.9536	0.0000	1.4000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	2.7000e-004	2.7000e-004	0.0000	0.0000	2.9000e-004
Unmitigated	1.9536	0.0000	1.4000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	2.7000e-004	2.7000e-004	0.0000	0.0000	2.9000e-004

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6.2 Area by SubCategory

Unmitigated

SubCategory	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Architectural Coating	0.2221					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.7314					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	1.4000e-004	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	2.7000e-004	2.7000e-004	2.7000e-004	0.0000	0.0000	2.9000e-004
Total	1.9535	0.0000	1.4000e-004	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	2.7000e-004	2.7000e-004	0.0000	0.0000	2.9000e-004

Mitigated

SubCategory	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Architectural Coating	0.2221					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.7314					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	1.4000e-004	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	2.7000e-004	2.7000e-004	2.7000e-004	0.0000	0.0000	2.9000e-004
Total	1.9535	0.0000	1.4000e-004	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	2.7000e-004	2.7000e-004	0.0000	0.0000	2.9000e-004

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	46.3948	1.9200e-003	4.0000e-004	46.5607
Unmitigated	46.3948	1.9200e-003	4.0000e-004	46.5607

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 13.1063	46.3948	1.9200e-003	4.0000e-004	46.5607
Total		46.3948	1.9200e-003	4.0000e-004	46.5607

Peters Canyon Regional Park - Phase 1 - Orange County, Annual

7.2 Water by Land Use

Mitigated

Land Use	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
	Mgal	MT/yr			
City Park	0 / 13.1063	46.3948	1.9200e-003	4.0000e-004	46.5607
Total		46.3948	1.9200e-003	4.0000e-004	46.5607

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

Category/Year	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.1928	0.0114	0.0000	0.4778
Unmitigated	0.1928	0.0114	0.0000	0.4778

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8.2 Waste by Land Use

Unmitigated

Land Use	Waste Disposed tons	Total CO2	CH4	N2O	CO2e
City Park	0.95	0.1928	0.0114	0.0000	0.4778
Total		0.1928	0.0114	0.0000	0.4778

Mitigated

Land Use	Waste Disposed tons	Total CO2	CH4	N2O	CO2e
City Park	0.95	0.1928	0.0114	0.0000	0.4778
Total		0.1928	0.0114	0.0000	0.4778

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

Peters Canyon Regional Park - Phase 2 - Orange County, Annual

Peters Canyon Regional Park - Phase 2
Orange County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	11.00	Acre	11.00	479,160.00	0

1.2 Other Project Characteristics

Urbanization Urban Wind Speed (m/s) 2.2 Precipitation Freq (Days) 30
 Climate Zone 8 Operational Year 2022

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

Peters Canyon Regional Park - Phase 2 - Orange County, Annual

Project Characteristics - Phase 2 opening year 2023.

Land Use - 11 AC City Park with 400 square feet of building area.

Construction Phase - 10 days Demo, 10 days Grading, 125 days Construction, 20 days Paving, and 20 days Painting.

Off-road Equipment -

Off-road Equipment - Construction - 2 forklifts and default equipment.

Off-road Equipment -

Off-road Equipment - Grading - 3 tractors/loaders/backhoes and default equipment as worst case scenario.

Off-road Equipment -

Trips and VMT - 60 haul trips per project design. Default Worker and Vendor trips utilized as worst case scenario. 14 paving haul trips.

Demolition - 42 CY demolition material x 1.4 tons per CY = 58.8 tons demolition material

Grading -

Vehicle Trips - Default operational trips utilized as worst case scenario.

Energy Use -

Construction Off-road Equipment Mitigation - Per SCAQMD Rule 403 minimum requirements, water exposure 3x per day selected.

Architectural Coating - 400 square feet building area.

