



Appendix A
Air Quality Analysis: CalEEMod Modelling

Orange Memorial Park Water Capture Project - March 2019 - San Mateo County, Annual

**Orange Memorial Park Water Capture Project - March 2019
San Mateo County, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	108.90	User Defined Unit	2.00	108,900.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	70
Climate Zone	5			Operational Year	2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	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 -

Land Use - Total area of proposed construction activity and size (in sf) of underground cisterns

Construction Phase - Estimated construction duration based on precedent projects and Applicant assumptions

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - Anticipated construction equipment

Off-road Equipment - Anticipated construction equipment

Off-road Equipment - Anticipated construction equipment

Off-road Equipment -

Trips and VMT -

Grading - Project grading. 13,600 CY to be exported offsite, the remainder to be stored onsite for later grading of the Ball Field post-cistern installation.

Construction Off-road Equipment Mitigation -

Operational Off-Road Equipment - Proposed Duplex 15 HP variable frequency drive well pump

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Parking	150	0
tblConstructionPhase	NumDays	200.00	60.00
tblConstructionPhase	NumDays	200.00	60.00
tblConstructionPhase	NumDays	4.00	60.00
tblConstructionPhase	NumDays	4.00	21.00
tblConstructionPhase	NumDays	2.00	14.00
tblConstructionPhase	NumDaysWeek	5.00	7.00
tblConstructionPhase	NumDaysWeek	5.00	7.00
tblConstructionPhase	NumDaysWeek	5.00	7.00
tblConstructionPhase	NumDaysWeek	5.00	7.00
tblConstructionPhase	NumDaysWeek	5.00	7.00

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tblConstructionPhase	NumDaysWeek	5.00	7.00
tblGrading	AcresOfGrading	0.00	2.00
tblGrading	AcresOfGrading	7.00	2.00
tblGrading	MaterialExported	0.00	13,600.00
tblLandUse	LandUseSquareFeet	0.00	108,900.00
tblLandUse	LotAcreage	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	180.00
tblOperationalOffRoadEquipment	OperFuelType	Diesel	Electrical
tblOperationalOffRoadEquipment	OperHorsePower	84.00	15.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	4.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblTripsAndVMT	HaulingTripLength	20.00	2.00
tblTripsAndVMT	HaulingTripLength	20.00	2.00
tblTripsAndVMT	HaulingTripLength	20.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	1.00
tblTripsAndVMT	WorkerTripNumber	5.00	10.00
tblTripsAndVMT	WorkerTripNumber	8.00	25.00
tblTripsAndVMT	WorkerTripNumber	46.00	30.00

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	3-2-2020	6-1-2020	0.8214	0.8214
2	6-2-2020	9-1-2020	0.5739	0.5739
3	9-2-2020	9-30-2020	0.1883	0.1883
		Highest	0.8214	0.8214

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	0.4822	1.0000e-005	1.0000e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.9500e-003	1.9500e-003	1.0000e-005	0.0000	2.0800e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Offroad	6.3200e-003	0.0393	0.0311	7.0000e-005		1.8900e-003	1.8900e-003		1.8900e-003	1.8900e-003	0.0000	4.5419	4.5419	5.1000e-004	0.0000	4.5546
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.4885	0.0393	0.0321	7.0000e-005	0.0000	1.8900e-003	1.8900e-003	0.0000	1.8900e-003	1.8900e-003	0.0000	4.5438	4.5438	5.2000e-004	0.0000	4.5567

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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	0.4822	1.0000e-005	1.0000e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.9500e-003	1.9500e-003	1.0000e-005	0.0000	2.0800e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Offroad	6.3200e-003	0.0393	0.0311	7.0000e-005		1.8900e-003	1.8900e-003		1.8900e-003	1.8900e-003	0.0000	4.5419	4.5419	5.1000e-004	0.0000	4.5546
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.4885	0.0393	0.0321	7.0000e-005	0.0000	1.8900e-003	1.8900e-003	0.0000	1.8900e-003	1.8900e-003	0.0000	4.5438	4.5438	5.2000e-004	0.0000	4.5567

	ROG	NOx	CO	SO2	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	Staging and Mobilization	Site Preparation	3/2/2020	3/15/2020	7	14	
2	Excavation, Storage, and Export	Grading	3/16/2020	5/14/2020	7	60	
3	Installation of Diversion Pipelines	Trenching	5/15/2020	6/13/2020	7	30	
4	Installation of Treatment and Filtration Chambers	Building Construction	6/14/2020	8/12/2020	7	60	
5	Installation of Large Underground	Building Construction	8/13/2020	10/11/2020	7	60	
6	Grading of Ball Fields	Grading	10/12/2020	11/1/2020	7	21	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; 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
Staging and Mobilization	Graders	1	8.00	187	0.41
Staging and Mobilization	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Excavation, Storage, and Export	Excavators	2	8.00	158	0.38
Excavation, Storage, and Export	Rubber Tired Dozers	1	8.00	247	0.40
Excavation, Storage, and Export	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Installation of Diversion Pipelines	Excavators	1	8.00	158	0.38
Installation of Diversion Pipelines	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Installation of Diversion Pipelines	Trenchers	1	8.00	78	0.50
Installation of Treatment and Filtration Chambers	Cement and Mortar Mixers	2	6.00	9	0.56
Installation of Treatment and Filtration Chambers	Cranes	1	8.00	231	0.29
Installation of Treatment and Filtration Chambers	Rough Terrain Forklifts	1	8.00	100	0.40
Installation of Treatment and Filtration Chambers	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Installation of Large Underground	Cement and Mortar Mixers	2	6.00	9	0.56
Installation of Large Underground	Cranes	1	8.00	231	0.29
Installation of Large Underground	Rough Terrain Forklifts	1	8.00	100	0.40
Installation of Large Underground	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading of Ball Fields	Tractors/Loaders/Backhoes	1	8.00	97	0.37

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
Staging and Mobilization	2	10.00	0.00	0.00	10.80	7.30	2.00	LD_Mix	HDT_Mix	HHDT
Excavation, Storage, and Export	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Installation of Diversion Pipelines	3	25.00	1.00	0.00	10.80	7.30	2.00	LD_Mix	HDT_Mix	HHDT
Installation of Treatment and Filtration	5	30.00	18.00	0.00	10.80	7.30	2.00	LD_Mix	HDT_Mix	HHDT
Installation of Large Underground	5	46.00	18.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading of Ball Fields	1	3.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Staging and Mobilization - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.0600e-003	0.0000	1.0600e-003	1.1000e-004	0.0000	1.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.8000e-003	0.0590	0.0287	7.0000e-005		2.3500e-003	2.3500e-003		2.1600e-003	2.1600e-003	0.0000	5.9914	5.9914	1.9400e-003	0.0000	6.0399
Total	4.8000e-003	0.0590	0.0287	7.0000e-005	1.0600e-003	2.3500e-003	3.4100e-003	1.1000e-004	2.1600e-003	2.2700e-003	0.0000	5.9914	5.9914	1.9400e-003	0.0000	6.0399

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3.2 Staging and Mobilization - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9000e-004	1.3000e-004	1.3600e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4589	0.4589	1.0000e-005	0.0000	0.4591
Total	1.9000e-004	1.3000e-004	1.3600e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4589	0.4589	1.0000e-005	0.0000	0.4591

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					4.8000e-004	0.0000	4.8000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.8000e-003	0.0590	0.0287	7.0000e-005		2.3500e-003	2.3500e-003		2.1600e-003	2.1600e-003	0.0000	5.9914	5.9914	1.9400e-003	0.0000	6.0399
Total	4.8000e-003	0.0590	0.0287	7.0000e-005	4.8000e-004	2.3500e-003	2.8300e-003	5.0000e-005	2.1600e-003	2.2100e-003	0.0000	5.9914	5.9914	1.9400e-003	0.0000	6.0399

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3.2 Staging and Mobilization - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9000e-004	1.3000e-004	1.3600e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4589	0.4589	1.0000e-005	0.0000	0.4591
Total	1.9000e-004	1.3000e-004	1.3600e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4589	0.4589	1.0000e-005	0.0000	0.4591

