

# **APPENDIX A**

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## **Air Quality Model Output**

**Griffith Park Performing Arts Center  
Los Angeles-South Coast County, Summer**

**1.0 Project Characteristics**

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**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	1.00	Acre	1.00	43,560.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	33
<b>Climate Zone</b>	11			<b>Operational Year</b>	2015
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	630.89	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics -

Land Use -

Construction Phase - Anticipated construction schedule for Phase 1 and 2 of project.

Off-road Equipment - Anticipated construction equipment for Phase 1 building construction.

Off-road Equipment - Anticipated construction equipment for Phase 2 building phase.

Off-road Equipment - Anticipated construction equipment for Phase 1 grading phase.

Off-road Equipment - Default construction equipment for Phase 2 paving phase.

Off-road Equipment - Default construction equipment for Phase 1 site preparation phase.

Off-road Equipment - Anticipated equipment for Phase 1 trenching for utility relocation.

Trips and VMT - No import or export soils needed for project.

Grading - Assumes a total of 0.75 acres would be disturbed; Assumes a daily of 1,500 cy of excavation (1,500 cy x 5 days of grading = 7,500 cy).

Vehicle Trips - A daily total of 1,100 vehicle trips is anticipated for project.

Area Coating - Square footage of outdoor performing arts stage.

Water And Wastewater - No outdoor water use for project.

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Interior	65340	0
tblConstructionPhase	NumDays	100.00	25.00
tblConstructionPhase	NumDays	100.00	75.00
tblConstructionPhase	NumDays	2.00	5.00
tblConstructionPhase	NumDays	5.00	10.00
tblConstructionPhase	NumDays	1.00	5.00
tblConstructionPhase	PhaseEndDate	10/10/2014	6/12/2015
tblConstructionPhase	PhaseEndDate	6/26/2015	6/12/2015
tblConstructionPhase	PhaseStartDate	5/24/2014	5/26/2014
tblConstructionPhase	PhaseStartDate	6/28/2014	3/2/2015
tblConstructionPhase	PhaseStartDate	2/8/2014	2/10/2014
tblConstructionPhase	PhaseStartDate	6/13/2015	6/1/2015
tblConstructionPhase	PhaseStartDate	2/15/2014	2/17/2014
tblGrading	AcresOfGrading	1.88	0.75
tblGrading	AcresOfGrading	2.50	0.75
tblGrading	MaterialExported	0.00	7,500.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblProjectCharacteristics	OperationalYear	2014	2015
tblTripsAndVMT	HaulingTripNumber	938.00	0.00
tblVehicleTrips	ST_TR	1.59	1,100.00
tblVehicleTrips	SU_TR	1.59	1,100.00
tblVehicleTrips	WD_TR	1.59	1,100.00

tblWater	ElectricityIntensityFactorForWastewaterTreatment	1,911.00	0.00
tblWater	ElectricityIntensityFactorToDistribute	1,272.00	0.00
tblWater	ElectricityIntensityFactorToSupply	9,727.00	0.00
tblWater	ElectricityIntensityFactorToTreat	111.00	0.00
tblWater	OutdoorWaterUseRate	1,191,481.35	0.00

## 2.0 Emissions Summary

### 2.1 Overall Construction (Maximum Daily Emission)

#### Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2014	4.6505	30.1394	22.1070	0.0321	5.5178	2.4759	7.0022	2.9373	2.3678	4.3030	0.0000	3,090.0838	3,090.0838	0.7030	0.0000	3,104.8471
2015	5.6752	41.1728	30.0970	0.0448	0.3901	2.7241	3.1142	0.1043	2.5752	2.6795	0.0000	4,353.9595	4,353.9595	1.0125	0.0000	4,375.2209
<b>Total</b>	<b>10.3257</b>	<b>71.3122</b>	<b>52.2041</b>	<b>0.0769</b>	<b>5.9080</b>	<b>5.2000</b>	<b>10.1164</b>	<b>3.0417</b>	<b>4.9430</b>	<b>6.9824</b>	<b>0.0000</b>	<b>7,444.0433</b>	<b>7,444.0433</b>	<b>1.7155</b>	<b>0.0000</b>	<b>7,480.0680</b>

#### Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2014	4.6505	30.1394	22.1070	0.0321	2.2065	2.4759	3.6909	1.1600	2.3678	2.5256	0.0000	3,090.0838	3,090.0838	0.7030	0.0000	3,104.8471
2015	5.6752	41.1728	30.0970	0.0448	0.3901	2.7241	3.1142	0.1043	2.5752	2.6795	0.0000	4,353.9595	4,353.9595	1.0125	0.0000	4,375.2209

Total	10.3257	71.3122	52.2041	0.0769	2.5966	5.2000	6.8051	1.2643	4.9430	5.2051	0.0000	7,444.0432	7,444.0432	1.7155	0.0000	7,480.0680
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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	56.05	0.00	32.73	58.43	0.00	25.45	0.00	0.00	0.00	0.00	0.00	0.00

## 2.2 Overall Operational Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.9316	0.0000	1.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	4.4175	11.7907	49.2824	0.1024	6.7179	0.1760	6.8940	1.7960	0.1617	1.9577		9,262.2861	9,262.2861	0.4092		9,270.8793
Total	5.3492	11.7907	49.2825	0.1024	6.7179	0.1760	6.8940	1.7960	0.1617	1.9577		9,262.2863	9,262.2863	0.4092	0.0000	9,270.8796

## Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.9316	0.0000	1.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	4.4175	11.7907	49.2824	0.1024	6.7179	0.1760	6.8940	1.7960	0.1617	1.9577		9,262.2861	9,262.2861	0.4092		9,270.8793

Total	5.3492	11.7907	49.2825	0.1024	6.7179	0.1760	6.8940	1.7960	0.1617	1.9577		9,262.2863	9,262.2863	0.4092	0.0000	9,270.8796
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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation - Phase 1	Site Preparation	2/3/2014	2/7/2014	5	5	
2	Grading - Phase 1	Grading	2/10/2014	2/14/2014	5	5	
3	Utility Relocation - Phase 1	Trenching	2/17/2014	5/23/2014	5	70	
4	Building Construction - Phase 1	Building Construction	5/26/2014	6/27/2014	5	25	
5	Building Construction - Phase 2	Building Construction	3/2/2015	6/12/2015	5	75	
6	Paving - Phase 2	Paving	6/1/2015	6/12/2015	5	10	

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 (Architectural Coating – sqft)

#### OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation - Phase 1	Graders	1	8.00	174	0.41
Site Preparation - Phase 1	Rubber Tired Dozers	1	7.00	255	0.40
Site Preparation - Phase 1	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading - Phase 1	Graders	1	6.00	174	0.41
Grading - Phase 1	Off-Highway Trucks	1	4.00	400	0.38

Grading - Phase 1	Rubber Tired Dozers	1	6.00	255	0.40
Grading - Phase 1	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Utility Relocation - Phase 1	Crushing/Proc. Equipment	2	8.00	85	0.78
Utility Relocation - Phase 1	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Utility Relocation - Phase 1	Trenchers	2	8.00	80	0.50
Building Construction - Phase 1	Aerial Lifts	2	6.00	62	0.31
Building Construction - Phase 1	Cranes	1	6.00	226	0.29
Building Construction - Phase 1	Forklifts	2	6.00	89	0.20
Building Construction - Phase 1	Generator Sets	1	8.00	84	0.74
Building Construction - Phase 1	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Building Construction - Phase 1	Welders	3	8.00	46	0.45
Building Construction - Phase 2	Cranes	1	6.00	226	0.29
Building Construction - Phase 2	Forklifts	2	6.00	89	0.20
Building Construction - Phase 2	Generator Sets	1	8.00	84	0.74
Building Construction - Phase 2	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Building Construction - Phase 2	Welders	3	8.00	46	0.45
Paving - Phase 2	Cement and Mortar Mixers	1	6.00	9	0.56
Paving - Phase 2	Pavers	1	6.00	125	0.42
Paving - Phase 2	Paving Equipment	1	8.00	130	0.36
Paving - Phase 2	Rollers	1	7.00	80	0.38
Paving - Phase 2	Tractors/Loaders/Backhoes	1	8.00	97	0.37

### Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation - Phase 1	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading - Phase 1	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Utility Relocation - Phase 1	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction - Phase 1	11	18.00	7.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction - Phase 2	9	18.00	7.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

Paving - Phase 2	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
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### 3.1 Mitigation Measures Construction

Water Exposed Area

### 3.2 Site Preparation - Phase 1 - 2014

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.4284	0.0000	5.4284	2.9136	0.0000	2.9136			0.0000			0.0000
Off-Road	2.5474	27.1661	17.0975	0.0171		1.4834	1.4834		1.3647	1.3647		1,821.0895	1,821.0895	0.5382		1,832.3907
<b>Total</b>	<b>2.5474</b>	<b>27.1661</b>	<b>17.0975</b>	<b>0.0171</b>	<b>5.4284</b>	<b>1.4834</b>	<b>6.9118</b>	<b>2.9136</b>	<b>1.3647</b>	<b>4.2784</b>		<b>1,821.0895</b>	<b>1,821.0895</b>	<b>0.5382</b>		<b>1,832.3907</b>

#### 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	0.0439	0.0551	0.6762	1.1600e-003	0.0894	9.6000e-004	0.0904	0.0237	8.7000e-004	0.0246		104.8409	104.8409	6.3200e-003		104.9735
<b>Total</b>	<b>0.0439</b>	<b>0.0551</b>	<b>0.6762</b>	<b>1.1600e-003</b>	<b>0.0894</b>	<b>9.6000e-004</b>	<b>0.0904</b>	<b>0.0237</b>	<b>8.7000e-004</b>	<b>0.0246</b>		<b>104.8409</b>	<b>104.8409</b>	<b>6.3200e-003</b>		<b>104.9735</b>



**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					2.1171	0.0000	2.1171	1.1363	0.0000	1.1363			0.0000			0.0000
Off-Road	2.5474	27.1661	17.0975	0.0171		1.4834	1.4834		1.3647	1.3647	0.0000	1,821.0895	1,821.0895	0.5382		1,832.3907
<b>Total</b>	<b>2.5474</b>	<b>27.1661</b>	<b>17.0975</b>	<b>0.0171</b>	<b>2.1171</b>	<b>1.4834</b>	<b>3.6005</b>	<b>1.1363</b>	<b>1.3647</b>	<b>2.5011</b>	<b>0.0000</b>	<b>1,821.0895</b>	<b>1,821.0895</b>	<b>0.5382</b>		<b>1,832.3907</b>

**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	0.0439	0.0551	0.6762	1.1600e-003	0.0894	9.6000e-004	0.0904	0.0237	8.7000e-004	0.0246		104.8409	104.8409	6.3200e-003		104.9735
<b>Total</b>	<b>0.0439</b>	<b>0.0551</b>	<b>0.6762</b>	<b>1.1600e-003</b>	<b>0.0894</b>	<b>9.6000e-004</b>	<b>0.0904</b>	<b>0.0237</b>	<b>8.7000e-004</b>	<b>0.0246</b>		<b>104.8409</b>	<b>104.8409</b>	<b>6.3200e-003</b>		<b>104.9735</b>