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Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	239,580.00	400.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	718,740.00	400.00
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstructionPhase	NumDays	300.00	125.00
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	30.00	10.00
tblConstructionPhase	PhaseEndDate	2/14/2022	2/28/2022
tblConstructionPhase	PhaseEndDate	10/25/2021	12/22/2021
tblConstructionPhase	PhaseEndDate	11/22/2021	1/30/2022
tblConstructionPhase	PhaseStartDate	11/23/2021	2/1/2022
tblConstructionPhase	PhaseStartDate	6/29/2021	7/1/2021
tblConstructionPhase	PhaseStartDate	10/26/2021	1/1/2022
tblLandUse	BuildingSpaceSquareFeet	0.00	479,160.00
tblLandUse	GreenSpaceSquareFeet	479,160.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblProjectCharacteristics	OperationalYear	2018	2022
tblTripsAndVMT	HaulingTripNumber	6.00	60.00
tblTripsAndVMT	HaulingTripNumber	0.00	14.00

2.0 Emissions Summary

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	6-1-2021	8-31-2021	1.0389	1.0389
2	9-1-2021	11-30-2021	0.8742	0.8742
3	12-1-2021	2-28-2022	0.3659	0.3659
		Highest	1.0389	1.0389

**2.2 Overall Operational
Unmitigated Operational**

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Area	1.9536	0.0000	1.4000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	2.7000e-004	2.7000e-004	0.0000	0.0000	2.9000e-004
Energy	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0184	0.0786	0.2389	9.1000e-004	0.0839	6.8000e-004	0.0846	0.0225	6.3000e-004	0.0231	0.0000	84.0514	84.0514	3.4800e-003	0.0000	84.1385
Waste						0.0000	0.0000		0.0000	0.0000	0.1928	0.0000	0.1928	0.0114	0.0000	0.4778
Water						0.0000	0.0000		0.0000	0.0000	0.0000	46.3948	46.3948	1.9200e-003	4.0000e-004	46.5607
Total	1.9720	0.0786	0.2390	9.1000e-004	0.0839	6.8000e-004	0.0846	0.0225	6.3000e-004	0.0231	0.1928	130.4465	130.6393	0.0168	4.0000e-004	131.1773

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2.2 Overall Operational
Mitigated Operational

Category	tons/yr											MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Area	1.9536	0.0000	1.4000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	2.7000e-004	2.7000e-004	0.0000	0.0000	0.0000	2.9000e-004
Energy	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0184	0.0786	0.2389	9.1000e-004	0.0639	6.8000e-004	0.0846	0.0225	6.3000e-004	0.0231	0.0000	84.0514	84.0514	3.4800e-003	0.0000	0.0000	84.1385
Waste						0.0000	0.0000	0.0000	0.0000	0.0000	0.1928	0.0000	0.1928	0.0114	0.0000	0.4778	
Water						0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	46.3948	46.3948	1.9200e-003	4.0000e-004	46.5607	
Total	1.9720	0.0786	0.2390	9.1000e-004	0.0639	6.8000e-004	0.0846	0.0225	6.3000e-004	0.0231	0.1928	130.4465	130.6393	0.0168	4.0000e-004	131.1773	

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

3.0 Construction Detail

Construction Phase

Peters Canyon Regional Park - Phase 2 - Orange County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/1/2021	6/14/2021	5	10	
2	Grading	Grading	6/15/2021	6/28/2021	5	10	
3	Building Construction	Building Construction	7/1/2021	12/22/2021	5	125	
4	Paving	Paving	1/1/2022	1/30/2022	5	20	
5	Architectural Coating	Architectural Coating	2/1/2022	2/28/2022	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 25

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 400; Non-Residential Outdoor: 400; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Peters Canyon Regional Park - Phase 2 - Orange County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	2	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	60.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	201.00	79.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	14.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	40.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

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3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2021

Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
tons/yr																	
MT/yr																	
Fugitive Dust					6.3000e-004	0.0000	6.3000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0158	0.1572	0.1078	1.9000e-004	7.7600e-003	7.7600e-003	7.7600e-003	7.2100e-003	0.0000	7.2100e-003	0.0000	17.0004	17.0004	4.7800e-003	0.0000	0.0000	17.1200
Total	0.0158	0.1572	0.1078	1.9000e-004	6.3000e-004	7.7600e-003	8.3900e-003	1.0000e-004	7.2100e-003	7.3100e-003	0.0000	17.0004	17.0004	4.7800e-003	0.0000	0.0000	17.1200