3.3 Excavation, Storage, and Export - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1817	0.0000	0.1817	0.0994	0.0000	0.0994	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0597	0.6110	0.4568	7.5000e-004		0.0317	0.0317		0.0291	0.0291	0.0000	66.1097	66.1097	0.0214	0.0000	66.6443
Total	0.0597	0.6110	0.4568	7.5000e-004	0.1817	0.0317	0.2134	0.0994	0.0291	0.1285	0.0000	66.1097	66.1097	0.0214	0.0000	66.6443

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3.3 Excavation, Storage, and Export - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0600e-003	7.2000e-004	7.5900e-003	3.0000e-005	3.0700e-003	2.0000e-005	3.0900e-003	8.2000e-004	2.0000e-005	8.3000e-004	0.0000	2.5566	2.5566	5.0000e-005	0.0000	2.5578
Total	1.0600e-003	7.2000e-004	7.5900e-003	3.0000e-005	3.0700e-003	2.0000e-005	3.0900e-003	8.2000e-004	2.0000e-005	8.3000e-004	0.0000	2.5566	2.5566	5.0000e-005	0.0000	2.5578

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					0.0818	0.0000	0.0818	0.0447	0.0000	0.0447	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0597	0.6110	0.4568	7.5000e-004		0.0317	0.0317		0.0291	0.0291	0.0000	66.1096	66.1096	0.0214	0.0000	66.6442
Total	0.0597	0.6110	0.4568	7.5000e-004	0.0818	0.0317	0.1134	0.0447	0.0291	0.0739	0.0000	66.1096	66.1096	0.0214	0.0000	66.6442

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3.3 Excavation, Storage, and Export - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0600e-003	7.2000e-004	7.5900e-003	3.0000e-005	3.0700e-003	2.0000e-005	3.0900e-003	8.2000e-004	2.0000e-005	8.3000e-004	0.0000	2.5566	2.5566	5.0000e-005	0.0000	2.5578
Total	1.0600e-003	7.2000e-004	7.5900e-003	3.0000e-005	3.0700e-003	2.0000e-005	3.0900e-003	8.2000e-004	2.0000e-005	8.3000e-004	0.0000	2.5566	2.5566	5.0000e-005	0.0000	2.5578

3.4 Installation of Diversion Pipelines - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0131	0.1247	0.1228	1.7000e-004		8.0100e-003	8.0100e-003		7.3700e-003	7.3700e-003	0.0000	15.3455	15.3455	4.9600e-003	0.0000	15.4696
Total	0.0131	0.1247	0.1228	1.7000e-004		8.0100e-003	8.0100e-003		7.3700e-003	7.3700e-003	0.0000	15.3455	15.3455	4.9600e-003	0.0000	15.4696

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3.4 Installation of Diversion Pipelines - 2020

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	6.0000e-005	1.7400e-003	6.9000e-004	0.0000	1.0000e-004	1.0000e-005	1.1000e-004	3.0000e-005	1.0000e-005	4.0000e-005	0.0000	0.3975	0.3975	3.0000e-005	0.0000	0.3984
Worker	1.0200e-003	6.9000e-004	7.3000e-003	3.0000e-005	2.9500e-003	2.0000e-005	2.9700e-003	7.9000e-004	2.0000e-005	8.0000e-004	0.0000	2.4582	2.4582	5.0000e-005	0.0000	2.4594
Total	1.0800e-003	2.4300e-003	7.9900e-003	3.0000e-005	3.0500e-003	3.0000e-005	3.0800e-003	8.2000e-004	3.0000e-005	8.4000e-004	0.0000	2.8557	2.8557	8.0000e-005	0.0000	2.8578

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	0.0131	0.1247	0.1228	1.7000e-004		8.0100e-003	8.0100e-003		7.3700e-003	7.3700e-003	0.0000	15.3455	15.3455	4.9600e-003	0.0000	15.4695
Total	0.0131	0.1247	0.1228	1.7000e-004		8.0100e-003	8.0100e-003		7.3700e-003	7.3700e-003	0.0000	15.3455	15.3455	4.9600e-003	0.0000	15.4695

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3.4 Installation of Diversion Pipelines - 2020

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	6.0000e-005	1.7400e-003	6.9000e-004	0.0000	1.0000e-004	1.0000e-005	1.1000e-004	3.0000e-005	1.0000e-005	4.0000e-005	0.0000	0.3975	0.3975	3.0000e-005	0.0000	0.3984
Worker	1.0200e-003	6.9000e-004	7.3000e-003	3.0000e-005	2.9500e-003	2.0000e-005	2.9700e-003	7.9000e-004	2.0000e-005	8.0000e-004	0.0000	2.4582	2.4582	5.0000e-005	0.0000	2.4594
Total	1.0800e-003	2.4300e-003	7.9900e-003	3.0000e-005	3.0500e-003	3.0000e-005	3.0800e-003	8.2000e-004	3.0000e-005	8.4000e-004	0.0000	2.8557	2.8557	8.0000e-005	0.0000	2.8578

3.5 Installation of Treatment and Filtration Chambers - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0265	0.2934	0.2146	4.0000e-004		0.0135	0.0135		0.0125	0.0125	0.0000	34.5369	34.5369	0.0107	0.0000	34.8048
Total	0.0265	0.2934	0.2146	4.0000e-004		0.0135	0.0135		0.0125	0.0125	0.0000	34.5369	34.5369	0.0107	0.0000	34.8048

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3.5 Installation of Treatment and Filtration Chambers - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.0900e-003	0.0626	0.0249	1.4000e-004	3.5200e-003	3.1000e-004	3.8300e-003	1.0200e-003	3.0000e-004	1.3200e-003	0.0000	14.3097	14.3097	1.2400e-003	0.0000	14.3408
Worker	2.4500e-003	1.6600e-003	0.0175	7.0000e-005	7.0900e-003	4.0000e-005	7.1300e-003	1.8900e-003	4.0000e-005	1.9300e-003	0.0000	5.8998	5.8998	1.2000e-004	0.0000	5.9026
Total	4.5400e-003	0.0643	0.0424	2.1000e-004	0.0106	3.5000e-004	0.0110	2.9100e-003	3.4000e-004	3.2500e-003	0.0000	20.2094	20.2094	1.3600e-003	0.0000	20.2434

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	0.0265	0.2934	0.2146	4.0000e-004		0.0135	0.0135		0.0125	0.0125	0.0000	34.5368	34.5368	0.0107	0.0000	34.8048
Total	0.0265	0.2934	0.2146	4.0000e-004		0.0135	0.0135		0.0125	0.0125	0.0000	34.5368	34.5368	0.0107	0.0000	34.8048

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3.5 Installation of Treatment and Filtration Chambers - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.0900e-003	0.0626	0.0249	1.4000e-004	3.5200e-003	3.1000e-004	3.8300e-003	1.0200e-003	3.0000e-004	1.3200e-003	0.0000	14.3097	14.3097	1.2400e-003	0.0000	14.3408
Worker	2.4500e-003	1.6600e-003	0.0175	7.0000e-005	7.0900e-003	4.0000e-005	7.1300e-003	1.8900e-003	4.0000e-005	1.9300e-003	0.0000	5.8998	5.8998	1.2000e-004	0.0000	5.9026
Total	4.5400e-003	0.0643	0.0424	2.1000e-004	0.0106	3.5000e-004	0.0110	2.9100e-003	3.4000e-004	3.2500e-003	0.0000	20.2094	20.2094	1.3600e-003	0.0000	20.2434

3.6 Installation of Large Underground - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0265	0.2934	0.2146	4.0000e-004		0.0135	0.0135		0.0125	0.0125	0.0000	34.5369	34.5369	0.0107	0.0000	34.8048
Total	0.0265	0.2934	0.2146	4.0000e-004		0.0135	0.0135		0.0125	0.0125	0.0000	34.5369	34.5369	0.0107	0.0000	34.8048