**3.3 Grading - Phase 1 - 2014**

**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
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Category	lb/day										lb/day					
Fugitive Dust					4.8453	0.0000	4.8453	2.5255	0.0000	2.5255			0.0000			0.0000
Off-Road	2.6032	28.4561	16.9473	0.0207		1.4513	1.4513		1.3352	1.3352		2,194.1195	2,194.1195	0.6484		2,207.7356
<b>Total</b>	<b>2.6032</b>	<b>28.4561</b>	<b>16.9473</b>	<b>0.0207</b>	<b>4.8453</b>	<b>1.4513</b>	<b>6.2965</b>	<b>2.5255</b>	<b>1.3352</b>	<b>3.8607</b>		<b>2,194.1195</b>	<b>2,194.1195</b>	<b>0.6484</b>		<b>2,207.7356</b>

**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	0.0548	0.0688	0.8452	1.4500e-003	0.1118	1.2000e-003	0.1130	0.0296	1.0900e-003	0.0307		131.0511	131.0511	7.9000e-003		131.2169
<b>Total</b>	<b>0.0548</b>	<b>0.0688</b>	<b>0.8452</b>	<b>1.4500e-003</b>	<b>0.1118</b>	<b>1.2000e-003</b>	<b>0.1130</b>	<b>0.0296</b>	<b>1.0900e-003</b>	<b>0.0307</b>		<b>131.0511</b>	<b>131.0511</b>	<b>7.9000e-003</b>		<b>131.2169</b>

**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					1.8897	0.0000	1.8897	0.9850	0.0000	0.9850			0.0000			0.0000
Off-Road	2.6032	28.4561	16.9473	0.0207		1.4513	1.4513		1.3352	1.3352	0.0000	2,194.1195	2,194.1195	0.6484		2,207.7356

Total	2.6032	28.4561	16.9473	0.0207	1.8897	1.4513	3.3409	0.9850	1.3352	2.3201	0.0000	2,194.1195	2,194.1195	0.6484		2,207.7356
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**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	0.0548	0.0688	0.8452	1.4500e-003	0.1118	1.2000e-003	0.1130	0.0296	1.0900e-003	0.0307		131.0511	131.0511	7.9000e-003		131.2169
<b>Total</b>	<b>0.0548</b>	<b>0.0688</b>	<b>0.8452</b>	<b>1.4500e-003</b>	<b>0.1118</b>	<b>1.2000e-003</b>	<b>0.1130</b>	<b>0.0296</b>	<b>1.0900e-003</b>	<b>0.0307</b>		<b>131.0511</b>	<b>131.0511</b>	<b>7.9000e-003</b>		<b>131.2169</b>

**3.4 Utility Relocation - Phase 1 - 2014**

**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	3.9423	30.0362	19.6034	0.0272		2.4741	2.4741		2.3662	2.3662		2,725.9693	2,725.9693	0.5976		2,738.5180
<b>Total</b>	<b>3.9423</b>	<b>30.0362</b>	<b>19.6034</b>	<b>0.0272</b>		<b>2.4741</b>	<b>2.4741</b>		<b>2.3662</b>	<b>2.3662</b>		<b>2,725.9693</b>	<b>2,725.9693</b>	<b>0.5976</b>		<b>2,738.5180</b>

**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	0.0822	0.1032	1.2678	2.1800e-003	0.1677	1.8000e-003	0.1695	0.0445	1.6400e-003	0.0461		196.5766	196.5766	0.0118		196.8254
<b>Total</b>	<b>0.0822</b>	<b>0.1032</b>	<b>1.2678</b>	<b>2.1800e-003</b>	<b>0.1677</b>	<b>1.8000e-003</b>	<b>0.1695</b>	<b>0.0445</b>	<b>1.6400e-003</b>	<b>0.0461</b>		<b>196.5766</b>	<b>196.5766</b>	<b>0.0118</b>		<b>196.8254</b>

**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	3.9423	30.0362	19.6034	0.0272		2.4741	2.4741		2.3662	2.3662	0.0000	2,725.9693	2,725.9693	0.5976		2,738.5180
<b>Total</b>	<b>3.9423</b>	<b>30.0362</b>	<b>19.6034</b>	<b>0.0272</b>		<b>2.4741</b>	<b>2.4741</b>		<b>2.3662</b>	<b>2.3662</b>	<b>0.0000</b>	<b>2,725.9693</b>	<b>2,725.9693</b>	<b>0.5976</b>		<b>2,738.5180</b>

**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	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	0.0822	0.1032	1.2678	2.1800e-003	0.1677	1.8000e-003	0.1695	0.0445	1.6400e-003	0.0461		196.5766	196.5766	0.0118		196.8254
<b>Total</b>	<b>0.0822</b>	<b>0.1032</b>	<b>1.2678</b>	<b>2.1800e-003</b>	<b>0.1677</b>	<b>1.8000e-003</b>	<b>0.1695</b>	<b>0.0445</b>	<b>1.6400e-003</b>	<b>0.0461</b>		<b>196.5766</b>	<b>196.5766</b>	<b>0.0118</b>		<b>196.8254</b>

### 3.5 Building Construction - Phase 1 - 2014

#### 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	4.4740	28.5096	19.7243	0.0279		2.0207	2.0207		1.9342	1.9342		2,696.6171	2,696.6171	0.6874		2,711.0521
<b>Total</b>	<b>4.4740</b>	<b>28.5096</b>	<b>19.7243</b>	<b>0.0279</b>		<b>2.0207</b>	<b>2.0207</b>		<b>1.9342</b>	<b>1.9342</b>		<b>2,696.6171</b>	<b>2,696.6171</b>	<b>0.6874</b>		<b>2,711.0521</b>

#### 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	0.0778	0.7917	0.8614	1.5400e-003	0.0436	0.0152	0.0588	0.0124	0.0139	0.0264		157.5747	157.5747	1.4200e-003		157.6046
Worker	0.0987	0.1239	1.5214	2.6100e-003	0.2012	2.1500e-003	0.2034	0.0534	1.9700e-003	0.0553		235.8920	235.8920	0.0142		236.1904
<b>Total</b>	<b>0.1765</b>	<b>0.9156</b>	<b>2.3828</b>	<b>4.1500e-003</b>	<b>0.2448</b>	<b>0.0173</b>	<b>0.2621</b>	<b>0.0658</b>	<b>0.0159</b>	<b>0.0817</b>		<b>393.4667</b>	<b>393.4667</b>	<b>0.0156</b>		<b>393.7950</b>

**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	4.4740	28.5096	19.7243	0.0279		2.0207	2.0207		1.9342	1.9342	0.0000	2,696.6171	2,696.6171	0.6874		2,711.0521
<b>Total</b>	<b>4.4740</b>	<b>28.5096</b>	<b>19.7243</b>	<b>0.0279</b>		<b>2.0207</b>	<b>2.0207</b>		<b>1.9342</b>	<b>1.9342</b>	<b>0.0000</b>	<b>2,696.6171</b>	<b>2,696.6171</b>	<b>0.6874</b>		<b>2,711.0521</b>

**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	0.0778	0.7917	0.8614	1.5400e-003	0.0436	0.0152	0.0588	0.0124	0.0139	0.0264		157.5747	157.5747	1.4200e-003		157.6046
Worker	0.0987	0.1239	1.5214	2.6100e-003	0.2012	2.1500e-003	0.2034	0.0534	1.9700e-003	0.0553		235.8920	235.8920	0.0142		236.1904
<b>Total</b>	<b>0.1765</b>	<b>0.9156</b>	<b>2.3828</b>	<b>4.1500e-003</b>	<b>0.2448</b>	<b>0.0173</b>	<b>0.2621</b>	<b>0.0658</b>	<b>0.0159</b>	<b>0.0817</b>		<b>393.4667</b>	<b>393.4667</b>	<b>0.0156</b>		<b>393.7950</b>

**3.6 Building Construction - Phase 2 - 2015**

**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	4.0512	25.6925	17.7801	0.0254		1.8171	1.8171		1.7398	1.7398		2,421.5154	2,421.5154	0.5834		2,433.7659
<b>Total</b>	<b>4.0512</b>	<b>25.6925</b>	<b>17.7801</b>	<b>0.0254</b>		<b>1.8171</b>	<b>1.8171</b>		<b>1.7398</b>	<b>1.7398</b>		<b>2,421.5154</b>	<b>2,421.5154</b>	<b>0.5834</b>		<b>2,433.7659</b>

**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	0.0670	0.6922	0.7772	1.5400e-003	0.0436	0.0116	0.0552	0.0124	0.0107	0.0231		155.8331	155.8331	1.2500e-003		155.8594
Worker	0.0888	0.1116	1.3763	2.6200e-003	0.2012	2.0100e-003	0.2032	0.0534	1.8400e-003	0.0552		228.8559	228.8559	0.0131		229.1301
<b>Total</b>	<b>0.1558</b>	<b>0.8038</b>	<b>2.1535</b>	<b>4.1600e-003</b>	<b>0.2448</b>	<b>0.0136</b>	<b>0.2585</b>	<b>0.0658</b>	<b>0.0125</b>	<b>0.0783</b>		<b>384.6890</b>	<b>384.6890</b>	<b>0.0143</b>		<b>384.9895</b>

**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	4.0512	25.6925	17.7801	0.0254		1.8171	1.8171		1.7398	1.7398	0.0000	2,421.5154	2,421.5154	0.5834		2,433.7659

<b>Total</b>	<b>4.0512</b>	<b>25.6925</b>	<b>17.7801</b>	<b>0.0254</b>		<b>1.8171</b>	<b>1.8171</b>		<b>1.7398</b>	<b>1.7398</b>	<b>0.0000</b>	<b>2,421.5154</b>	<b>2,421.5154</b>	<b>0.5834</b>		<b>2,433.7659</b>
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**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	0.0670	0.6922	0.7772	1.5400e-003	0.0436	0.0116	0.0552	0.0124	0.0107	0.0231		155.8331	155.8331	1.2500e-003		155.8594
Worker	0.0888	0.1116	1.3763	2.6200e-003	0.2012	2.0100e-003	0.2032	0.0534	1.8400e-003	0.0552		228.8559	228.8559	0.0131		229.1301
<b>Total</b>	<b>0.1558</b>	<b>0.8038</b>	<b>2.1535</b>	<b>4.1600e-003</b>	<b>0.2448</b>	<b>0.0136</b>	<b>0.2585</b>	<b>0.0658</b>	<b>0.0125</b>	<b>0.0783</b>		<b>384.6890</b>	<b>384.6890</b>	<b>0.0143</b>		<b>384.9895</b>

**3.7 Paving - Phase 2 - 2015**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4041	14.5959	9.1695	0.0133		0.8919	0.8919		0.8215	0.8215		1,382.4703	1,382.4703	0.4054		1,390.9826
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.4041</b>	<b>14.5959</b>	<b>9.1695</b>	<b>0.0133</b>		<b>0.8919</b>	<b>0.8919</b>		<b>0.8215</b>	<b>0.8215</b>		<b>1,382.4703</b>	<b>1,382.4703</b>	<b>0.4054</b>		<b>1,390.9826</b>