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3.2 Demolition - 2021

Unmitigated Construction Off-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Hauling	2.2000e-004	7.8600e-003	2.1400e-003	2.0000e-005	5.1000e-004	2.0000e-005	5.4000e-004	1.4000e-004	2.0000e-005	1.6000e-004	0.0000	2.2786	2.2786	2.4000e-004	0.0000	2.2846
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	2.7000e-004	1.8000e-004	2.1500e-003	1.0000e-005	8.2000e-004	1.0000e-005	8.3000e-004	2.2000e-004	0.0000	2.2000e-004	0.0000	0.6879	0.6879	1.0000e-005	0.0000	0.6883
Total	4.9000e-004	8.0400e-003	4.2900e-003	3.0000e-005	1.3300e-003	3.0000e-005	1.3700e-003	3.6000e-004	2.0000e-005	3.8000e-004	0.0000	2.9665	2.9665	2.5000e-004	0.0000	2.9729

Mitigated Construction On-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Fugitive Dust	0.0158	0.1572	0.1078	1.9000e-004	2.5000e-004	0.0000	2.5000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0158	0.1572	0.1078	1.9000e-004	7.7600e-003	7.7600e-003	7.7600e-003	7.2100e-003	0.0000	7.2100e-003	0.0000	17.0004	17.0004	4.7800e-003	0.0000	17.1200
Total	0.0158	0.1572	0.1078	1.9000e-004	2.5000e-004	7.7600e-003	8.0100e-003	4.0000e-005	0.0000	7.2500e-003	0.0000	17.0004	17.0004	4.7800e-003	0.0000	17.1200

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3.2 Demolition - 2021

Mitigated Construction Off-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Hauling	2.2000e-004	7.8600e-003	2.1400e-003	2.0000e-005	5.1000e-004	2.0000e-005	5.4000e-004	1.4000e-004	2.0000e-005	1.6000e-004	0.0000	2.2786	2.2786	2.4000e-004	0.0000	2.2846
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	2.7000e-004	1.8000e-004	2.1500e-003	1.0000e-005	8.2000e-004	1.0000e-005	8.3000e-004	2.2000e-004	0.0000	2.2000e-004	0.0000	0.6879	0.6879	1.0000e-005	0.0000	0.6883
Total	4.9000e-004	8.0400e-003	4.2900e-003	3.0000e-005	1.3300e-003	3.0000e-005	1.3700e-003	3.6000e-004	2.0000e-005	3.8000e-004	0.0000	2.9665	2.9665	2.5000e-004	0.0000	2.9729

3.3 Grading - 2021

Unmitigated Construction On-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Fugitive Dust					0.0434	0.0000	0.0434	0.0180	0.0000	0.0180	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0219	0.2415	0.1657	3.3000e-004	0.0105	0.0105	0.0105	9.6500e-003	0.0000	9.6500e-003	0.0000	28.6124	28.6124	9.2500e-003	0.0000	28.8437
Total	0.0219	0.2415	0.1657	3.3000e-004	0.0434	0.0105	0.0539	0.0180	9.6500e-003	0.0276	0.0000	28.6124	28.6124	9.2500e-003	0.0000	28.8437

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3.3 Grading - 2021

Unmitigated Construction Off-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.7000e-004	2.5000e-004	2.8700e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.9172	0.9172	2.0000e-005	0.0000	0.9177
Total	3.7000e-004	2.5000e-004	2.8700e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.9172	0.9172	2.0000e-005	0.0000	0.9177