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3.6 Installation of Large Underground - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.0900e-003	0.0626	0.0249	1.4000e-004	3.5200e-003	3.1000e-004	3.8300e-003	1.0200e-003	3.0000e-004	1.3200e-003	0.0000	14.3097	14.3097	1.2400e-003	0.0000	14.3408
Worker	3.7600e-003	2.5500e-003	0.0269	1.0000e-004	0.0109	7.0000e-005	0.0109	2.8900e-003	6.0000e-005	2.9500e-003	0.0000	9.0463	9.0463	1.8000e-004	0.0000	9.0507
Total	5.8500e-003	0.0652	0.0518	2.4000e-004	0.0144	3.8000e-004	0.0148	3.9100e-003	3.6000e-004	4.2700e-003	0.0000	23.3560	23.3560	1.4200e-003	0.0000	23.3915

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	0.0265	0.2934	0.2146	4.0000e-004		0.0135	0.0135		0.0125	0.0125	0.0000	34.5368	34.5368	0.0107	0.0000	34.8048
Total	0.0265	0.2934	0.2146	4.0000e-004		0.0135	0.0135		0.0125	0.0125	0.0000	34.5368	34.5368	0.0107	0.0000	34.8048

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3.6 Installation of Large Underground - 2020**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.0900e-003	0.0626	0.0249	1.4000e-004	3.5200e-003	3.1000e-004	3.8300e-003	1.0200e-003	3.0000e-004	1.3200e-003	0.0000	14.3097	14.3097	1.2400e-003	0.0000	14.3408
Worker	3.7600e-003	2.5500e-003	0.0269	1.0000e-004	0.0109	7.0000e-005	0.0109	2.8900e-003	6.0000e-005	2.9500e-003	0.0000	9.0463	9.0463	1.8000e-004	0.0000	9.0507
Total	5.8500e-003	0.0652	0.0518	2.4000e-004	0.0144	3.8000e-004	0.0148	3.9100e-003	3.6000e-004	4.2700e-003	0.0000	23.3560	23.3560	1.4200e-003	0.0000	23.3915

3.7 Grading of Ball Fields - 2020**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.0600e-003	0.0000	1.0600e-003	1.1000e-004	0.0000	1.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.2000e-003	0.0221	0.0239	3.0000e-005		1.4000e-003	1.4000e-003		1.2900e-003	1.2900e-003	0.0000	2.8650	2.8650	9.3000e-004	0.0000	2.8881
Total	2.2000e-003	0.0221	0.0239	3.0000e-005	1.0600e-003	1.4000e-003	2.4600e-003	1.1000e-004	1.2900e-003	1.4000e-003	0.0000	2.8650	2.8650	9.3000e-004	0.0000	2.8881

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3.7 Grading of Ball Fields - 2020

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-005	6.0000e-005	6.1000e-004	0.0000	2.5000e-004	0.0000	2.5000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2065	0.2065	0.0000	0.0000	0.2066
Total	9.0000e-005	6.0000e-005	6.1000e-004	0.0000	2.5000e-004	0.0000	2.5000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2065	0.2065	0.0000	0.0000	0.2066

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					4.8000e-004	0.0000	4.8000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.2000e-003	0.0221	0.0239	3.0000e-005		1.4000e-003	1.4000e-003		1.2900e-003	1.2900e-003	0.0000	2.8650	2.8650	9.3000e-004	0.0000	2.8881
Total	2.2000e-003	0.0221	0.0239	3.0000e-005	4.8000e-004	1.4000e-003	1.8800e-003	5.0000e-005	1.2900e-003	1.3400e-003	0.0000	2.8650	2.8650	9.3000e-004	0.0000	2.8881

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3.7 Grading of Ball Fields - 2020

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-005	6.0000e-005	6.1000e-004	0.0000	2.5000e-004	0.0000	2.5000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2065	0.2065	0.0000	0.0000	0.2066
Total	9.0000e-005	6.0000e-005	6.1000e-004	0.0000	2.5000e-004	0.0000	2.5000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2065	0.2065	0.0000	0.0000	0.2066

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
User Defined Industrial	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
User Defined Industrial	9.50	7.30	7.30	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
User Defined Industrial	0.482816	0.049967	0.258264	0.138365	0.017696	0.006700	0.022365	0.006431	0.004044	0.003214	0.008927	0.000452	0.000759

5.0 Energy Detail

Historical Energy Use: N

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5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU/yr	tons/yr										MT/yr						
User Defined Industrial	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
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

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

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5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.4822	1.0000e-005	1.0000e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.9500e-003	1.9500e-003	1.0000e-005	0.0000	2.0800e-003
Unmitigated	0.4822	1.0000e-005	1.0000e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.9500e-003	1.9500e-003	1.0000e-005	0.0000	2.0800e-003

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6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0568					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4253					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	9.0000e-005	1.0000e-005	1.0000e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.9500e-003	1.9500e-003	1.0000e-005	0.0000	2.0800e-003
Total	0.4822	1.0000e-005	1.0000e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.9500e-003	1.9500e-003	1.0000e-005	0.0000	2.0800e-003

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0568					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4253					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	9.0000e-005	1.0000e-005	1.0000e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.9500e-003	1.9500e-003	1.0000e-005	0.0000	2.0800e-003
Total	0.4822	1.0000e-005	1.0000e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.9500e-003	1.9500e-003	1.0000e-005	0.0000	2.0800e-003

7.0 Water Detail

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7.1 Mitigation Measures Water

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

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

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7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

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

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8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

9.0 Operational Offroad

Orange Memorial Park Water Capture Project - March 2019 - San Mateo County, Annual

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Pumps	1	4.00	180	15	0.74	Electrical

UnMitigated/Mitigated

Equipment Type	ROG	NOx	CO	SO2	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					
Pumps	6.3200e-003	0.0393	0.0311	7.0000e-005		1.8900e-003	1.8900e-003		1.8900e-003	1.8900e-003	0.0000	4.5419	4.5419	5.1000e-004	0.0000	4.5546
Total	6.3200e-003	0.0393	0.0311	7.0000e-005		1.8900e-003	1.8900e-003		1.8900e-003	1.8900e-003	0.0000	4.5419	4.5419	5.1000e-004	0.0000	4.5546

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

Orange Memorial Park Water Capture Project - March 2019 - San Mateo County, Summer

Orange Memorial Park Water Capture Project - March 2019
San Mateo County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	108.90	User Defined Unit	2.00	108,900.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	70
Climate Zone	5			Operational Year	2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	641.35	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Orange Memorial Park Water Capture Project - March 2019 - San Mateo County, Summer

Project Characteristics -

Land Use - Total area of proposed construction activity and size (in sf) of underground cisterns

Construction Phase - Estimated construction duration based on precedent projects and Applicant assumptions

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - Anticipated construction equipment

Off-road Equipment - Anticipated construction equipment

Off-road Equipment - Anticipated construction equipment

Off-road Equipment -

Trips and VMT -

Grading - Project grading. 13,600 CY to be exported offsite, the remainder to be stored onsite for later grading of the Ball Field post-cistern installation.

Construction Off-road Equipment Mitigation -

Operational Off-Road Equipment - Proposed Duplex 15 HP variable frequency drive well pump

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Parking	150	0
tblConstructionPhase	NumDays	200.00	60.00
tblConstructionPhase	NumDays	200.00	60.00
tblConstructionPhase	NumDays	4.00	60.00
tblConstructionPhase	NumDays	4.00	21.00
tblConstructionPhase	NumDays	2.00	14.00
tblConstructionPhase	NumDaysWeek	5.00	7.00
tblConstructionPhase	NumDaysWeek	5.00	7.00
tblConstructionPhase	NumDaysWeek	5.00	7.00
tblConstructionPhase	NumDaysWeek	5.00	7.00
tblConstructionPhase	NumDaysWeek	5.00	7.00

Orange Memorial Park Water Capture Project - March 2019 - San Mateo County, Summer

tblConstructionPhase	NumDaysWeek	5.00	7.00
tblGrading	AcresOfGrading	0.00	2.00
tblGrading	AcresOfGrading	7.00	2.00
tblGrading	MaterialExported	0.00	13,600.00
tblLandUse	LandUseSquareFeet	0.00	108,900.00
tblLandUse	LotAcreage	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	180.00
tblOperationalOffRoadEquipment	OperFuelType	Diesel	Electrical
tblOperationalOffRoadEquipment	OperHorsePower	84.00	15.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	4.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblTripsAndVMT	HaulingTripLength	20.00	2.00
tblTripsAndVMT	HaulingTripLength	20.00	2.00
tblTripsAndVMT	HaulingTripLength	20.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	1.00
tblTripsAndVMT	WorkerTripNumber	5.00	10.00
tblTripsAndVMT	WorkerTripNumber	8.00	25.00
tblTripsAndVMT	WorkerTripNumber	46.00	30.00