**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	0.0641	0.0806	0.9940	1.8900e-003	0.1453	1.4500e-003	0.1468	0.0385	1.3300e-003	0.0399		165.2848	165.2848	9.4300e-003		165.4829
<b>Total</b>	<b>0.0641</b>	<b>0.0806</b>	<b>0.9940</b>	<b>1.8900e-003</b>	<b>0.1453</b>	<b>1.4500e-003</b>	<b>0.1468</b>	<b>0.0385</b>	<b>1.3300e-003</b>	<b>0.0399</b>		<b>165.2848</b>	<b>165.2848</b>	<b>9.4300e-003</b>		<b>165.4829</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4041	14.5959	9.1695	0.0133		0.8919	0.8919		0.8215	0.8215	0.0000	1,382.4703	1,382.4703	0.4054		1,390.9826
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.4041</b>	<b>14.5959</b>	<b>9.1695</b>	<b>0.0133</b>		<b>0.8919</b>	<b>0.8919</b>		<b>0.8215</b>	<b>0.8215</b>	<b>0.0000</b>	<b>1,382.4703</b>	<b>1,382.4703</b>	<b>0.4054</b>		<b>1,390.9826</b>

**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	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	0.0641	0.0806	0.9940	1.8900e-003	0.1453	1.4500e-003	0.1468	0.0385	1.3300e-003	0.0399		165.2848	165.2848	9.4300e-003		165.4829
<b>Total</b>	<b>0.0641</b>	<b>0.0806</b>	<b>0.9940</b>	<b>1.8900e-003</b>	<b>0.1453</b>	<b>1.4500e-003</b>	<b>0.1468</b>	<b>0.0385</b>	<b>1.3300e-003</b>	<b>0.0399</b>		<b>165.2848</b>	<b>165.2848</b>	<b>9.4300e-003</b>		<b>165.4829</b>

#### 4.0 Operational Detail - Mobile

#### 4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	4.4175	11.7907	49.2824	0.1024	6.7179	0.1760	6.8940	1.7960	0.1617	1.9577		9,262.2861	9,262.2861	0.4092		9,270.8793
Unmitigated	4.4175	11.7907	49.2824	0.1024	6.7179	0.1760	6.8940	1.7960	0.1617	1.9577		9,262.2861	9,262.2861	0.4092		9,270.8793

#### 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	1,100.00	1,100.00	1100.00	3,165,294	3,165,294
<b>Total</b>	<b>1,100.00</b>	<b>1,100.00</b>	<b>1,100.00</b>	<b>3,165,294</b>	<b>3,165,294</b>

#### 4.3 Trip Type Information

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

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.534619	0.058604	0.178185	0.126004	0.038986	0.006286	0.016079	0.029769	0.002429	0.003158	0.003693	0.000543	0.001646

## 5.0 Energy Detail

### 4.4 Fleet Mix

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

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

### 5.2 Energy by Land Use - NaturalGas

#### Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**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					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.9316	0.0000	1.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Unmitigated	0.9316	0.0000	1.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004

**6.2 Area by SubCategory**

**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Consumer Products	0.8625					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Architectural Coating	0.0691					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.9316</b>	<b>0.0000</b>	<b>1.1000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>2.2000e-004</b>	<b>2.2000e-004</b>	<b>0.0000</b>		<b>2.3000e-004</b>

**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					
Consumer Products	0.8625					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Architectural Coating	0.0691					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.9316</b>	<b>0.0000</b>	<b>1.1000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>2.2000e-004</b>	<b>2.2000e-004</b>	<b>0.0000</b>		<b>2.3000e-004</b>

**7.0 Water Detail**

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**7.1 Mitigation Measures Water**

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

## 9.0 Operational Offroad

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

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**Griffith Park Performing Arts Center  
Los Angeles-South Coast County, Winter**

**1.0 Project Characteristics**

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**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	1.00	Acre	1.00	43,560.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	33
<b>Climate Zone</b>	11			<b>Operational Year</b>	2015
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	630.89	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics -

Land Use -

Construction Phase - Anticipated construction schedule for Phase 1 and 2 of project.

Off-road Equipment - Anticipated construction equipment for Phase 1 building construction.

Off-road Equipment - Anticipated construction equipment for Phase 2 building phase.

Off-road Equipment - Anticipated construction equipment for Phase 1 grading phase.

Off-road Equipment - Default construction equipment for Phase 2 paving phase.

Off-road Equipment - Default construction equipment for Phase 1 site preparation phase.

Off-road Equipment - Anticipated equipment for Phase 1 trenching for utility relocation.

Trips and VMT - No import or export soils needed for project.

Grading - Assumes a total of 0.75 acres would be disturbed; Assumes a daily of 1,500 cy of excavation (1,500 cy x 5 days of grading = 7,500 cy).

Vehicle Trips - A daily total of 1,100 vehicle trips is anticipated for project.

Area Coating - Square footage of outdoor performing arts stage.

Water And Wastewater - No outdoor water use for project.

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Interior	65340	0
tblConstructionPhase	NumDays	100.00	25.00
tblConstructionPhase	NumDays	100.00	75.00
tblConstructionPhase	NumDays	2.00	5.00
tblConstructionPhase	NumDays	5.00	10.00
tblConstructionPhase	NumDays	1.00	5.00
tblConstructionPhase	PhaseEndDate	10/10/2014	6/12/2015
tblConstructionPhase	PhaseEndDate	6/26/2015	6/12/2015
tblConstructionPhase	PhaseStartDate	5/24/2014	5/26/2014
tblConstructionPhase	PhaseStartDate	6/28/2014	3/2/2015
tblConstructionPhase	PhaseStartDate	2/8/2014	2/10/2014
tblConstructionPhase	PhaseStartDate	6/13/2015	6/1/2015
tblConstructionPhase	PhaseStartDate	2/15/2014	2/17/2014
tblGrading	AcresOfGrading	1.88	0.75
tblGrading	AcresOfGrading	2.50	0.75
tblGrading	MaterialExported	0.00	7,500.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblProjectCharacteristics	OperationalYear	2014	2015
tblTripsAndVMT	HaulingTripNumber	938.00	0.00
tblVehicleTrips	ST_TR	1.59	1,100.00
tblVehicleTrips	SU_TR	1.59	1,100.00
tblVehicleTrips	WD_TR	1.59	1,100.00



tblWater	ElectricityIntensityFactorForWastewaterTreatment	1,911.00	0.00
tblWater	ElectricityIntensityFactorToDistribute	1,272.00	0.00
tblWater	ElectricityIntensityFactorToSupply	9,727.00	0.00
tblWater	ElectricityIntensityFactorToTreat	111.00	0.00
tblWater	OutdoorWaterUseRate	1,191,481.35	0.00

## 2.0 Emissions Summary

### 2.1 Overall Construction (Maximum Daily Emission)

#### Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2014	4.6634	30.1507	22.1823	0.0319	5.5178	2.4759	7.0022	2.9373	2.3678	4.3030	0.0000	3,075.5781	3,075.5781	0.7031	0.0000	3,090.3421
2015	5.6888	41.2115	30.1168	0.0446	0.3901	2.7242	3.1144	0.1043	2.5753	2.6796	0.0000	4,330.5639	4,330.5639	1.0125	0.0000	4,351.8260
<b>Total</b>	<b>10.3522</b>	<b>71.3622</b>	<b>52.2990</b>	<b>0.0765</b>	<b>5.9080</b>	<b>5.2002</b>	<b>10.1166</b>	<b>3.0417</b>	<b>4.9431</b>	<b>6.9826</b>	<b>0.0000</b>	<b>7,406.1420</b>	<b>7,406.1420</b>	<b>1.7155</b>	<b>0.0000</b>	<b>7,442.1682</b>

#### Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2014	4.6634	30.1507	22.1823	0.0319	2.2065	2.4759	3.6909	1.1600	2.3678	2.5256	0.0000	3,075.5781	3,075.5781	0.7031	0.0000	3,090.3421
2015	5.6888	41.2115	30.1168	0.0446	0.3901	2.7242	3.1144	0.1043	2.5753	2.6796	0.0000	4,330.5639	4,330.5639	1.0125	0.0000	4,351.8260

Total	10.3522	71.3622	52.2990	0.0765	2.5966	5.2002	6.8052	1.2643	4.9431	5.2052	0.0000	7,406.1420	7,406.1420	1.7155	0.0000	7,442.1682
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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	56.05	0.00	32.73	58.43	0.00	25.45	0.00	0.00	0.00	0.00	0.00	0.00

## 2.2 Overall Operational Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.9316	0.0000	1.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	4.6632	12.4333	49.5120	0.0977	6.7179	0.1771	6.8951	1.7960	0.1627	1.9587		8,851.8993	8,851.8993	0.4095		8,860.4989
Total	5.5949	12.4333	49.5121	0.0977	6.7179	0.1771	6.8951	1.7960	0.1627	1.9587		8,851.8995	8,851.8995	0.4095	0.0000	8,860.4991

## Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.9316	0.0000	1.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	4.6632	12.4333	49.5120	0.0977	6.7179	0.1771	6.8951	1.7960	0.1627	1.9587		8,851.8993	8,851.8993	0.4095		8,860.4989

Total	5.5949	12.4333	49.5121	0.0977	6.7179	0.1771	6.8951	1.7960	0.1627	1.9587		8,851.8995	8,851.8995	0.4095	0.0000	8,860.4991
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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation - Phase 1	Site Preparation	2/3/2014	2/7/2014	5	5	
2	Grading - Phase 1	Grading	2/10/2014	2/14/2014	5	5	
3	Utility Relocation - Phase 1	Trenching	2/17/2014	5/23/2014	5	70	
4	Building Construction - Phase 1	Building Construction	5/26/2014	6/27/2014	5	25	
5	Building Construction - Phase 2	Building Construction	3/2/2015	6/12/2015	5	75	
6	Paving - Phase 2	Paving	6/1/2015	6/12/2015	5	10	

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 (Architectural Coating – sqft)

#### OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation - Phase 1	Graders	1	8.00	174	0.41
Site Preparation - Phase 1	Rubber Tired Dozers	1	7.00	255	0.40
Site Preparation - Phase 1	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading - Phase 1	Graders	1	6.00	174	0.41
Grading - Phase 1	Off-Highway Trucks	1	4.00	400	0.38

Grading - Phase 1	Rubber Tired Dozers	1	6.00	255	0.40
Grading - Phase 1	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Utility Relocation - Phase 1	Crushing/Proc. Equipment	2	8.00	85	0.78
Utility Relocation - Phase 1	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Utility Relocation - Phase 1	Trenchers	2	8.00	80	0.50
Building Construction - Phase 1	Aerial Lifts	2	6.00	62	0.31
Building Construction - Phase 1	Cranes	1	6.00	226	0.29
Building Construction - Phase 1	Forklifts	2	6.00	89	0.20
Building Construction - Phase 1	Generator Sets	1	8.00	84	0.74
Building Construction - Phase 1	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Building Construction - Phase 1	Welders	3	8.00	46	0.45
Building Construction - Phase 2	Cranes	1	6.00	226	0.29
Building Construction - Phase 2	Forklifts	2	6.00	89	0.20
Building Construction - Phase 2	Generator Sets	1	8.00	84	0.74
Building Construction - Phase 2	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Building Construction - Phase 2	Welders	3	8.00	46	0.45
Paving - Phase 2	Cement and Mortar Mixers	1	6.00	9	0.56
Paving - Phase 2	Pavers	1	6.00	125	0.42
Paving - Phase 2	Paving Equipment	1	8.00	130	0.36
Paving - Phase 2	Rollers	1	7.00	80	0.38
Paving - Phase 2	Tractors/Loaders/Backhoes	1	8.00	97	0.37

### Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation - Phase 1	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading - Phase 1	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Utility Relocation - Phase 1	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction - Phase 1	11	18.00	7.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction - Phase 2	9	18.00	7.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

Paving - Phase 2	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
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### 3.1 Mitigation Measures Construction

Water Exposed Area

### 3.2 Site Preparation - Phase 1 - 2014

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.4284	0.0000	5.4284	2.9136	0.0000	2.9136			0.0000			0.0000
Off-Road	2.5474	27.1661	17.0975	0.0171		1.4834	1.4834		1.3647	1.3647		1,821.0895	1,821.0895	0.5382		1,832.3907
<b>Total</b>	<b>2.5474</b>	<b>27.1661</b>	<b>17.0975</b>	<b>0.0171</b>	<b>5.4284</b>	<b>1.4834</b>	<b>6.9118</b>	<b>2.9136</b>	<b>1.3647</b>	<b>4.2784</b>		<b>1,821.0895</b>	<b>1,821.0895</b>	<b>0.5382</b>		<b>1,832.3907</b>

#### 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	0.0458	0.0611	0.6394	1.1000e-003	0.0894	9.6000e-004	0.0904	0.0237	8.7000e-004	0.0246		98.9680	98.9680	6.3200e-003		99.1006
<b>Total</b>	<b>0.0458</b>	<b>0.0611</b>	<b>0.6394</b>	<b>1.1000e-003</b>	<b>0.0894</b>	<b>9.6000e-004</b>	<b>0.0904</b>	<b>0.0237</b>	<b>8.7000e-004</b>	<b>0.0246</b>		<b>98.9680</b>	<b>98.9680</b>	<b>6.3200e-003</b>		<b>99.1006</b>

**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					2.1171	0.0000	2.1171	1.1363	0.0000	1.1363			0.0000			0.0000
Off-Road	2.5474	27.1661	17.0975	0.0171		1.4834	1.4834		1.3647	1.3647	0.0000	1,821.0895	1,821.0895	0.5382		1,832.3907
<b>Total</b>	<b>2.5474</b>	<b>27.1661</b>	<b>17.0975</b>	<b>0.0171</b>	<b>2.1171</b>	<b>1.4834</b>	<b>3.6005</b>	<b>1.1363</b>	<b>1.3647</b>	<b>2.5011</b>	<b>0.0000</b>	<b>1,821.0895</b>	<b>1,821.0895</b>	<b>0.5382</b>		<b>1,832.3907</b>

**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	0.0458	0.0611	0.6394	1.1000e-003	0.0894	9.6000e-004	0.0904	0.0237	8.7000e-004	0.0246		98.9680	98.9680	6.3200e-003		99.1006
<b>Total</b>	<b>0.0458</b>	<b>0.0611</b>	<b>0.6394</b>	<b>1.1000e-003</b>	<b>0.0894</b>	<b>9.6000e-004</b>	<b>0.0904</b>	<b>0.0237</b>	<b>8.7000e-004</b>	<b>0.0246</b>		<b>98.9680</b>	<b>98.9680</b>	<b>6.3200e-003</b>		<b>99.1006</b>

**3.3 Grading - Phase 1 - 2014**

**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
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Category	lb/day										lb/day					
Fugitive Dust					4.8453	0.0000	4.8453	2.5255	0.0000	2.5255			0.0000			0.0000
Off-Road	2.6032	28.4561	16.9473	0.0207		1.4513	1.4513		1.3352	1.3352		2,194.1195	2,194.1195	0.6484		2,207.7356
<b>Total</b>	<b>2.6032</b>	<b>28.4561</b>	<b>16.9473</b>	<b>0.0207</b>	<b>4.8453</b>	<b>1.4513</b>	<b>6.2965</b>	<b>2.5255</b>	<b>1.3352</b>	<b>3.8607</b>		<b>2,194.1195</b>	<b>2,194.1195</b>	<b>0.6484</b>		<b>2,207.7356</b>

**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	0.0572	0.0763	0.7992	1.3700e-003	0.1118	1.2000e-003	0.1130	0.0296	1.0900e-003	0.0307		123.7099	123.7099	7.9000e-003		123.8758
<b>Total</b>	<b>0.0572</b>	<b>0.0763</b>	<b>0.7992</b>	<b>1.3700e-003</b>	<b>0.1118</b>	<b>1.2000e-003</b>	<b>0.1130</b>	<b>0.0296</b>	<b>1.0900e-003</b>	<b>0.0307</b>		<b>123.7099</b>	<b>123.7099</b>	<b>7.9000e-003</b>		<b>123.8758</b>

**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					1.8897	0.0000	1.8897	0.9850	0.0000	0.9850			0.0000			0.0000
Off-Road	2.6032	28.4561	16.9473	0.0207		1.4513	1.4513		1.3352	1.3352	0.0000	2,194.1195	2,194.1195	0.6484		2,207.7356

<b>Total</b>	<b>2.6032</b>	<b>28.4561</b>	<b>16.9473</b>	<b>0.0207</b>	<b>1.8897</b>	<b>1.4513</b>	<b>3.3409</b>	<b>0.9850</b>	<b>1.3352</b>	<b>2.3201</b>	<b>0.0000</b>	<b>2,194.1195</b>	<b>2,194.1195</b>	<b>0.6484</b>		<b>2,207.7356</b>
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**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	0.0572	0.0763	0.7992	1.3700e-003	0.1118	1.2000e-003	0.1130	0.0296	1.0900e-003	0.0307		123.7099	123.7099	7.9000e-003		123.8758
<b>Total</b>	<b>0.0572</b>	<b>0.0763</b>	<b>0.7992</b>	<b>1.3700e-003</b>	<b>0.1118</b>	<b>1.2000e-003</b>	<b>0.1130</b>	<b>0.0296</b>	<b>1.0900e-003</b>	<b>0.0307</b>		<b>123.7099</b>	<b>123.7099</b>	<b>7.9000e-003</b>		<b>123.8758</b>

**3.4 Utility Relocation - Phase 1 - 2014**

**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	3.9423	30.0362	19.6034	0.0272		2.4741	2.4741		2.3662	2.3662		2,725.9693	2,725.9693	0.5976		2,738.5180
<b>Total</b>	<b>3.9423</b>	<b>30.0362</b>	<b>19.6034</b>	<b>0.0272</b>		<b>2.4741</b>	<b>2.4741</b>		<b>2.3662</b>	<b>2.3662</b>		<b>2,725.9693</b>	<b>2,725.9693</b>	<b>0.5976</b>		<b>2,738.5180</b>

**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	0.0858	0.1145	1.1988	2.0600e-003	0.1677	1.8000e-003	0.1695	0.0445	1.6400e-003	0.0461		185.5649	185.5649	0.0118		185.8136
<b>Total</b>	<b>0.0858</b>	<b>0.1145</b>	<b>1.1988</b>	<b>2.0600e-003</b>	<b>0.1677</b>	<b>1.8000e-003</b>	<b>0.1695</b>	<b>0.0445</b>	<b>1.6400e-003</b>	<b>0.0461</b>		<b>185.5649</b>	<b>185.5649</b>	<b>0.0118</b>		<b>185.8136</b>

**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	3.9423	30.0362	19.6034	0.0272		2.4741	2.4741		2.3662	2.3662	0.0000	2,725.9693	2,725.9693	0.5976		2,738.5180
<b>Total</b>	<b>3.9423</b>	<b>30.0362</b>	<b>19.6034</b>	<b>0.0272</b>		<b>2.4741</b>	<b>2.4741</b>		<b>2.3662</b>	<b>2.3662</b>	<b>0.0000</b>	<b>2,725.9693</b>	<b>2,725.9693</b>	<b>0.5976</b>		<b>2,738.5180</b>

**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	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	0.0858	0.1145	1.1988	2.0600e-003	0.1677	1.8000e-003	0.1695	0.0445	1.6400e-003	0.0461		185.5649	185.5649	0.0118		185.8136
<b>Total</b>	<b>0.0858</b>	<b>0.1145</b>	<b>1.1988</b>	<b>2.0600e-003</b>	<b>0.1677</b>	<b>1.8000e-003</b>	<b>0.1695</b>	<b>0.0445</b>	<b>1.6400e-003</b>	<b>0.0461</b>		<b>185.5649</b>	<b>185.5649</b>	<b>0.0118</b>		<b>185.8136</b>

### 3.5 Building Construction - Phase 1 - 2014

#### 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	4.4740	28.5096	19.7243	0.0279		2.0207	2.0207		1.9342	1.9342		2,696.6171	2,696.6171	0.6874		2,711.0521
<b>Total</b>	<b>4.4740</b>	<b>28.5096</b>	<b>19.7243</b>	<b>0.0279</b>		<b>2.0207</b>	<b>2.0207</b>		<b>1.9342</b>	<b>1.9342</b>		<b>2,696.6171</b>	<b>2,696.6171</b>	<b>0.6874</b>		<b>2,711.0521</b>

#### 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	0.0864	0.8127	1.0194	1.5300e-003	0.0436	0.0154	0.0590	0.0124	0.0141	0.0265		156.2831	156.2831	1.4600e-003		156.3137
Worker	0.1030	0.1374	1.4386	2.4700e-003	0.2012	2.1500e-003	0.2034	0.0534	1.9700e-003	0.0553		222.6779	222.6779	0.0142		222.9764
<b>Total</b>	<b>0.1894</b>	<b>0.9501</b>	<b>2.4580</b>	<b>4.0000e-003</b>	<b>0.2448</b>	<b>0.0175</b>	<b>0.2623</b>	<b>0.0658</b>	<b>0.0161</b>	<b>0.0819</b>		<b>378.9610</b>	<b>378.9610</b>	<b>0.0157</b>		<b>379.2901</b>

**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	4.4740	28.5096	19.7243	0.0279		2.0207	2.0207		1.9342	1.9342	0.0000	2,696.6171	2,696.6171	0.6874		2,711.0521
<b>Total</b>	<b>4.4740</b>	<b>28.5096</b>	<b>19.7243</b>	<b>0.0279</b>		<b>2.0207</b>	<b>2.0207</b>		<b>1.9342</b>	<b>1.9342</b>	<b>0.0000</b>	<b>2,696.6171</b>	<b>2,696.6171</b>	<b>0.6874</b>		<b>2,711.0521</b>