Mitigated Construction On-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Fugitive Dust					0.0169	0.0000	0.0169	7.0100e-003	0.0000	7.0100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0219	0.2415	0.1657	3.3000e-004	0.0105	0.0105	0.0105	9.6500e-003	0.0000	9.6500e-003	0.0000	28.6123	28.6123	9.2500e-003	0.0000	28.8437
Total	0.0219	0.2415	0.1657	3.3000e-004	0.0169	0.0105	0.0274	7.0100e-003	9.6500e-003	0.0167	0.0000	28.6123	28.6123	9.2500e-003	0.0000	28.8437

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3.3 Grading - 2021

Mitigated Construction Off-Site

Category	tons/yr										MT/yr						
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
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	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	0.0000
Worker	3.7000e-004	2.5000e-004	2.8700e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.9172	0.9172	2.0000e-005	0.0000	0.0000	0.9177
Total	3.7000e-004	2.5000e-004	2.8700e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.9172	0.9172	2.0000e-005	0.0000	0.0000	0.9177

3.4 Building Construction - 2021

Unmitigated Construction On-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Off-Road	0.1107	1.0158	0.9630	1.5900e-003	0.0547	0.0547	0.0547	0.0515	0.0515	0.0515	0.0000	136.3801	136.3801	0.0322	0.0000	137.1854
Total	0.1107	1.0158	0.9630	1.5900e-003	0.0547	0.0547	0.0547	0.0515	0.0515	0.0515	0.0000	136.3801	136.3801	0.0322	0.0000	137.1854

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3.4 Building Construction - 2021
Unmitigated Construction Off-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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	0.0135	0.4704	0.1319	1.2100e-003	0.0311	9.8000e-004	0.0321	8.9600e-003	9.3000e-004	9.9000e-003	0.0000	119.1559	119.1559	9.6400e-003	0.0000	119.3971
Worker	0.0460	0.0309	0.3609	1.2700e-003	0.1379	9.1000e-004	0.1388	0.0366	8.4000e-004	0.0375	0.0000	115.2219	115.2219	2.4700e-003	0.0000	115.2836
Total	0.0595	0.5014	0.4928	2.4800e-003	0.1690	1.8900e-003	0.1709	0.0456	1.7700e-003	0.0474	0.0000	234.3779	234.3779	0.0121	0.0000	234.6807

Mitigated Construction On-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Off-Road	0.1107	1.0158	0.9630	1.5900e-003		0.0547	0.0547		0.0515	0.0515	0.0000	136.3799	136.3799	0.0322	0.0000	137.1853
Total	0.1107	1.0158	0.9630	1.5900e-003		0.0547	0.0547		0.0515	0.0515	0.0000	136.3799	136.3799	0.0322	0.0000	137.1853

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3.4 Building Construction - 2021
Mitigated Construction Off-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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	0.0135	0.4704	0.1319	1.2100e-003	0.0311	9.8000e-004	0.0321	8.9600e-003	9.3000e-004	9.9000e-003	0.0000	119.1559	119.1559	9.6400e-003	0.0000	119.3971
Worker	0.0460	0.0309	0.3609	1.2700e-003	0.1379	9.1000e-004	0.1388	0.0366	8.4000e-004	0.0375	0.0000	115.2219	115.2219	2.4700e-003	0.0000	115.2836
Total	0.0595	0.5014	0.4928	2.4800e-003	0.1690	1.8900e-003	0.1709	0.0456	1.7700e-003	0.0474	0.0000	234.3779	234.3779	0.0121	0.0000	234.6807

3.5 Paving - 2022
Unmitigated Construction On-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Off-Road	0.0110	0.1113	0.1458	2.3000e-004		5.6800e-003	5.6800e-003		5.2200e-003	5.2200e-003	0.0000	20.0276	20.0276	6.4800e-003	0.0000	20.1895
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0110	0.1113	0.1458	2.3000e-004		5.6800e-003	5.6800e-003		5.2200e-003	5.2200e-003	0.0000	20.0276	20.0276	6.4800e-003	0.0000	20.1895