2.0 Emissions Summary

Orange Memorial Park Water Capture Project - March 2019 - San Mateo 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	2.6427	1.0000e-004	0.0112	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0238	0.0238	6.0000e-005		0.0254
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Offroad	0.0702	0.4368	0.3456	7.8000e-004		0.0210	0.0210		0.0210	0.0210		55.6281	55.6281	6.2600e-003		55.7847
Total	2.7128	0.4369	0.3568	7.8000e-004	0.0000	0.0210	0.0210	0.0000	0.0210	0.0210		55.6519	55.6519	6.3200e-003	0.0000	55.8101

Orange Memorial Park Water Capture Project - March 2019 - San Mateo County, Summer

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	lb/day										lb/day					
Area	2.6427	1.0000e-004	0.0112	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0238	0.0238	6.0000e-005		0.0254
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Offroad	0.0702	0.4368	0.3456	7.8000e-004		0.0210	0.0210		0.0210	0.0210		55.6281	55.6281	6.2600e-003		55.7847
Total	2.7128	0.4369	0.3568	7.8000e-004	0.0000	0.0210	0.0210	0.0000	0.0210	0.0210		55.6519	55.6519	6.3200e-003	0.0000	55.8101

	ROG	NOx	CO	SO2	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

Orange Memorial Park Water Capture Project - March 2019 - San Mateo County, Summer

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Staging and Mobilization	Site Preparation	3/2/2020	3/15/2020	7	14	
2	Excavation, Storage, and Export	Grading	3/16/2020	5/14/2020	7	60	
3	Installation of Diversion Pipelines	Trenching	5/15/2020	6/13/2020	7	30	
4	Installation of Treatment and Filtration Chambers	Building Construction	6/14/2020	8/12/2020	7	60	
5	Installation of Large Underground	Building Construction	8/13/2020	10/11/2020	7	60	
6	Grading of Ball Fields	Grading	10/12/2020	11/1/2020	7	21	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Orange Memorial Park Water Capture Project - March 2019 - San Mateo County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Staging and Mobilization	Graders	1	8.00	187	0.41
Staging and Mobilization	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Excavation, Storage, and Export	Excavators	2	8.00	158	0.38
Excavation, Storage, and Export	Rubber Tired Dozers	1	8.00	247	0.40
Excavation, Storage, and Export	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Installation of Diversion Pipelines	Excavators	1	8.00	158	0.38
Installation of Diversion Pipelines	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Installation of Diversion Pipelines	Trenchers	1	8.00	78	0.50
Installation of Treatment and Filtration Chambers	Cement and Mortar Mixers	2	6.00	9	0.56
Installation of Treatment and Filtration Chambers	Cranes	1	8.00	231	0.29
Installation of Treatment and Filtration Chambers	Rough Terrain Forklifts	1	8.00	100	0.40
Installation of Treatment and Filtration Chambers	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Installation of Large Underground	Cement and Mortar Mixers	2	6.00	9	0.56
Installation of Large Underground	Cranes	1	8.00	231	0.29
Installation of Large Underground	Rough Terrain Forklifts	1	8.00	100	0.40
Installation of Large Underground	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading of Ball Fields	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Orange Memorial Park Water Capture Project - March 2019 - San Mateo 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
Staging and Mobilization	2	10.00	0.00	0.00	10.80	7.30	2.00	LD_Mix	HDT_Mix	HHDT
Excavation, Storage, and Export	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Installation of Diversion Pipelines	3	25.00	1.00	0.00	10.80	7.30	2.00	LD_Mix	HDT_Mix	HHDT
Installation of Treatment and Filtration	5	30.00	18.00	0.00	10.80	7.30	2.00	LD_Mix	HDT_Mix	HHDT
Installation of Large Underground	5	46.00	18.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading of Ball Fields	1	3.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Staging and Mobilization - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1515	0.0000	0.1515	0.0164	0.0000	0.0164			0.0000			0.0000
Off-Road	0.6853	8.4307	4.0942	9.7400e-003		0.3353	0.3353		0.3085	0.3085		943.4872	943.4872	0.3051		951.1158
Total	0.6853	8.4307	4.0942	9.7400e-003	0.1515	0.3353	0.4868	0.0164	0.3085	0.3249		943.4872	943.4872	0.3051		951.1158

Orange Memorial Park Water Capture Project - March 2019 - San Mateo County, Summer

3.2 Staging and Mobilization - 2020

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	0.0275	0.0163	0.2069	7.7000e-004	0.0822	4.9000e-004	0.0826	0.0218	4.6000e-004	0.0223		76.7119	76.7119	1.4800e-003		76.7490
Total	0.0275	0.0163	0.2069	7.7000e-004	0.0822	4.9000e-004	0.0826	0.0218	4.6000e-004	0.0223		76.7119	76.7119	1.4800e-003		76.7490

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					0.0682	0.0000	0.0682	7.3600e-003	0.0000	7.3600e-003			0.0000			0.0000
Off-Road	0.6853	8.4307	4.0942	9.7400e-003		0.3353	0.3353		0.3085	0.3085	0.0000	943.4872	943.4872	0.3051		951.1158
Total	0.6853	8.4307	4.0942	9.7400e-003	0.0682	0.3353	0.4035	7.3600e-003	0.3085	0.3159	0.0000	943.4872	943.4872	0.3051		951.1158

Orange Memorial Park Water Capture Project - March 2019 - San Mateo County, Summer

3.2 Staging and Mobilization - 2020

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	0.0275	0.0163	0.2069	7.7000e-004	0.0822	4.9000e-004	0.0826	0.0218	4.6000e-004	0.0223		76.7119	76.7119	1.4800e-003		76.7490
Total	0.0275	0.0163	0.2069	7.7000e-004	0.0822	4.9000e-004	0.0826	0.0218	4.6000e-004	0.0223		76.7119	76.7119	1.4800e-003		76.7490

3.3 Excavation, Storage, and Export - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.0574	0.0000	6.0574	3.3140	0.0000	3.3140			0.0000			0.0000
Off-Road	1.9885	20.3678	15.2266	0.0251		1.0550	1.0550		0.9706	0.9706		2,429.1164	2,429.1164	0.7856		2,448.7570
Total	1.9885	20.3678	15.2266	0.0251	6.0574	1.0550	7.1124	3.3140	0.9706	4.2846		2,429.1164	2,429.1164	0.7856		2,448.7570

Orange Memorial Park Water Capture Project - March 2019 - San Mateo County, Summer

3.3 Excavation, Storage, and Export - 2020

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	0.0357	0.0212	0.2690	1.0000e-003	0.1068	6.4000e-004	0.1074	0.0283	5.9000e-004	0.0289		99.7255	99.7255	1.9300e-003		99.7737
Total	0.0357	0.0212	0.2690	1.0000e-003	0.1068	6.4000e-004	0.1074	0.0283	5.9000e-004	0.0289		99.7255	99.7255	1.9300e-003		99.7737

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					2.7259	0.0000	2.7259	1.4913	0.0000	1.4913			0.0000			0.0000
Off-Road	1.9885	20.3678	15.2266	0.0251		1.0550	1.0550		0.9706	0.9706	0.0000	2,429.1164	2,429.1164	0.7856		2,448.7570
Total	1.9885	20.3678	15.2266	0.0251	2.7259	1.0550	3.7808	1.4913	0.9706	2.4619	0.0000	2,429.1164	2,429.1164	0.7856		2,448.7570

Orange Memorial Park Water Capture Project - March 2019 - San Mateo County, Summer