**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	0.0864	0.8127	1.0194	1.5300e-003	0.0436	0.0154	0.0590	0.0124	0.0141	0.0265		156.2831	156.2831	1.4600e-003		156.3137
Worker	0.1030	0.1374	1.4386	2.4700e-003	0.2012	2.1500e-003	0.2034	0.0534	1.9700e-003	0.0553		222.6779	222.6779	0.0142		222.9764
<b>Total</b>	<b>0.1894</b>	<b>0.9501</b>	<b>2.4580</b>	<b>4.0000e-003</b>	<b>0.2448</b>	<b>0.0175</b>	<b>0.2623</b>	<b>0.0658</b>	<b>0.0161</b>	<b>0.0819</b>		<b>378.9610</b>	<b>378.9610</b>	<b>0.0157</b>		<b>379.2901</b>

**3.6 Building Construction - Phase 2 - 2015**

**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	4.0512	25.6925	17.7801	0.0254		1.8171	1.8171		1.7398	1.7398		2,421.5154	2,421.5154	0.5834		2,433.7659
<b>Total</b>	<b>4.0512</b>	<b>25.6925</b>	<b>17.7801</b>	<b>0.0254</b>		<b>1.8171</b>	<b>1.8171</b>		<b>1.7398</b>	<b>1.7398</b>		<b>2,421.5154</b>	<b>2,421.5154</b>	<b>0.5834</b>		<b>2,433.7659</b>

**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	0.0742	0.7100	0.9338	1.5300e-003	0.0436	0.0118	0.0554	0.0124	0.0108	0.0232		154.5449	154.5449	1.2900e-003		154.5719
Worker	0.0925	0.1238	1.2968	2.4700e-003	0.2012	2.0100e-003	0.2032	0.0534	1.8400e-003	0.0552		216.0194	216.0194	0.0131		216.2936
<b>Total</b>	<b>0.1667</b>	<b>0.8338</b>	<b>2.2307</b>	<b>4.0000e-003</b>	<b>0.2448</b>	<b>0.0138</b>	<b>0.2586</b>	<b>0.0658</b>	<b>0.0126</b>	<b>0.0784</b>		<b>370.5643</b>	<b>370.5643</b>	<b>0.0144</b>		<b>370.8655</b>

**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	4.0512	25.6925	17.7801	0.0254		1.8171	1.8171		1.7398	1.7398	0.0000	2,421.5154	2,421.5154	0.5834		2,433.7659

<b>Total</b>	<b>4.0512</b>	<b>25.6925</b>	<b>17.7801</b>	<b>0.0254</b>		<b>1.8171</b>	<b>1.8171</b>		<b>1.7398</b>	<b>1.7398</b>	<b>0.0000</b>	<b>2,421.5154</b>	<b>2,421.5154</b>	<b>0.5834</b>		<b>2,433.7659</b>
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**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	0.0742	0.7100	0.9338	1.5300e-003	0.0436	0.0118	0.0554	0.0124	0.0108	0.0232		154.5449	154.5449	1.2900e-003		154.5719
Worker	0.0925	0.1238	1.2968	2.4700e-003	0.2012	2.0100e-003	0.2032	0.0534	1.8400e-003	0.0552		216.0194	216.0194	0.0131		216.2936
<b>Total</b>	<b>0.1667</b>	<b>0.8338</b>	<b>2.2307</b>	<b>4.0000e-003</b>	<b>0.2448</b>	<b>0.0138</b>	<b>0.2586</b>	<b>0.0658</b>	<b>0.0126</b>	<b>0.0784</b>		<b>370.5643</b>	<b>370.5643</b>	<b>0.0144</b>		<b>370.8655</b>

**3.7 Paving - Phase 2 - 2015**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4041	14.5959	9.1695	0.0133		0.8919	0.8919		0.8215	0.8215		1,382.4703	1,382.4703	0.4054		1,390.9826
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.4041</b>	<b>14.5959</b>	<b>9.1695</b>	<b>0.0133</b>		<b>0.8919</b>	<b>0.8919</b>		<b>0.8215</b>	<b>0.8215</b>		<b>1,382.4703</b>	<b>1,382.4703</b>	<b>0.4054</b>		<b>1,390.9826</b>

**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	0.0668	0.0894	0.9366	1.7800e-003	0.1453	1.4500e-003	0.1468	0.0385	1.3300e-003	0.0399		156.0140	156.0140	9.4300e-003		156.2121
<b>Total</b>	<b>0.0668</b>	<b>0.0894</b>	<b>0.9366</b>	<b>1.7800e-003</b>	<b>0.1453</b>	<b>1.4500e-003</b>	<b>0.1468</b>	<b>0.0385</b>	<b>1.3300e-003</b>	<b>0.0399</b>		<b>156.0140</b>	<b>156.0140</b>	<b>9.4300e-003</b>		<b>156.2121</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4041	14.5959	9.1695	0.0133		0.8919	0.8919		0.8215	0.8215	0.0000	1,382.4703	1,382.4703	0.4054		1,390.9826
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.4041</b>	<b>14.5959</b>	<b>9.1695</b>	<b>0.0133</b>		<b>0.8919</b>	<b>0.8919</b>		<b>0.8215</b>	<b>0.8215</b>	<b>0.0000</b>	<b>1,382.4703</b>	<b>1,382.4703</b>	<b>0.4054</b>		<b>1,390.9826</b>

**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	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	0.0668	0.0894	0.9366	1.7800e-003	0.1453	1.4500e-003	0.1468	0.0385	1.3300e-003	0.0399		156.0140	156.0140	9.4300e-003		156.2121
<b>Total</b>	<b>0.0668</b>	<b>0.0894</b>	<b>0.9366</b>	<b>1.7800e-003</b>	<b>0.1453</b>	<b>1.4500e-003</b>	<b>0.1468</b>	<b>0.0385</b>	<b>1.3300e-003</b>	<b>0.0399</b>		<b>156.0140</b>	<b>156.0140</b>	<b>9.4300e-003</b>		<b>156.2121</b>

## 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	4.6632	12.4333	49.5120	0.0977	6.7179	0.1771	6.8951	1.7960	0.1627	1.9587		8,851.8993	8,851.8993	0.4095		8,860.4989
Unmitigated	4.6632	12.4333	49.5120	0.0977	6.7179	0.1771	6.8951	1.7960	0.1627	1.9587		8,851.8993	8,851.8993	0.4095		8,860.4989

### 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	1,100.00	1,100.00	1100.00	3,165,294	3,165,294
<b>Total</b>	<b>1,100.00</b>	<b>1,100.00</b>	<b>1,100.00</b>	<b>3,165,294</b>	<b>3,165,294</b>

### 4.3 Trip Type Information

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

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.534619	0.058604	0.178185	0.126004	0.038986	0.006286	0.016079	0.029769	0.002429	0.003158	0.003693	0.000543	0.001646

## 5.0 Energy Detail

### 4.4 Fleet Mix

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

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

### 5.2 Energy by Land Use - NaturalGas

#### Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>



**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					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.9316	0.0000	1.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Unmitigated	0.9316	0.0000	1.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004

**6.2 Area by SubCategory**

**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Consumer Products	0.8625					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Architectural Coating	0.0691					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.9316</b>	<b>0.0000</b>	<b>1.1000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>2.2000e-004</b>	<b>2.2000e-004</b>	<b>0.0000</b>		<b>2.3000e-004</b>

### 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					
Consumer Products	0.8625					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Architectural Coating	0.0691					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.9316</b>	<b>0.0000</b>	<b>1.1000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>2.2000e-004</b>	<b>2.2000e-004</b>	<b>0.0000</b>		<b>2.3000e-004</b>

## 7.0 Water Detail

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### 7.1 Mitigation Measures Water

## 8.0 Waste Detail

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### 8.1 Mitigation Measures Waste

## 9.0 Operational Offroad

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

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**Griffith Park Performing Arts Center**  
**Los Angeles-South Coast County, Annual**

## 1.0 Project Characteristics

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### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	1.00	Acre	1.00	43,560.00	0

### 1.2 Other Project Characteristics

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	33
<b>Climate Zone</b>	11			<b>Operational Year</b>	2015
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	630.89	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

### 1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Anticipated construction schedule for Phase 1 and 2 of project.

Off-road Equipment - Anticipated construction equipment for Phase 1 building construction.

Off-road Equipment - Anticipated construction equipment for Phase 2 building phase.

Off-road Equipment - Anticipated construction equipment for Phase 1 grading phase.

Off-road Equipment - Default construction equipment for Phase 2 paving phase.

Off-road Equipment - Default construction equipment for Phase 1 site preparation phase.

Off-road Equipment - Anticipated equipment for Phase 1 trenching for utility relocation.

Trips and VMT - No import or export soils needed for project.

Grading - Assumes a total of 0.75 acres would be disturbed; Assumes a daily of 1,500 cy of excavation (1,500 cy x 5 days of grading = 7,500 cy).

Vehicle Trips - A daily total of 1,100 vehicle trips is anticipated for project.

Area Coating - Square footage of outdoor performing arts stage.

Water And Wastewater - No outdoor water use for project.

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Interior	65340	0
tblConstructionPhase	NumDays	100.00	25.00
tblConstructionPhase	NumDays	100.00	75.00
tblConstructionPhase	NumDays	2.00	5.00
tblConstructionPhase	NumDays	5.00	10.00
tblConstructionPhase	NumDays	1.00	5.00
tblConstructionPhase	PhaseEndDate	10/10/2014	6/12/2015
tblConstructionPhase	PhaseEndDate	6/26/2015	6/12/2015
tblConstructionPhase	PhaseStartDate	5/24/2014	5/26/2014
tblConstructionPhase	PhaseStartDate	6/28/2014	3/2/2015
tblConstructionPhase	PhaseStartDate	2/8/2014	2/10/2014
tblConstructionPhase	PhaseStartDate	6/13/2015	6/1/2015
tblConstructionPhase	PhaseStartDate	2/15/2014	2/17/2014
tblGrading	AcresOfGrading	1.88	0.75
tblGrading	AcresOfGrading	2.50	0.75
tblGrading	MaterialExported	0.00	7,500.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblProjectCharacteristics	OperationalYear	2014	2015
tblTripsAndVMT	HaulingTripNumber	938.00	0.00
tblVehicleTrips	ST_TR	1.59	1,100.00
tblVehicleTrips	SU_TR	1.59	1,100.00
tblVehicleTrips	WD_TR	1.59	1,100.00

tblWater	ElectricityIntensityFactorForWastewaterTreatment	1,911.00	0.00
tblWater	ElectricityIntensityFactorToDistribute	1,272.00	0.00
tblWater	ElectricityIntensityFactorToSupply	9,727.00	0.00
tblWater	ElectricityIntensityFactorToTreat	111.00	0.00
tblWater	OutdoorWaterUseRate	1,191,481.35	0.00