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3.5 Paving - 2022

Unmitigated Construction Off-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Hauling	5.0000e-005	1.6800e-003	5.0000e-004	1.0000e-005	1.2000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	4.0000e-005	0.0000	0.5247	0.5247	6.0000e-005	0.0000	0.5260
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	5.2000e-004	3.3000e-004	4.0200e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3249	1.3249	3.0000e-005	0.0000	1.3255
Total	5.7000e-004	2.0100e-003	4.5200e-003	2.0000e-005	1.7700e-003	1.0000e-005	1.7800e-003	4.7000e-004	1.0000e-005	4.9000e-004	0.0000	1.8495	1.8495	9.0000e-005	0.0000	1.8516

Mitigated Construction On-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Off-Road	0.0110	0.1113	0.1458	2.3000e-004	5.6800e-003	5.6800e-003	5.6800e-003	5.2200e-003	5.2200e-003	5.2200e-003	0.0000	20.0275	20.0275	6.4800e-003	0.0000	20.1895
Paving	0.0000				0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0110	0.1113	0.1458	2.3000e-004	5.6800e-003	5.6800e-003	5.6800e-003	5.2200e-003	5.2200e-003	5.2200e-003	0.0000	20.0275	20.0275	6.4800e-003	0.0000	20.1895

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3.5 Paving - 2022

Mitigated Construction Off-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Hauling	5.0000e-005	1.6800e-003	5.0000e-004	1.0000e-005	1.2000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	4.0000e-005	0.0000	0.5247	0.5247	6.0000e-005	0.0000	0.5260
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	5.2000e-004	3.3000e-004	4.0200e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3249	1.3249	3.0000e-005	0.0000	1.3255
Total	5.7000e-004	2.0100e-003	4.5200e-003	2.0000e-005	1.7700e-003	1.0000e-005	1.7800e-003	4.7000e-004	1.0000e-005	4.9000e-004	0.0000	1.8495	1.8495	9.0000e-005	0.0000	1.8516

3.6 Architectural Coating - 2022

Unmitigated Construction On-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Archit. Coating	1.8500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.0500e-003	0.0141	0.0181	3.0000e-005	8.2000e-004	8.2000e-004	8.2000e-004	8.2000e-004	8.2000e-004	8.2000e-004	0.0000	2.5533	2.5533	1.7000e-004	0.0000	2.5574
Total	3.9000e-003	0.0141	0.0181	3.0000e-005		8.2000e-004	8.2000e-004		8.2000e-004	8.2000e-004	0.0000	2.5533	2.5533	1.7000e-004	0.0000	2.5574

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3.6 Architectural Coating - 2022
Unmitigated Construction Off-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3900e-003	8.9000e-004	0.0107	4.0000e-005	4.3900e-003	3.0000e-005	4.4200e-003	1.1700e-003	3.0000e-005	1.1900e-003	0.0000	3.5329	3.5329	7.0000e-005	0.0000	3.5347
Total	1.3900e-003	8.9000e-004	0.0107	4.0000e-005	4.3900e-003	3.0000e-005	4.4200e-003	1.1700e-003	3.0000e-005	1.1900e-003	0.0000	3.5329	3.5329	7.0000e-005	0.0000	3.5347

Mitigated Construction On-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Archit. Coating	1.8500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.0500e-003	0.0141	0.0181	3.0000e-005		8.2000e-004	8.2000e-004	8.2000e-004	8.2000e-004	8.2000e-004	0.0000	2.5533	2.5533	1.7000e-004	0.0000	2.5574
Total	3.9000e-003	0.0141	0.0181	3.0000e-005		8.2000e-004	8.2000e-004		8.2000e-004	8.2000e-004	0.0000	2.5533	2.5533	1.7000e-004	0.0000	2.5574

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3.6 Architectural Coating - 2022
Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3900e-003	8.9000e-004	0.0107	4.0000e-005	4.3900e-003	3.0000e-005	4.4200e-003	1.1700e-003	3.0000e-005	1.1900e-003	0.0000	3.5329	3.5329	7.0000e-005	0.0000	3.5347
Total	1.3900e-003	8.9000e-004	0.0107	4.0000e-005	4.3900e-003	3.0000e-005	4.4200e-003	1.1700e-003	3.0000e-005	1.1900e-003	0.0000	3.5329	3.5329	7.0000e-005	0.0000	3.5347