3.3 Excavation, Storage, and Export - 2020

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	0.0357	0.0212	0.2690	1.0000e-003	0.1068	6.4000e-004	0.1074	0.0283	5.9000e-004	0.0289		99.7255	99.7255	1.9300e-003		99.7737
Total	0.0357	0.0212	0.2690	1.0000e-003	0.1068	6.4000e-004	0.1074	0.0283	5.9000e-004	0.0289		99.7255	99.7255	1.9300e-003		99.7737

3.4 Installation of Diversion Pipelines - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8742	8.3143	8.1838	0.0116		0.5342	0.5342		0.4915	0.4915		1,127.6990	1,127.6990	0.3647		1,136.8170
Total	0.8742	8.3143	8.1838	0.0116		0.5342	0.5342		0.4915	0.4915		1,127.6990	1,127.6990	0.3647		1,136.8170

Orange Memorial Park Water Capture Project - March 2019 - San Mateo County, Summer

3.4 Installation of Diversion Pipelines - 2020

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	3.8000e-003	0.1142	0.0443	2.7000e-004	6.7500e-003	5.7000e-004	7.3200e-003	1.9400e-003	5.5000e-004	2.4900e-003		29.4263	29.4263	2.5100e-003		29.4891
Worker	0.0687	0.0407	0.5174	1.9200e-003	0.2054	1.2400e-003	0.2066	0.0545	1.1400e-003	0.0556		191.7797	191.7797	3.7100e-003		191.8724
Total	0.0725	0.1549	0.5616	2.1900e-003	0.2121	1.8100e-003	0.2139	0.0564	1.6900e-003	0.0581		221.2061	221.2061	6.2200e-003		221.3615

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8742	8.3143	8.1838	0.0116		0.5342	0.5342		0.4915	0.4915	0.0000	1,127.6990	1,127.6990	0.3647		1,136.8170
Total	0.8742	8.3143	8.1838	0.0116		0.5342	0.5342		0.4915	0.4915	0.0000	1,127.6990	1,127.6990	0.3647		1,136.8170

Orange Memorial Park Water Capture Project - March 2019 - San Mateo County, Summer

3.4 Installation of Diversion Pipelines - 2020

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	3.8000e-003	0.1142	0.0443	2.7000e-004	6.7500e-003	5.7000e-004	7.3200e-003	1.9400e-003	5.5000e-004	2.4900e-003		29.4263	29.4263	2.5100e-003		29.4891
Worker	0.0687	0.0407	0.5174	1.9200e-003	0.2054	1.2400e-003	0.2066	0.0545	1.1400e-003	0.0556		191.7797	191.7797	3.7100e-003		191.8724
Total	0.0725	0.1549	0.5616	2.1900e-003	0.2121	1.8100e-003	0.2139	0.0564	1.6900e-003	0.0581		221.2061	221.2061	6.2200e-003		221.3615

3.5 Installation of Treatment and Filtration Chambers - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8845	9.7789	7.1546	0.0134		0.4492	0.4492		0.4150	0.4150		1,269.0131	1,269.0131	0.3938		1,278.8577
Total	0.8845	9.7789	7.1546	0.0134		0.4492	0.4492		0.4150	0.4150		1,269.0131	1,269.0131	0.3938		1,278.8577

Orange Memorial Park Water Capture Project - March 2019 - San Mateo County, Summer

3.5 Installation of Treatment and Filtration Chambers - 2020

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	0.0683	2.0558	0.7970	4.8200e-003	0.1215	0.0103	0.1318	0.0350	9.8500e-003	0.0448		529.6740	529.6740	0.0452		530.8041
Worker	0.0824	0.0489	0.6208	2.3100e-003	0.2464	1.4800e-003	0.2479	0.0654	1.3700e-003	0.0667		230.1357	230.1357	4.4500e-003		230.2469
Total	0.1508	2.1046	1.4178	7.1300e-003	0.3679	0.0118	0.3797	0.1003	0.0112	0.1116		759.8097	759.8097	0.0497		761.0510

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8845	9.7789	7.1546	0.0134		0.4492	0.4492		0.4150	0.4150	0.0000	1,269.0131	1,269.0131	0.3938		1,278.8577
Total	0.8845	9.7789	7.1546	0.0134		0.4492	0.4492		0.4150	0.4150	0.0000	1,269.0131	1,269.0131	0.3938		1,278.8577

Orange Memorial Park Water Capture Project - March 2019 - San Mateo County, Summer

3.5 Installation of Treatment and Filtration Chambers - 2020

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	0.0683	2.0558	0.7970	4.8200e-003	0.1215	0.0103	0.1318	0.0350	9.8500e-003	0.0448		529.6740	529.6740	0.0452		530.8041
Worker	0.0824	0.0489	0.6208	2.3100e-003	0.2464	1.4800e-003	0.2479	0.0654	1.3700e-003	0.0667		230.1357	230.1357	4.4500e-003		230.2469
Total	0.1508	2.1046	1.4178	7.1300e-003	0.3679	0.0118	0.3797	0.1003	0.0112	0.1116		759.8097	759.8097	0.0497		761.0510

3.6 Installation of Large Underground - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8845	9.7789	7.1546	0.0134		0.4492	0.4492		0.4150	0.4150		1,269.0131	1,269.0131	0.3938		1,278.8577
Total	0.8845	9.7789	7.1546	0.0134		0.4492	0.4492		0.4150	0.4150		1,269.0131	1,269.0131	0.3938		1,278.8577

Orange Memorial Park Water Capture Project - March 2019 - San Mateo County, Summer

3.6 Installation of Large Underground - 2020

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	0.0683	2.0558	0.7970	4.8200e-003	0.1215	0.0103	0.1318	0.0350	9.8500e-003	0.0448		529.6740	529.6740	0.0452		530.8041
Worker	0.1264	0.0750	0.9519	3.5400e-003	0.3779	2.2800e-003	0.3802	0.1002	2.1000e-003	0.1023		352.8747	352.8747	6.8200e-003		353.0452
Total	0.1947	2.1307	1.7489	8.3600e-003	0.4994	0.0126	0.5120	0.1352	0.0120	0.1471		882.5487	882.5487	0.0520		883.8494

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8845	9.7789	7.1546	0.0134		0.4492	0.4492		0.4150	0.4150	0.0000	1,269.0131	1,269.0131	0.3938		1,278.8577
Total	0.8845	9.7789	7.1546	0.0134		0.4492	0.4492		0.4150	0.4150	0.0000	1,269.0131	1,269.0131	0.3938		1,278.8577

Orange Memorial Park Water Capture Project - March 2019 - San Mateo County, Summer

3.6 Installation of Large Underground - 2020

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	0.0683	2.0558	0.7970	4.8200e-003	0.1215	0.0103	0.1318	0.0350	9.8500e-003	0.0448		529.6740	529.6740	0.0452		530.8041
Worker	0.1264	0.0750	0.9519	3.5400e-003	0.3779	2.2800e-003	0.3802	0.1002	2.1000e-003	0.1023		352.8747	352.8747	6.8200e-003		353.0452
Total	0.1947	2.1307	1.7489	8.3600e-003	0.4994	0.0126	0.5120	0.1352	0.0120	0.1471		882.5487	882.5487	0.0520		883.8494

3.7 Grading of Ball Fields - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1010	0.0000	0.1010	0.0109	0.0000	0.0109			0.0000			0.0000
Off-Road	0.2095	2.1052	2.2797	3.1100e-003		0.1331	0.1331		0.1225	0.1225		300.7685	300.7685	0.0973		303.2004
Total	0.2095	2.1052	2.2797	3.1100e-003	0.1010	0.1331	0.2341	0.0109	0.1225	0.1334		300.7685	300.7685	0.0973		303.2004

Orange Memorial Park Water Capture Project - March 2019 - San Mateo County, Summer

3.7 Grading of Ball Fields - 2020

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	8.2400e-003	4.8900e-003	0.0621	2.3000e-004	0.0246	1.5000e-004	0.0248	6.5400e-003	1.4000e-004	6.6700e-003		23.0136	23.0136	4.4000e-004		23.0247
Total	8.2400e-003	4.8900e-003	0.0621	2.3000e-004	0.0246	1.5000e-004	0.0248	6.5400e-003	1.4000e-004	6.6700e-003		23.0136	23.0136	4.4000e-004		23.0247