## 2.0 Emissions Summary

### 2.1 Overall Construction

#### Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2014	0.2121	1.5633	1.0949	1.5200e-003	0.0349	0.1195	0.1544	0.0161	0.1140	0.1301	0.0000	137.0849	137.0849	0.0300	0.0000	137.7158
2015	0.1652	1.0688	0.8007	1.1800e-003	9.7200e-003	0.0731	0.0828	2.6100e-003	0.0698	0.0724	0.0000	102.1182	102.1182	0.0222	0.0000	102.5847
<b>Total</b>	<b>0.3773</b>	<b>2.6321</b>	<b>1.8956</b>	<b>2.7000e-003</b>	<b>0.0447</b>	<b>0.1926</b>	<b>0.2373</b>	<b>0.0187</b>	<b>0.1838</b>	<b>0.2025</b>	<b>0.0000</b>	<b>239.2031</b>	<b>239.2031</b>	<b>0.0523</b>	<b>0.0000</b>	<b>240.3006</b>

#### Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2014	0.2121	1.5633	1.0949	1.5200e-003	0.0193	0.1195	0.1387	7.7700e-003	0.1140	0.1218	0.0000	137.0848	137.0848	0.0300	0.0000	137.7157
2015	0.1652	1.0688	0.8007	1.1800e-003	9.7200e-003	0.0731	0.0828	2.6100e-003	0.0698	0.0724	0.0000	102.1181	102.1181	0.0222	0.0000	102.5846

Total	0.3773	2.6321	1.8956	2.7000e-003	0.0290	0.1926	0.2216	0.0104	0.1838	0.1942	0.0000	239.2029	239.2029	0.0523	0.0000	240.3003
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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	35.10	0.00	6.60	44.40	0.00	4.09	0.00	0.00	0.00	0.00	0.00	0.00

### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation - Phase 1	Site Preparation	2/3/2014	2/7/2014	5	5	
2	Grading - Phase 1	Grading	2/10/2014	2/14/2014	5	5	
3	Utility Relocation - Phase 1	Trenching	2/17/2014	5/23/2014	5	70	
4	Building Construction - Phase 1	Building Construction	5/26/2014	6/27/2014	5	25	
5	Building Construction - Phase 2	Building Construction	3/2/2015	6/12/2015	5	75	
6	Paving - Phase 2	Paving	6/1/2015	6/12/2015	5	10	

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 (Architectural Coating – sqft)

#### OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation - Phase 1	Graders	1	8.00	174	0.41
Site Preparation - Phase 1	Rubber Tired Dozers	1	7.00	255	0.40
Site Preparation - Phase 1	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading - Phase 1	Graders	1	6.00	174	0.41
Grading - Phase 1	Off-Highway Trucks	1	4.00	400	0.38
Grading - Phase 1	Rubber Tired Dozers	1	6.00	255	0.40

Grading - Phase 1	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Utility Relocation - Phase 1	Crushing/Proc. Equipment	2	8.00	85	0.78
Utility Relocation - Phase 1	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Utility Relocation - Phase 1	Trenchers	2	8.00	80	0.50
Building Construction - Phase 1	Aerial Lifts	2	6.00	62	0.31
Building Construction - Phase 1	Cranes	1	6.00	226	0.29
Building Construction - Phase 1	Forklifts	2	6.00	89	0.20
Building Construction - Phase 1	Generator Sets	1	8.00	84	0.74
Building Construction - Phase 1	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Building Construction - Phase 1	Welders	3	8.00	46	0.45
Building Construction - Phase 2	Cranes	1	6.00	226	0.29
Building Construction - Phase 2	Forklifts	2	6.00	89	0.20
Building Construction - Phase 2	Generator Sets	1	8.00	84	0.74
Building Construction - Phase 2	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Building Construction - Phase 2	Welders	3	8.00	46	0.45
Paving - Phase 2	Cement and Mortar Mixers	1	6.00	9	0.56
Paving - Phase 2	Pavers	1	6.00	125	0.42
Paving - Phase 2	Paving Equipment	1	8.00	130	0.36
Paving - Phase 2	Rollers	1	7.00	80	0.38
Paving - Phase 2	Tractors/Loaders/Backhoes	1	8.00	97	0.37

### Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation - Phase 1	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading - Phase 1	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Utility Relocation - Phase 1	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction - Phase 1	11	18.00	7.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction - Phase 2	9	18.00	7.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving - Phase 2	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT



### 3.1 Mitigation Measures Construction

Water Exposed Area

### 3.2 Site Preparation - Phase 1 - 2014

#### 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					0.0136	0.0000	0.0136	7.2800e-003	0.0000	7.2800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.3700e-003	0.0679	0.0427	4.0000e-005	3.7100e-003	3.7100e-003		3.4100e-003	3.4100e-003		0.0000	4.1302	4.1302	1.2200e-003	0.0000	4.1558
<b>Total</b>	<b>6.3700e-003</b>	<b>0.0679</b>	<b>0.0427</b>	<b>4.0000e-005</b>	<b>0.0136</b>	<b>3.7100e-003</b>	<b>0.0173</b>	<b>7.2800e-003</b>	<b>3.4100e-003</b>	<b>0.0107</b>	<b>0.0000</b>	<b>4.1302</b>	<b>4.1302</b>	<b>1.2200e-003</b>	<b>0.0000</b>	<b>4.1558</b>

#### 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	1.1000e-004	1.6000e-004	1.6300e-003	0.0000	2.2000e-004	0.0000	2.2000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.2281	0.2281	1.0000e-005	0.0000	0.2284
<b>Total</b>	<b>1.1000e-004</b>	<b>1.6000e-004</b>	<b>1.6300e-003</b>	<b>0.0000</b>	<b>2.2000e-004</b>	<b>0.0000</b>	<b>2.2000e-004</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>0.2281</b>	<b>0.2281</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.2284</b>

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.2900e-003	0.0000	5.2900e-003	2.8400e-003	0.0000	2.8400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.3700e-003	0.0679	0.0427	4.0000e-005		3.7100e-003	3.7100e-003		3.4100e-003	3.4100e-003	0.0000	4.1302	4.1302	1.2200e-003	0.0000	4.1558
<b>Total</b>	<b>6.3700e-003</b>	<b>0.0679</b>	<b>0.0427</b>	<b>4.0000e-005</b>	<b>5.2900e-003</b>	<b>3.7100e-003</b>	<b>9.0000e-003</b>	<b>2.8400e-003</b>	<b>3.4100e-003</b>	<b>6.2500e-003</b>	<b>0.0000</b>	<b>4.1302</b>	<b>4.1302</b>	<b>1.2200e-003</b>	<b>0.0000</b>	<b>4.1558</b>

**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	1.1000e-004	1.6000e-004	1.6300e-003	0.0000	2.2000e-004	0.0000	2.2000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.2281	0.2281	1.0000e-005	0.0000	0.2284
<b>Total</b>	<b>1.1000e-004</b>	<b>1.6000e-004</b>	<b>1.6300e-003</b>	<b>0.0000</b>	<b>2.2000e-004</b>	<b>0.0000</b>	<b>2.2000e-004</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>0.2281</b>	<b>0.2281</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.2284</b>

**3.3 Grading - Phase 1 - 2014**

**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					0.0121	0.0000	0.0121	6.3100e-003	0.0000	6.3100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.5100e-003	0.0711	0.0424	5.0000e-005		3.6300e-003	3.6300e-003		3.3400e-003	3.3400e-003	0.0000	4.9762	4.9762	1.4700e-003	0.0000	5.0071
<b>Total</b>	<b>6.5100e-003</b>	<b>0.0711</b>	<b>0.0424</b>	<b>5.0000e-005</b>	<b>0.0121</b>	<b>3.6300e-003</b>	<b>0.0157</b>	<b>6.3100e-003</b>	<b>3.3400e-003</b>	<b>9.6500e-003</b>	<b>0.0000</b>	<b>4.9762</b>	<b>4.9762</b>	<b>1.4700e-003</b>	<b>0.0000</b>	<b>5.0071</b>

**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	1.4000e-004	2.0000e-004	2.0400e-003	0.0000	2.7000e-004	0.0000	2.8000e-004	7.0000e-005	0.0000	8.0000e-005	0.0000	0.2851	0.2851	2.0000e-005	0.0000	0.2855
<b>Total</b>	<b>1.4000e-004</b>	<b>2.0000e-004</b>	<b>2.0400e-003</b>	<b>0.0000</b>	<b>2.7000e-004</b>	<b>0.0000</b>	<b>2.8000e-004</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>0.2851</b>	<b>0.2851</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.2855</b>

**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					4.7200e-003	0.0000	4.7200e-003	2.4600e-003	0.0000	2.4600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.5100e-003	0.0711	0.0424	5.0000e-005		3.6300e-003	3.6300e-003		3.3400e-003	3.3400e-003	0.0000	4.9762	4.9762	1.4700e-003	0.0000	5.0071
<b>Total</b>	<b>6.5100e-003</b>	<b>0.0711</b>	<b>0.0424</b>	<b>5.0000e-005</b>	<b>4.7200e-003</b>	<b>3.6300e-003</b>	<b>8.3500e-003</b>	<b>2.4600e-003</b>	<b>3.3400e-003</b>	<b>5.8000e-003</b>	<b>0.0000</b>	<b>4.9762</b>	<b>4.9762</b>	<b>1.4700e-003</b>	<b>0.0000</b>	<b>5.0071</b>

**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	1.4000e-004	2.0000e-004	2.0400e-003	0.0000	2.7000e-004	0.0000	2.8000e-004	7.0000e-005	0.0000	8.0000e-005	0.0000	0.2851	0.2851	2.0000e-005	0.0000	0.2855
<b>Total</b>	<b>1.4000e-004</b>	<b>2.0000e-004</b>	<b>2.0400e-003</b>	<b>0.0000</b>	<b>2.7000e-004</b>	<b>0.0000</b>	<b>2.8000e-004</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>0.2851</b>	<b>0.2851</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.2855</b>

**3.4 Utility Relocation - Phase 1 - 2014**

**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	0.1380	1.0513	0.6861	9.5000e-004		0.0866	0.0866		0.0828	0.0828	0.0000	86.5535	86.5535	0.0190	0.0000	86.9520
<b>Total</b>	<b>0.1380</b>	<b>1.0513</b>	<b>0.6861</b>	<b>9.5000e-004</b>		<b>0.0866</b>	<b>0.0866</b>		<b>0.0828</b>	<b>0.0828</b>	<b>0.0000</b>	<b>86.5535</b>	<b>86.5535</b>	<b>0.0190</b>	<b>0.0000</b>	<b>86.9520</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8400e-003	4.1100e-003	0.0428	7.0000e-005	5.7500e-003	6.0000e-005	5.8200e-003	1.5300e-003	6.0000e-005	1.5900e-003	0.0000	5.9865	5.9865	3.8000e-004	0.0000	5.9944
<b>Total</b>	<b>2.8400e-003</b>	<b>4.1100e-003</b>	<b>0.0428</b>	<b>7.0000e-005</b>	<b>5.7500e-003</b>	<b>6.0000e-005</b>	<b>5.8200e-003</b>	<b>1.5300e-003</b>	<b>6.0000e-005</b>	<b>1.5900e-003</b>	<b>0.0000</b>	<b>5.9865</b>	<b>5.9865</b>	<b>3.8000e-004</b>	<b>0.0000</b>	<b>5.9944</b>