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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Category	tons/yr											MT/yr				
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Mitigated	0.0184	0.0786	0.2389	9.1000e-004	0.0839	6.8000e-004	0.0846	0.0225	6.3000e-004	0.0231	0.0000	84.0514	84.0514	3.4800e-003	0.0000	84.1385
Unmitigated	0.0184	0.0786	0.2389	9.1000e-004	0.0839	6.8000e-004	0.0846	0.0225	6.3000e-004	0.0231	0.0000	84.0514	84.0514	3.4800e-003	0.0000	84.1385

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	20.79	250.25	184.14	221,299	221,299
Total	20.79	250.25	184.14	221,299	221,299

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-O or C-W	H-S or C-C	H-O or C-C	H-O or C-NW	Primary	Diverted	Pass-by		
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6			

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.561378	0.043284	0.209473	0.111826	0.015545	0.005795	0.025829	0.017125	0.001747	0.001542	0.004926	0.000594	0.000934

5.0 Energy Detail

Historical Energy Use: N

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5.2 Energy by Land Use - Natural Gas

Mitigated

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

5.3 Energy by Land Use - Electricity

Unmitigated

Land Use	Electricity Use kWh/yr	MT/yr					
		Total CO2	CH4	N2O	CO2e		
City Park	0	0.0000	0.0000	0.0000	0.0000	0.0000	
Total		0.0000	0.0000	0.0000	0.0000	0.0000	

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5.3 Energy by Land Use - Electricity

Mitigated

Land Use	Electricity Use kWh/yr	Total CO2	CH4	N2O	CO2e
City Park	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

Category	tons/yr																
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Mitigated	1.9536	0.0000	1.4000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	2.7000e-004	2.7000e-004	0.0000	0.0000	0.0000	2.9000e-004
Unmitigated	1.9536	0.0000	1.4000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	2.7000e-004	2.7000e-004	0.0000	0.0000	0.0000	2.9000e-004

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6.2 Area by SubCategory

Unmitigated

SubCategory	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Architectural Coating	0.2221					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.7314					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	1.4000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	2.7000e-004	2.7000e-004	2.7000e-004	0.0000	0.0000	2.9000e-004
Total	1.9535	0.0000	1.4000e-004	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	2.7000e-004	2.7000e-004	0.0000	0.0000	2.9000e-004

Mitigated

SubCategory	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Architectural Coating	0.2221					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.7314					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	1.4000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	2.7000e-004	2.7000e-004	2.7000e-004	0.0000	0.0000	2.9000e-004
Total	1.9535	0.0000	1.4000e-004	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	2.7000e-004	2.7000e-004	0.0000	0.0000	2.9000e-004

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	46.3948	1.9200e-003	4.0000e-004	46.5607
Unmitigated	46.3948	1.9200e-003	4.0000e-004	46.5607

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 13.1063	46.3948	1.9200e-003	4.0000e-004	46.5607
Total		46.3948	1.9200e-003	4.0000e-004	46.5607

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7.2 Water by Land Use

Mitigated

Land Use	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
	Mgal	MT/yr			
City Park	0 / 13.1063	46.3948	1.9200e-003	4.0000e-004	46.5607
Total		46.3948	1.9200e-003	4.0000e-004	46.5607

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

Category/Year	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.1928	0.0114	0.0000	0.4778
Unmitigated	0.1928	0.0114	0.0000	0.4778

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8.2 Waste by Land Use

Unmitigated

Land Use	Waste Disposed tons	Total CO2	CH4	N2O	CO2e
City Park	0.95	0.1928	0.0114	0.0000	0.4778
Total		0.1928	0.0114	0.0000	0.4778

Mitigated

Land Use	Waste Disposed tons	Total CO2	CH4	N2O	CO2e
City Park	0.95	0.1928	0.0114	0.0000	0.4778
Total		0.1928	0.0114	0.0000	0.4778

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