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					0.0455	0.0000	0.0455	4.9100e-003	0.0000	4.9100e-003			0.0000			0.0000
Off-Road	0.2095	2.1052	2.2797	3.1100e-003		0.1331	0.1331		0.1225	0.1225	0.0000	300.7685	300.7685	0.0973		303.2004
Total	0.2095	2.1052	2.2797	3.1100e-003	0.0455	0.1331	0.1786	4.9100e-003	0.1225	0.1274	0.0000	300.7685	300.7685	0.0973		303.2004

Orange Memorial Park Water Capture Project - March 2019 - San Mateo County, Summer

3.7 Grading of Ball Fields - 2020

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	8.2400e-003	4.8900e-003	0.0621	2.3000e-004	0.0246	1.5000e-004	0.0248	6.5400e-003	1.4000e-004	6.6700e-003		23.0136	23.0136	4.4000e-004		23.0247
Total	8.2400e-003	4.8900e-003	0.0621	2.3000e-004	0.0246	1.5000e-004	0.0248	6.5400e-003	1.4000e-004	6.6700e-003		23.0136	23.0136	4.4000e-004		23.0247

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Orange Memorial Park Water Capture Project - March 2019 - San Mateo 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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
User Defined Industrial	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
User Defined Industrial	9.50	7.30	7.30	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
User Defined Industrial	0.482816	0.049967	0.258264	0.138365	0.017696	0.006700	0.022365	0.006431	0.004044	0.003214	0.008927	0.000452	0.000759

5.0 Energy Detail

Historical Energy Use: N

Orange Memorial Park Water Capture Project - March 2019 - San Mateo County, Summer

5.1 Mitigation Measures Energy

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

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Orange Memorial Park Water Capture Project - March 2019 - San Mateo County, Summer

5.2 Energy by Land Use - Natural Gas

Mitigated

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

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.6427	1.0000e-004	0.0112	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0238	0.0238	6.0000e-005		0.0254
Unmitigated	2.6427	1.0000e-004	0.0112	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0238	0.0238	6.0000e-005		0.0254

Orange Memorial Park Water Capture Project - March 2019 - San Mateo County, Summer

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3112					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.3305					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0400e-003	1.0000e-004	0.0112	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0238	0.0238	6.0000e-005		0.0254
Total	2.6427	1.0000e-004	0.0112	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0238	0.0238	6.0000e-005		0.0254

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3112					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.3305					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0400e-003	1.0000e-004	0.0112	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0238	0.0238	6.0000e-005		0.0254
Total	2.6427	1.0000e-004	0.0112	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0238	0.0238	6.0000e-005		0.0254

7.0 Water Detail

Orange Memorial Park Water Capture Project - March 2019 - San Mateo County, Summer

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
Pumps	1	4.00	180	15	0.74	Electrical

UnMitigated/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
Equipment Type	lb/day										lb/day					
Pumps	0.0702	0.4368	0.3456	7.8000e-004		0.0210	0.0210		0.0210	0.0210		55.6281	55.6281	6.2600e-003		55.7847
Total	0.0702	0.4368	0.3456	7.8000e-004		0.0210	0.0210		0.0210	0.0210		55.6281	55.6281	6.2600e-003		55.7847

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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Orange Memorial Park Water Capture Project - March 2019 - San Mateo County, Summer

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

Orange Memorial Park Water Capture Project - March 2019 - San Mateo County, Winter

Orange Memorial Park Water Capture Project - March 2019
San Mateo County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	108.90	User Defined Unit	2.00	108,900.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	70
Climate Zone	5			Operational Year	2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Orange Memorial Park Water Capture Project - March 2019 - San Mateo County, Winter

Project Characteristics -

Land Use - Total area of proposed construction activity and size (in sf) of underground cisterns

Construction Phase - Estimated construction duration based on precedent projects and Applicant assumptions

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - Anticipated construction equipment

Off-road Equipment - Anticipated construction equipment

Off-road Equipment - Anticipated construction equipment

Off-road Equipment -

Trips and VMT -

Grading - Project grading. 13,600 CY to be exported offsite, the remainder to be stored onsite for later grading of the Ball Field post-cistern installation.

Construction Off-road Equipment Mitigation -

Operational Off-Road Equipment - Proposed Duplex 15 HP variable frequency drive well pump

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Parking	150	0
tblConstructionPhase	NumDays	200.00	60.00
tblConstructionPhase	NumDays	200.00	60.00
tblConstructionPhase	NumDays	4.00	60.00
tblConstructionPhase	NumDays	4.00	21.00
tblConstructionPhase	NumDays	2.00	14.00
tblConstructionPhase	NumDaysWeek	5.00	7.00
tblConstructionPhase	NumDaysWeek	5.00	7.00
tblConstructionPhase	NumDaysWeek	5.00	7.00
tblConstructionPhase	NumDaysWeek	5.00	7.00
tblConstructionPhase	NumDaysWeek	5.00	7.00

Orange Memorial Park Water Capture Project - March 2019 - San Mateo County, Winter

tblConstructionPhase	NumDaysWeek	5.00	7.00
tblGrading	AcresOfGrading	0.00	2.00
tblGrading	AcresOfGrading	7.00	2.00
tblGrading	MaterialExported	0.00	13,600.00
tblLandUse	LandUseSquareFeet	0.00	108,900.00
tblLandUse	LotAcreage	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	180.00
tblOperationalOffRoadEquipment	OperFuelType	Diesel	Electrical
tblOperationalOffRoadEquipment	OperHorsePower	84.00	15.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	4.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblTripsAndVMT	HaulingTripLength	20.00	2.00
tblTripsAndVMT	HaulingTripLength	20.00	2.00
tblTripsAndVMT	HaulingTripLength	20.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	1.00
tblTripsAndVMT	WorkerTripNumber	5.00	10.00
tblTripsAndVMT	WorkerTripNumber	8.00	25.00
tblTripsAndVMT	WorkerTripNumber	46.00	30.00

2.0 Emissions Summary

Orange Memorial Park Water Capture Project - March 2019 - San Mateo 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	2.6427	1.0000e-004	0.0112	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0238	0.0238	6.0000e-005		0.0254
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Offroad	0.0702	0.4368	0.3456	7.8000e-004		0.0210	0.0210		0.0210	0.0210		55.6281	55.6281	6.2600e-003		55.7847
Total	2.7128	0.4369	0.3568	7.8000e-004	0.0000	0.0210	0.0210	0.0000	0.0210	0.0210		55.6519	55.6519	6.3200e-003	0.0000	55.8101

Orange Memorial Park Water Capture Project - March 2019 - San Mateo County, Winter

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	lb/day										lb/day					
Area	2.6427	1.0000e-004	0.0112	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0238	0.0238	6.0000e-005		0.0254
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Offroad	0.0702	0.4368	0.3456	7.8000e-004		0.0210	0.0210		0.0210	0.0210		55.6281	55.6281	6.2600e-003		55.7847
Total	2.7128	0.4369	0.3568	7.8000e-004	0.0000	0.0210	0.0210	0.0000	0.0210	0.0210		55.6519	55.6519	6.3200e-003	0.0000	55.8101

	ROG	NOx	CO	SO2	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

Orange Memorial Park Water Capture Project - March 2019 - San Mateo County, Winter