**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	0.1380	1.0513	0.6861	9.5000e-004		0.0866	0.0866		0.0828	0.0828	0.0000	86.5534	86.5534	0.0190	0.0000	86.9519
<b>Total</b>	<b>0.1380</b>	<b>1.0513</b>	<b>0.6861</b>	<b>9.5000e-004</b>		<b>0.0866</b>	<b>0.0866</b>		<b>0.0828</b>	<b>0.0828</b>	<b>0.0000</b>	<b>86.5534</b>	<b>86.5534</b>	<b>0.0190</b>	<b>0.0000</b>	<b>86.9519</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8400e-003	4.1100e-003	0.0428	7.0000e-005	5.7500e-003	6.0000e-005	5.8200e-003	1.5300e-003	6.0000e-005	1.5900e-003	0.0000	5.9865	5.9865	3.8000e-004	0.0000	5.9944

<b>Total</b>	<b>2.8400e-003</b>	<b>4.1100e-003</b>	<b>0.0428</b>	<b>7.0000e-005</b>	<b>5.7500e-003</b>	<b>6.0000e-005</b>	<b>5.8200e-003</b>	<b>1.5300e-003</b>	<b>6.0000e-005</b>	<b>1.5900e-003</b>	<b>0.0000</b>	<b>5.9865</b>	<b>5.9865</b>	<b>3.8000e-004</b>	<b>0.0000</b>	<b>5.9944</b>
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### 3.5 Building Construction - Phase 1 - 2014

#### 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	0.0559	0.3564	0.2466	3.5000e-004		0.0253	0.0253		0.0242	0.0242	0.0000	30.5791	30.5791	7.7900e-003	0.0000	30.7428
<b>Total</b>	<b>0.0559</b>	<b>0.3564</b>	<b>0.2466</b>	<b>3.5000e-004</b>		<b>0.0253</b>	<b>0.0253</b>		<b>0.0242</b>	<b>0.0242</b>	<b>0.0000</b>	<b>30.5791</b>	<b>30.5791</b>	<b>7.7900e-003</b>	<b>0.0000</b>	<b>30.7428</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0400e-003	0.0104	0.0123	2.0000e-005	5.4000e-004	1.9000e-004	7.3000e-004	1.5000e-004	1.8000e-004	3.3000e-004	0.0000	1.7807	1.7807	2.0000e-005	0.0000	1.7811
Worker	1.2200e-003	1.7600e-003	0.0183	3.0000e-005	2.4700e-003	3.0000e-005	2.4900e-003	6.5000e-004	2.0000e-005	6.8000e-004	0.0000	2.5656	2.5656	1.6000e-004	0.0000	2.5690
<b>Total</b>	<b>2.2600e-003</b>	<b>0.0121</b>	<b>0.0306</b>	<b>5.0000e-005</b>	<b>3.0100e-003</b>	<b>2.2000e-004</b>	<b>3.2200e-003</b>	<b>8.0000e-004</b>	<b>2.0000e-004</b>	<b>1.0100e-003</b>	<b>0.0000</b>	<b>4.3463</b>	<b>4.3463</b>	<b>1.8000e-004</b>	<b>0.0000</b>	<b>4.3501</b>

#### 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	0.0559	0.3564	0.2466	3.5000e-004		0.0253	0.0253		0.0242	0.0242	0.0000	30.5791	30.5791	7.7900e-003	0.0000	30.7428
<b>Total</b>	<b>0.0559</b>	<b>0.3564</b>	<b>0.2466</b>	<b>3.5000e-004</b>		<b>0.0253</b>	<b>0.0253</b>		<b>0.0242</b>	<b>0.0242</b>	<b>0.0000</b>	<b>30.5791</b>	<b>30.5791</b>	<b>7.7900e-003</b>	<b>0.0000</b>	<b>30.7428</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0400e-003	0.0104	0.0123	2.0000e-005	5.4000e-004	1.9000e-004	7.3000e-004	1.5000e-004	1.8000e-004	3.3000e-004	0.0000	1.7807	1.7807	2.0000e-005	0.0000	1.7811
Worker	1.2200e-003	1.7600e-003	0.0183	3.0000e-005	2.4700e-003	3.0000e-005	2.4900e-003	6.5000e-004	2.0000e-005	6.8000e-004	0.0000	2.5656	2.5656	1.6000e-004	0.0000	2.5690
<b>Total</b>	<b>2.2600e-003</b>	<b>0.0121</b>	<b>0.0306</b>	<b>5.0000e-005</b>	<b>3.0100e-003</b>	<b>2.2000e-004</b>	<b>3.2200e-003</b>	<b>8.0000e-004</b>	<b>2.0000e-004</b>	<b>1.0100e-003</b>	<b>0.0000</b>	<b>4.3463</b>	<b>4.3463</b>	<b>1.8000e-004</b>	<b>0.0000</b>	<b>4.3501</b>

**3.6 Building Construction - Phase 2 - 2015**

**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	0.1519	0.9635	0.6668	9.5000e-004		0.0681	0.0681		0.0652	0.0652	0.0000	82.3786	82.3786	0.0199	0.0000	82.7953
<b>Total</b>	<b>0.1519</b>	<b>0.9635</b>	<b>0.6668</b>	<b>9.5000e-004</b>		<b>0.0681</b>	<b>0.0681</b>		<b>0.0652</b>	<b>0.0652</b>	<b>0.0000</b>	<b>82.3786</b>	<b>82.3786</b>	<b>0.0199</b>	<b>0.0000</b>	<b>82.7953</b>

**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	2.6900e-003	0.0272	0.0337	6.0000e-005	1.6100e-003	4.4000e-004	2.0500e-003	4.6000e-004	4.0000e-004	8.6000e-004	0.0000	5.2830	5.2830	4.0000e-005	0.0000	5.2839
Worker	3.2700e-003	4.7600e-003	0.0496	9.0000e-005	7.4000e-003	8.0000e-005	7.4700e-003	1.9600e-003	7.0000e-005	2.0300e-003	0.0000	7.4669	7.4669	4.4000e-004	0.0000	7.4762
<b>Total</b>	<b>5.9600e-003</b>	<b>0.0319</b>	<b>0.0833</b>	<b>1.5000e-004</b>	<b>9.0100e-003</b>	<b>5.2000e-004</b>	<b>9.5200e-003</b>	<b>2.4200e-003</b>	<b>4.7000e-004</b>	<b>2.8900e-003</b>	<b>0.0000</b>	<b>12.7498</b>	<b>12.7498</b>	<b>4.8000e-004</b>	<b>0.0000</b>	<b>12.7601</b>

**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	0.1519	0.9635	0.6668	9.5000e-004		0.0681	0.0681		0.0652	0.0652	0.0000	82.3785	82.3785	0.0199	0.0000	82.7952
<b>Total</b>	<b>0.1519</b>	<b>0.9635</b>	<b>0.6668</b>	<b>9.5000e-004</b>		<b>0.0681</b>	<b>0.0681</b>		<b>0.0652</b>	<b>0.0652</b>	<b>0.0000</b>	<b>82.3785</b>	<b>82.3785</b>	<b>0.0199</b>	<b>0.0000</b>	<b>82.7952</b>



**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	2.6900e-003	0.0272	0.0337	6.0000e-005	1.6100e-003	4.4000e-004	2.0500e-003	4.6000e-004	4.0000e-004	8.6000e-004	0.0000	5.2830	5.2830	4.0000e-005	0.0000	5.2839
Worker	3.2700e-003	4.7600e-003	0.0496	9.0000e-005	7.4000e-003	8.0000e-005	7.4700e-003	1.9600e-003	7.0000e-005	2.0300e-003	0.0000	7.4669	7.4669	4.4000e-004	0.0000	7.4762
<b>Total</b>	<b>5.9600e-003</b>	<b>0.0319</b>	<b>0.0833</b>	<b>1.5000e-004</b>	<b>9.0100e-003</b>	<b>5.2000e-004</b>	<b>9.5200e-003</b>	<b>2.4200e-003</b>	<b>4.7000e-004</b>	<b>2.8900e-003</b>	<b>0.0000</b>	<b>12.7498</b>	<b>12.7498</b>	<b>4.8000e-004</b>	<b>0.0000</b>	<b>12.7601</b>

**3.7 Paving - Phase 2 - 2015**

**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	7.0200e-003	0.0730	0.0459	7.0000e-005		4.4600e-003	4.4600e-003		4.1100e-003	4.1100e-003	0.0000	6.2708	6.2708	1.8400e-003	0.0000	6.3094
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>7.0200e-003</b>	<b>0.0730</b>	<b>0.0459</b>	<b>7.0000e-005</b>		<b>4.4600e-003</b>	<b>4.4600e-003</b>		<b>4.1100e-003</b>	<b>4.1100e-003</b>	<b>0.0000</b>	<b>6.2708</b>	<b>6.2708</b>	<b>1.8400e-003</b>	<b>0.0000</b>	<b>6.3094</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.2000e-004	4.6000e-004	4.7800e-003	1.0000e-005	7.1000e-004	1.0000e-005	7.2000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.7190	0.7190	4.0000e-005	0.0000	0.7199
<b>Total</b>	<b>3.2000e-004</b>	<b>4.6000e-004</b>	<b>4.7800e-003</b>	<b>1.0000e-005</b>	<b>7.1000e-004</b>	<b>1.0000e-005</b>	<b>7.2000e-004</b>	<b>1.9000e-004</b>	<b>1.0000e-005</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>0.7190</b>	<b>0.7190</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>0.7199</b>

**Mitigated Construction On-Site**

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Off-Road	7.0200e-003	0.0730	0.0459	7.0000e-005		4.4600e-003	4.4600e-003		4.1100e-003	4.1100e-003	0.0000	6.2708	6.2708	1.8400e-003	0.0000	6.3094
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>7.0200e-003</b>	<b>0.0730</b>	<b>0.0459</b>	<b>7.0000e-005</b>		<b>4.4600e-003</b>	<b>4.4600e-003</b>		<b>4.1100e-003</b>	<b>4.1100e-003</b>	<b>0.0000</b>	<b>6.2708</b>	<b>6.2708</b>	<b>1.8400e-003</b>	<b>0.0000</b>	<b>6.3094</b>

**Mitigated Construction Off-Site**

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.2000e-004	4.6000e-004	4.7800e-003	1.0000e-005	7.1000e-004	1.0000e-005	7.2000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.7190	0.7190	4.0000e-005	0.0000	0.7199

Total	3.2000e-004	4.6000e-004	4.7800e-003	1.0000e-005	7.1000e-004	1.0000e-005	7.2000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.7190	0.7190	4.0000e-005	0.0000	0.7199
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## Total On-Site Construction Emissions

<u>Construction Phase</u>	<u>On-site Combustion and Fugitive Dust Emissions*</u>			
	<u>CO</u>	<u>NOx</u>	<u>PM10</u>	<u>PM2.5</u>
Site Preparation - Phase 1	17.10	27.17	1.48	1.36
Grading/Excavation - Phase 1	16.95	28.46	1.80	1.41
Utility Relocation - Phase 1	19.60	30.04	2.76	2.43
Building Construction - Phase 1	20.53	28.69	2.02	1.93
Building Construction - Phase 2	18.53	25.85	1.82	1.74
Paving - Phase 2	9.17	14.60	0.89	0.82

\* Emissions also account for combustion exhaust emissions from delivery trucks traveling a 0.5-mile roundtrip distance onsite. On-site combustion emissions estimated from CalEEMod and fugitive emissions calculated from EPA's AP-42 equations.