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Staging and Mobilization	Site Preparation	3/2/2020	3/15/2020	7	14	
2	Excavation, Storage, and Export	Grading	3/16/2020	5/14/2020	7	60	
3	Installation of Diversion Pipelines	Trenching	5/15/2020	6/13/2020	7	30	
4	Installation of Treatment and Filtration Chambers	Building Construction	6/14/2020	8/12/2020	7	60	
5	Installation of Large Underground	Building Construction	8/13/2020	10/11/2020	7	60	
6	Grading of Ball Fields	Grading	10/12/2020	11/1/2020	7	21	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Orange Memorial Park Water Capture Project - March 2019 - San Mateo County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Staging and Mobilization	Graders	1	8.00	187	0.41
Staging and Mobilization	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Excavation, Storage, and Export	Excavators	2	8.00	158	0.38
Excavation, Storage, and Export	Rubber Tired Dozers	1	8.00	247	0.40
Excavation, Storage, and Export	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Installation of Diversion Pipelines	Excavators	1	8.00	158	0.38
Installation of Diversion Pipelines	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Installation of Diversion Pipelines	Trenchers	1	8.00	78	0.50
Installation of Treatment and Filtration Chambers	Cement and Mortar Mixers	2	6.00	9	0.56
Installation of Treatment and Filtration Chambers	Cranes	1	8.00	231	0.29
Installation of Treatment and Filtration Chambers	Rough Terrain Forklifts	1	8.00	100	0.40
Installation of Treatment and Filtration Chambers	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Installation of Large Underground	Cement and Mortar Mixers	2	6.00	9	0.56
Installation of Large Underground	Cranes	1	8.00	231	0.29
Installation of Large Underground	Rough Terrain Forklifts	1	8.00	100	0.40
Installation of Large Underground	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading of Ball Fields	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Orange Memorial Park Water Capture Project - March 2019 - San Mateo 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
Staging and Mobilization	2	10.00	0.00	0.00	10.80	7.30	2.00	LD_Mix	HDT_Mix	HHDT
Excavation, Storage, and Export	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Installation of Diversion Pipelines	3	25.00	1.00	0.00	10.80	7.30	2.00	LD_Mix	HDT_Mix	HHDT
Installation of Treatment and Filtration	5	30.00	18.00	0.00	10.80	7.30	2.00	LD_Mix	HDT_Mix	HHDT
Installation of Large Underground	5	46.00	18.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading of Ball Fields	1	3.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Staging and Mobilization - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1515	0.0000	0.1515	0.0164	0.0000	0.0164			0.0000			0.0000
Off-Road	0.6853	8.4307	4.0942	9.7400e-003		0.3353	0.3353		0.3085	0.3085		943.4872	943.4872	0.3051		951.1158
Total	0.6853	8.4307	4.0942	9.7400e-003	0.1515	0.3353	0.4868	0.0164	0.3085	0.3249		943.4872	943.4872	0.3051		951.1158

Orange Memorial Park Water Capture Project - March 2019 - San Mateo County, Winter

3.2 Staging and Mobilization - 2020

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	0.0201	0.2004	7.2000e-004	0.0822	4.9000e-004	0.0826	0.0218	4.6000e-004	0.0223		71.9862	71.9862	1.4100e-003		72.0215
Total	0.0306	0.0201	0.2004	7.2000e-004	0.0822	4.9000e-004	0.0826	0.0218	4.6000e-004	0.0223		71.9862	71.9862	1.4100e-003		72.0215

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					0.0682	0.0000	0.0682	7.3600e-003	0.0000	7.3600e-003			0.0000			0.0000
Off-Road	0.6853	8.4307	4.0942	9.7400e-003		0.3353	0.3353		0.3085	0.3085	0.0000	943.4872	943.4872	0.3051		951.1158
Total	0.6853	8.4307	4.0942	9.7400e-003	0.0682	0.3353	0.4035	7.3600e-003	0.3085	0.3159	0.0000	943.4872	943.4872	0.3051		951.1158

Orange Memorial Park Water Capture Project - March 2019 - San Mateo County, Winter

3.2 Staging and Mobilization - 2020

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	0.0201	0.2004	7.2000e-004	0.0822	4.9000e-004	0.0826	0.0218	4.6000e-004	0.0223		71.9862	71.9862	1.4100e-003		72.0215
Total	0.0306	0.0201	0.2004	7.2000e-004	0.0822	4.9000e-004	0.0826	0.0218	4.6000e-004	0.0223		71.9862	71.9862	1.4100e-003		72.0215

3.3 Excavation, Storage, and Export - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.0574	0.0000	6.0574	3.3140	0.0000	3.3140			0.0000			0.0000
Off-Road	1.9885	20.3678	15.2266	0.0251		1.0550	1.0550		0.9706	0.9706		2,429.1164	2,429.1164	0.7856		2,448.7570
Total	1.9885	20.3678	15.2266	0.0251	6.0574	1.0550	7.1124	3.3140	0.9706	4.2846		2,429.1164	2,429.1164	0.7856		2,448.7570

Orange Memorial Park Water Capture Project - March 2019 - San Mateo County, Winter

3.3 Excavation, Storage, and Export - 2020

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	0.0398	0.0261	0.2605	9.4000e-004	0.1068	6.4000e-004	0.1074	0.0283	5.9000e-004	0.0289		93.5820	93.5820	1.8400e-003		93.6280
Total	0.0398	0.0261	0.2605	9.4000e-004	0.1068	6.4000e-004	0.1074	0.0283	5.9000e-004	0.0289		93.5820	93.5820	1.8400e-003		93.6280

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					2.7259	0.0000	2.7259	1.4913	0.0000	1.4913			0.0000			0.0000
Off-Road	1.9885	20.3678	15.2266	0.0251		1.0550	1.0550		0.9706	0.9706	0.0000	2,429.1164	2,429.1164	0.7856		2,448.7570
Total	1.9885	20.3678	15.2266	0.0251	2.7259	1.0550	3.7808	1.4913	0.9706	2.4619	0.0000	2,429.1164	2,429.1164	0.7856		2,448.7570

Orange Memorial Park Water Capture Project - March 2019 - San Mateo County, Winter

3.3 Excavation, Storage, and Export - 2020

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	0.0398	0.0261	0.2605	9.4000e-004	0.1068	6.4000e-004	0.1074	0.0283	5.9000e-004	0.0289		93.5820	93.5820	1.8400e-003		93.6280
Total	0.0398	0.0261	0.2605	9.4000e-004	0.1068	6.4000e-004	0.1074	0.0283	5.9000e-004	0.0289		93.5820	93.5820	1.8400e-003		93.6280

3.4 Installation of Diversion Pipelines - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8742	8.3143	8.1838	0.0116		0.5342	0.5342		0.4915	0.4915		1,127.6990	1,127.6990	0.3647		1,136.8170
Total	0.8742	8.3143	8.1838	0.0116		0.5342	0.5342		0.4915	0.4915		1,127.6990	1,127.6990	0.3647		1,136.8170

Orange Memorial Park Water Capture Project - March 2019 - San Mateo County, Winter

3.4 Installation of Diversion Pipelines - 2020

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	3.9800e-003	0.1160	0.0482	2.6000e-004	6.7500e-003	5.9000e-004	7.3400e-003	1.9400e-003	5.6000e-004	2.5000e-003		28.9130	28.9130	2.5700e-003		28.9773
Worker	0.0765	0.0503	0.5010	1.8000e-003	0.2054	1.2400e-003	0.2066	0.0545	1.1400e-003	0.0556		179.9654	179.9654	3.5400e-003		180.0539
Total	0.0804	0.1663	0.5491	2.0600e-003	0.2121	1.8300e-003	0.2140	0.0564	1.7000e-003	0.0581		208.8784	208.8784	6.1100e-003		209.0311

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8742	8.3143	8.1838	0.0116		0.5342	0.5342		0.4915	0.4915	0.0000	1,127.6990	1,127.6990	0.3647		1,136.8170
Total	0.8742	8.3143	8.1838	0.0116		0.5342	0.5342		0.4915	0.4915	0.0000	1,127.6990	1,127.6990	0.3647		1,136.8170

Orange Memorial Park Water Capture Project - March 2019 - San Mateo County, Winter

3.4 Installation of Diversion Pipelines - 2020

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	3.9800e-003	0.1160	0.0482	2.6000e-004	6.7500e-003	5.9000e-004	7.3400e-003	1.9400e-003	5.6000e-004	2.5000e-003		28.9130	28.9130	2.5700e-003		28.9773
Worker	0.0765	0.0503	0.5010	1.8000e-003	0.2054	1.2400e-003	0.2066	0.0545	1.1400e-003	0.0556		179.9654	179.9654	3.5400e-003		180.0539
Total	0.0804	0.1663	0.5491	2.0600e-003	0.2121	1.8300e-003	0.2140	0.0564	1.7000e-003	0.0581		208.8784	208.8784	6.1100e-003		209.0311

3.5 Installation of Treatment and Filtration Chambers - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8845	9.7789	7.1546	0.0134		0.4492	0.4492		0.4150	0.4150		1,269.0131	1,269.0131	0.3938		1,278.8577
Total	0.8845	9.7789	7.1546	0.0134		0.4492	0.4492		0.4150	0.4150		1,269.0131	1,269.0131	0.3938		1,278.8577

Orange Memorial Park Water Capture Project - March 2019 - San Mateo County, Winter

3.5 Installation of Treatment and Filtration Chambers - 2020

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	0.0717	2.0884	0.8674	4.7400e-003	0.1215	0.0106	0.1320	0.0350	0.0101	0.0450		520.4343	520.4343	0.0463		521.5907
Worker	0.0917	0.0603	0.6011	2.1700e-003	0.2464	1.4800e-003	0.2479	0.0654	1.3700e-003	0.0667		215.9585	215.9585	4.2400e-003		216.0646
Total	0.1634	2.1487	1.4685	6.9100e-003	0.3679	0.0120	0.3800	0.1003	0.0115	0.1118		736.3928	736.3928	0.0505		737.6553

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8845	9.7789	7.1546	0.0134		0.4492	0.4492		0.4150	0.4150	0.0000	1,269.0131	1,269.0131	0.3938		1,278.8577
Total	0.8845	9.7789	7.1546	0.0134		0.4492	0.4492		0.4150	0.4150	0.0000	1,269.0131	1,269.0131	0.3938		1,278.8577

Orange Memorial Park Water Capture Project - March 2019 - San Mateo County, Winter

3.5 Installation of Treatment and Filtration Chambers - 2020

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	0.0717	2.0884	0.8674	4.7400e-003	0.1215	0.0106	0.1320	0.0350	0.0101	0.0450		520.4343	520.4343	0.0463		521.5907
Worker	0.0917	0.0603	0.6011	2.1700e-003	0.2464	1.4800e-003	0.2479	0.0654	1.3700e-003	0.0667		215.9585	215.9585	4.2400e-003		216.0646
Total	0.1634	2.1487	1.4685	6.9100e-003	0.3679	0.0120	0.3800	0.1003	0.0115	0.1118		736.3928	736.3928	0.0505		737.6553

3.6 Installation of Large Underground - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8845	9.7789	7.1546	0.0134		0.4492	0.4492		0.4150	0.4150		1,269.0131	1,269.0131	0.3938		1,278.8577
Total	0.8845	9.7789	7.1546	0.0134		0.4492	0.4492		0.4150	0.4150		1,269.0131	1,269.0131	0.3938		1,278.8577

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3.6 Installation of Large Underground - 2020

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	0.0717	2.0884	0.8674	4.7400e-003	0.1215	0.0106	0.1320	0.0350	0.0101	0.0450		520.4343	520.4343	0.0463		521.5907
Worker	0.1407	0.0925	0.9217	3.3200e-003	0.3779	2.2800e-003	0.3802	0.1002	2.1000e-003	0.1023		331.1364	331.1364	6.5100e-003		331.2991
Total	0.2123	2.1809	1.7891	8.0600e-003	0.4994	0.0128	0.5122	0.1352	0.0122	0.1474		851.5707	851.5707	0.0528		852.8897

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8845	9.7789	7.1546	0.0134		0.4492	0.4492		0.4150	0.4150	0.0000	1,269.0131	1,269.0131	0.3938		1,278.8577
Total	0.8845	9.7789	7.1546	0.0134		0.4492	0.4492		0.4150	0.4150	0.0000	1,269.0131	1,269.0131	0.3938		1,278.8577

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3.6 Installation of Large Underground - 2020

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	0.0717	2.0884	0.8674	4.7400e-003	0.1215	0.0106	0.1320	0.0350	0.0101	0.0450		520.4343	520.4343	0.0463		521.5907
Worker	0.1407	0.0925	0.9217	3.3200e-003	0.3779	2.2800e-003	0.3802	0.1002	2.1000e-003	0.1023		331.1364	331.1364	6.5100e-003		331.2991
Total	0.2123	2.1809	1.7891	8.0600e-003	0.4994	0.0128	0.5122	0.1352	0.0122	0.1474		851.5707	851.5707	0.0528		852.8897

3.7 Grading of Ball Fields - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1010	0.0000	0.1010	0.0109	0.0000	0.0109			0.0000			0.0000
Off-Road	0.2095	2.1052	2.2797	3.1100e-003		0.1331	0.1331		0.1225	0.1225		300.7685	300.7685	0.0973		303.2004
Total	0.2095	2.1052	2.2797	3.1100e-003	0.1010	0.1331	0.2341	0.0109	0.1225	0.1334		300.7685	300.7685	0.0973		303.2004

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3.7 Grading of Ball Fields - 2020

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	9.1700e-003	6.0300e-003	0.0601	2.2000e-004	0.0246	1.5000e-004	0.0248	6.5400e-003	1.4000e-004	6.6700e-003		21.5959	21.5959	4.2000e-004		21.6065
Total	9.1700e-003	6.0300e-003	0.0601	2.2000e-004	0.0246	1.5000e-004	0.0248	6.5400e-003	1.4000e-004	6.6700e-003		21.5959	21.5959	4.2000e-004		21.6065

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					0.0455	0.0000	0.0455	4.9100e-003	0.0000	4.9100e-003			0.0000			0.0000
Off-Road	0.2095	2.1052	2.2797	3.1100e-003		0.1331	0.1331		0.1225	0.1225	0.0000	300.7685	300.7685	0.0973		303.2004
Total	0.2095	2.1052	2.2797	3.1100e-003	0.0455	0.1331	0.1786	4.9100e-003	0.1225	0.1274	0.0000	300.7685	300.7685	0.0973		303.2004

Orange Memorial Park Water Capture Project - March 2019 - San Mateo County, Winter

3.7 Grading of Ball Fields - 2020

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	9.1700e-003	6.0300e-003	0.0601	2.2000e-004	0.0246	1.5000e-004	0.0248	6.5400e-003	1.4000e-004	6.6700e-003		21.5959	21.5959	4.2000e-004		21.6065
Total	9.1700e-003	6.0300e-003	0.0601	2.2000e-004	0.0246	1.5000e-004	0.0248	6.5400e-003	1.4000e-004	6.6700e-003		21.5959	21.5959	4.2000e-004		21.6065

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Orange Memorial Park Water Capture Project - March 2019 - San Mateo 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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
User Defined Industrial	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
User Defined Industrial	9.50	7.30	7.30	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
User Defined Industrial	0.482816	0.049967	0.258264	0.138365	0.017696	0.006700	0.022365	0.006431	0.004044	0.003214	0.008927	0.000452	0.000759

5.0 Energy Detail

Historical Energy Use: N

Orange Memorial Park Water Capture Project - March 2019 - San Mateo County, Winter

5.1 Mitigation Measures Energy

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

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

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5.2 Energy by Land Use - Natural Gas

Mitigated

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

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.6427	1.0000e-004	0.0112	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0238	0.0238	6.0000e-005		0.0254
Unmitigated	2.6427	1.0000e-004	0.0112	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0238	0.0238	6.0000e-005		0.0254

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6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3112					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.3305					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0400e-003	1.0000e-004	0.0112	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0238	0.0238	6.0000e-005		0.0254
Total	2.6427	1.0000e-004	0.0112	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0238	0.0238	6.0000e-005		0.0254

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3112					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.3305					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0400e-003	1.0000e-004	0.0112	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0238	0.0238	6.0000e-005		0.0254
Total	2.6427	1.0000e-004	0.0112	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0238	0.0238	6.0000e-005		0.0254

7.0 Water Detail

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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
Pumps	1	4.00	180	15	0.74	Electrical

UnMitigated/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
Equipment Type	lb/day										lb/day					
Pumps	0.0702	0.4368	0.3456	7.8000e-004		0.0210	0.0210		0.0210	0.0210		55.6281	55.6281	6.2600e-003		55.7847
Total	0.0702	0.4368	0.3456	7.8000e-004		0.0210	0.0210		0.0210	0.0210		55.6281	55.6281	6.2600e-003		55.7847

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