## CalEEMod Emissions Output for On-Site Construction Equipment Emissions

<u>Construction Phase</u>	<u>On-site Combustion Emissions*</u>			
	<u>CO</u>	<u>NOx</u>	<u>PM10</u>	<u>PM2.5</u>
Site Preparation - Phase 1	17.10	27.17	1.48	1.36
Grading/Excavation - Phase 1	16.95	28.46	1.45	1.34
Utility Relocation - Phase 1	19.60	30.04	2.47	2.37
Building Construction - Phase 1	20.53	28.69	2.02	1.93
Building Construction - Phase 2	18.53	25.85	1.82	1.74
Paving - Phase 2	9.17	14.60	0.89	0.82

\* Emissions also account for combustion exhaust emissions from delivery trucks traveling a 0.5-mile roundtrip distance onsite.

## Project On-site Grading/Excavation Emissions - Phase 1

### Fugitive Dust Grading Parameters

Vehicle Speed (mph) <sup>b</sup>	Vehicle Miles Traveled <sup>c</sup>
3	0.52

### Fugitive Dust Stockpiling Parameters

Silt Content <sup>d</sup>	Precipitation Days <sup>e</sup>	Mean Wind Speed Percent <sup>f</sup>	TSP Fraction	Area <sup>g</sup> (acres)
6.9	10	100	0.5	0

### Fugitive Dust Material Handling

Aerodynamic Particle Size Multiplier <sup>h</sup>	Mean Wind Speed <sup>i</sup> mph	Moisture Content <sup>d</sup>	Dirt Handled <sup>a</sup> cy	Dirt Handled <sup>j</sup> lb/day
0.35	10	7.9	3,000	3,750,000

### Incremental Increase in Fugitive Dust Emissions from Construction Operation:

#### Equations:

Grading<sup>k</sup>: PM10 Emissions (lb/day) = 0.60 x 0.051 x mean vehicle speed<sup>2.0</sup> x VMT x (1 - control efficiency)

Storage Piles<sup>l</sup>: PM10 Emissions (lb/day) = 1.7 x (silt content/1.5) x ((365-precipitation days)/235) x wind speed percent/15 x TSP fraction x Area) x (1 - control efficiency)

Material Handling<sup>m</sup>: PM10 Emissions (lb/day) = (0.0032 x aerodynamic particle size multiplier x (wind speed (mph)/5)<sup>1.3</sup>/(moisture content/2)<sup>1.4</sup> x dirt handled (lb/day)/2,000 (lb/ton) (1 - control efficiency)

Description	Control Efficiency %	PM10 <sup>n</sup> lb/day	PM2.5 <sup>o</sup> lb/day
Earthmoving	61	0.06	0.0126
Storage Piles	61	0	0
Material Handling	61	0.29	0.0609
<b>Total</b>		<b>0.35</b>	<b>0.07</b>

### Incremental Increase in Onsite Combustion Emissions from Construction Equipmen

#### On-site Combusion Emissions<sup>p</sup>:

CO lb/day	NOx lb/day	PM10 lb/day	PM2.5 lb/day
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Construction Equipment Emissions	<b>16.95</b>	<b>28.46</b>	<b>1.45</b>	<b>1.34</b>
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<b>Total Incremental Localized Emissions from Construction Activities:</b>				
<b>Sources</b>	<b>CO</b> lb/day	<b>NOx</b> lb/day	<b>PM10</b> lb/day	<b>PM2.5</b> lb/day
Total On-site Emissions	<b>16.95</b>	<b>28.46</b>	<b>1.80</b>	<b>1.41</b>
<b>Significance Threshold<sup>d</sup></b>	<b>562</b>	<b>103</b>	<b>4</b>	<b>3</b>
<b>Exceed Significance?</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>
<b>Notes:</b>				
a) Based on data provided for project.				
b) Caterpillar Performance Handbook, Edition 33, October 2003 Operating Speeds, p 2-3.				
c) A maximum total of 0.75 acre to be disturbed daily $[(32670)/12/5280]=0.52$ miles				
d) USEPA, AP-42, July 1998, Table 11.9-3 Typical Values for Correction Factors Applicable to the Predictive Emission Factor Equations				
e) Table A9-9-E2, SCAQMD CEQA Air Quality Handbook, 1993				
f) Mean wind speed percent - percent of time mean wind speed exceeds 12 mph. At least one meteorological site recorded wind speeds greater than 12 mph over a 24-hour period in 1981.				
g) No storage piles at project site during construction.				
h) USEPA, AP-42, Jan 1995, Section 13.2.4 Aggregate Handling and Storage Piles, p 13.2.4-3 Aerodynamic particle size multiplier for < 10 $\mu$ m				
i) Mean wind speed - maximum of daily average wind speeds reported in 1981 meteorological data.				
j) A maximum of 1,500 cubic yards of dirt will be handled on a maximum day during grading $[(1,500 \text{ cyd} \times 2,500 \text{ lb/cyd})= 3,750,000 \text{ lb/day}]$				
k) USEPA, AP-42, July 1998, Table 11.9-1, Equation for Site Grading $\leq 10 \mu$ m				
l) USEPA, AP-42, Jan 1995, Section 13.2.4 Aggregate Handling and Storage Piles, Equation 1				
m) USEPA, Fugitive Dust Background Document and Technical Information Document for Best Available Control Measures, Sept 1992, EPA-450/2-92-004, Equation 2-12				
n) Includes watering at least three times a day per Rule 403 (61% control efficiency).				
o) CARB's CEIDARS database PM2.5 fractions - construction dust category for fugitive dust.				
p) On-site combustion emissions from construction equipment taken from CalEEMod outputs for project.				
q) LSTs for a 2-acre site in SRA No. 2 (Northwest Coastal LA County) at a receptor distance of 25 meters.				

## Project On-site Utility Relocation Emissions - Phase 1

### Fugitive Dust Grading Parameters

<b>Vehicle Speed (mph)<sup>b</sup></b>	<b>Vehicle Miles Traveled<sup>c</sup></b>
3	0.00

### Fugitive Dust Stockpiling Parameters

<b>Silt Content<sup>d</sup></b>	<b>Precipitation Days<sup>e</sup></b>	<b>Mean Wind Speed Percent<sup>f</sup></b>	<b>TSP Fraction</b>	<b>Area<sup>g</sup> (acres)</b>
6.9	10	100	0.5	0

### Fugitive Dust Material Handling

<b>Aerodynamic Particle Size Multiplier<sup>h</sup></b>	<b>Mean Wind Speed<sup>i</sup></b>	<b>Moisture Content<sup>d</sup></b>	<b>Dirt Handled<sup>a</sup></b>	<b>Dirt Handled<sup>j</sup></b>
0.35	mph 10	7.9	cy 3,000	lb/day 3,750,000

### Incremental Increase in Fugitive Dust Emissions from Construction Operation:

#### Equations:

Grading<sup>k</sup>: PM10 Emissions (lb/day) = 0.60 x 0.051 x mean vehicle speed<sup>2.0</sup> x VMT x (1 - control efficiency)

Storage Piles<sup>l</sup>: PM10 Emissions (lb/day) = 1.7 x (silt content/1.5) x ((365-precipitation days)/235) x wind speed percent/15 x TSP fraction x Area) x (1 - control efficiency)

Material Handling<sup>m</sup>: PM10 Emissions (lb/day) = (0.0032 x aerodynamic particle size multiplier x (wind speed (mph)/5)<sup>1.3</sup>/(moisture content/2)<sup>1.4</sup> x dirt handled (lb/day)/2,000 (lb/ton) (1 - control efficiency)

<b>Description</b>	<b>Control Efficiency</b>	<b>PM10<sup>n</sup></b>	<b>PM2.5<sup>o</sup></b>
	%	lb/day	lb/day
Earthmoving	61	0	0
Storage Piles	61	0	0
Material Handling	61	0.29	0.0609
<b>Total</b>		<b>0.29</b>	<b>0.06</b>

### Incremental Increase in Onsite Combustion Emissions from Construction Equipmen

#### On-site Combusion Emissions<sup>p</sup>:

<b>CO</b>	<b>NOx</b>	<b>PM10</b>	<b>PM2.5</b>
lb/day	lb/day	lb/day	lb/day



Construction Equipment Emissions	<b>19.60</b>	<b>30.04</b>	<b>2.47</b>	<b>2.37</b>
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<b>Total Incremental Localized Emissions from Construction Activities:</b>				
<b>Sources</b>	<b>CO</b> lb/day	<b>NOx</b> lb/day	<b>PM10</b> lb/day	<b>PM2.5</b> lb/day
Total On-site Emissions	<b>19.60</b>	<b>30.04</b>	<b>2.76</b>	<b>2.43</b>
<b>Significance Threshold<sup>d</sup></b>	<b>562</b>	<b>103</b>	<b>4</b>	<b>3</b>
<b>Exceed Significance?</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>
<b>Notes:</b>				
a) Based on data provided for project.				
b) Caterpillar Performance Handbook, Edition 33, October 2003 Operating Speeds, p 2-3.				
c) No grading during utility relocation phase.				
d) USEPA, AP-42, July 1998, Table 11.9-3 Typical Values for Correction Factors Applicable to the Predictive Emission Factor Equations				
e) Table A9-9-E2, SCAQMD CEQA Air Quality Handbook, 1993				
f) Mean wind speed percent - percent of time mean wind speed exceeds 12 mph. At least one meteorological site recorded wind speeds greater than 12 mph over a 24-hour period in 1981.				
g) No storage piles at project site during construction.				
h) USEPA, AP-42, Jan 1995, Section 13.2.4 Aggregate Handling and Storage Piles, p 13.2.4-3 Aerodynamic particle size multiplier for < 10 µm				
i) Mean wind speed - maximum of daily average wind speeds reported in 1981 meteorological data.				
j) A maximum of 1,500 cubic yards of dirt will be handled on a maximum day during trenching activities for utility relocation [(1,500 cyd x 2,500 lb/cyd)= 3,750,000 lb/day]				
k) USEPA, AP-42, July 1998, Table 11.9-1, Equation for Site Grading ≤ 10 µm				
l) USEPA, AP-42, Jan 1995, Section 13.2.4 Aggregate Handling and Storage Piles, Equation 1				
m) USEPA, Fugitive Dust Background Document and Technical Information Document for Best Available Control Measures, Sept 1992, EPA-450/2-92-004, Equation 2-12				
n) Includes watering at least three times a day per Rule 403 (61% control efficiency).				
o) CARB's CEIDARS database PM2.5 fractions - construction dust category for fugitive dust.				
p) On-site combustion emissions from construction equipment taken from CalEEMod outputs for project.				
q) LSTs for a 1-acre site in SRA No. 2 (Northwest Coastal LA County) at a receptor distance of 25 meters.				