

VVR, LLC (2)
San Bernardino-Mojave Desert County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	44.49	1000sqft	1.02	44,490.00	0
Parking Lot	197.62	1000sqft	4.54	197,620.00	0
Fast Food Restaurant w/o Drive Thru	4.10	1000sqft	0.09	4,100.00	0
Fast Food Restaurant with Drive Thru	2.35	1000sqft	0.05	2,350.00	0
Convenience Market With Gas Pumps	3.96	1000sqft	0.09	3,960.00	0
Hardware/Paint Store	17.24	1000sqft	0.40	17,240.00	0
Strip Mall	41.38	1000sqft	0.95	41,380.00	0
Supermarket	12.36	1000sqft	0.28	12,360.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	32
Climate Zone	10			Operational Year	2017
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	630.89	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - 8.42 acres with multiple commercial land uses, onsite and offsite improvement, to be constructed in 8 phases.

Construction Phase - No demolition will occur as part of implementation of the proposed development. Final Construction Year anticipated to be 2024, due to proposed 8 phases development implementation.

Trips and VMT - No demolition will occur as part of project implementation.

Demolition - No Demolition will occur as part of implementation of the proposed project.

Grading - Earthwork anticipated to be balanced.

Construction Off-road Equipment Mitigation - Additional 10% Reduction added for 3 times site watering, based upon % reduction populated for 2 times site watering.

Mobile Land Use Mitigation - Road improvements will be constructed as a part of project implementation, including sidewalk adjacent to the project site.

Area Mitigation -

Water Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterExposedAreaPM10PercentReduction	61	65
tblConstDustMitigation	WaterExposedAreaPM25PercentReduction	61	65
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	PhaseEndDate	01/13/2017	02/10/2017
tblConstructionPhase	PhaseStartDate	12/31/2016	01/28/2017
tblProjectCharacteristics	OperationalYear	2014	2017
tblTripsAndVMT	WorkerTripNumber	15.00	0.00

2.0 Emissions Summary

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	7.7630	3.2000e-004	0.0337	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0708	0.0708	2.0000e-004		0.0749
Energy	0.0645	0.5859	0.4922	3.5200e-003		0.0445	0.0445		0.0445	0.0445		703.0899	703.0899	0.0135	0.0129	707.3688
Mobile	64.1425	106.7546	620.7010	0.6180	35.7021	1.3927	37.0948	9.5322	1.2795	10.8117		52,825.9212	52,825.9212	2.3210		52,874.6615
Total	71.9700	107.3408	621.2269	0.6215	35.7021	1.4373	37.1394	9.5322	1.3242	10.8563		53,529.0818	53,529.0818	2.3347	0.0129	53,582.1052

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	7.7630	3.2000e-004	0.0337	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0708	0.0708	2.0000e-004		0.0749
Energy	0.0645	0.5859	0.4922	3.5200e-003		0.0445	0.0445		0.0445	0.0445		703.0899	703.0899	0.0135	0.0129	707.3688
Mobile	64.0399	106.1184	618.0851	0.6124	35.3451	1.3802	36.7253	9.4368	1.2680	10.7049		52,340.4873	52,340.4873	2.3039		52,388.8692
Total	71.8674	106.7047	618.6109	0.6159	35.3451	1.4248	36.7699	9.4368	1.3127	10.7495		53,043.6480	53,043.6480	2.3176	0.0129	53,096.3129

	ROG	NOx	CO	SO2	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	0.14	0.59	0.42	0.91	1.00	0.87	0.99	1.00	0.87	0.98	0.00	0.91	0.91	0.73	0.00	0.91

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2017	12/30/2016	5	0	
2	Site Preparation	Site Preparation	1/28/2017	2/10/2017	5	10	
3	Grading	Grading	2/11/2017	3/10/2017	5	20	
4	Building Construction	Building Construction	3/11/2017	1/26/2018	5	230	
5	Paving	Paving	1/27/2018	2/23/2018	5	20	
6	Architectural Coating	Architectural Coating	2/24/2018	3/23/2018	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 197,713; Non-Residential Outdoor: 65,904 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	128.00	53.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	26.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.3 Site Preparation - 2017

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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.8382	51.7535	39.3970	0.0391		2.7542	2.7542		2.5339	2.5339		4,003.0859	4,003.0859	1.2265		4,028.8432
Total	4.8382	51.7535	39.3970	0.0391	18.0663	2.7542	20.8205	9.9307	2.5339	12.4646		4,003.0859	4,003.0859	1.2265		4,028.8432

3.3 Site Preparation - 2017

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	0.0704	0.1036	1.1869	1.8700e-003	0.1479	9.9000e-004	0.1489	0.0392	9.1000e-004	0.0401		148.0512	148.0512	8.6500e-003		148.2329
Total	0.0704	0.1036	1.1869	1.8700e-003	0.1479	9.9000e-004	0.1489	0.0392	9.1000e-004	0.0401		148.0512	148.0512	8.6500e-003		148.2329

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.3232	0.0000	6.3232	3.4757	0.0000	3.4757			0.0000			0.0000
Off-Road	4.8382	51.7535	39.3970	0.0391		2.7542	2.7542		2.5339	2.5339	0.0000	4,003.0859	4,003.0859	1.2265		4,028.8432
Total	4.8382	51.7535	39.3970	0.0391	6.3232	2.7542	9.0774	3.4757	2.5339	6.0096	0.0000	4,003.0859	4,003.0859	1.2265		4,028.8432

3.3 Site Preparation - 2017

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	0.0704	0.1036	1.1869	1.8700e-003	0.1479	9.9000e-004	0.1489	0.0392	9.1000e-004	0.0401		148.0512	148.0512	8.6500e-003			148.2329
Total	0.0704	0.1036	1.1869	1.8700e-003	0.1479	9.9000e-004	0.1489	0.0392	9.1000e-004	0.0401		148.0512	148.0512	8.6500e-003			148.2329

3.4 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000				0.0000
Off-Road	3.4555	35.9825	25.3812	0.0297		2.0388	2.0388		1.8757	1.8757		3,043.6667	3,043.6667	0.9326			3,063.2507
Total	3.4555	35.9825	25.3812	0.0297	6.5523	2.0388	8.5912	3.3675	1.8757	5.2432		3,043.6667	3,043.6667	0.9326			3,063.2507

3.4 Grading - 2017

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	0.0586	0.0863	0.9891	1.5600e-003	0.1232	8.3000e-004	0.1241	0.0327	7.6000e-004	0.0334		123.3760	123.3760	7.2100e-003			123.5274
Total	0.0586	0.0863	0.9891	1.5600e-003	0.1232	8.3000e-004	0.1241	0.0327	7.6000e-004	0.0334		123.3760	123.3760	7.2100e-003			123.5274

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					2.2933	0.0000	2.2933	1.1786	0.0000	1.1786			0.0000				0.0000
Off-Road	3.4555	35.9825	25.3812	0.0297		2.0388	2.0388		1.8757	1.8757	0.0000	3,043.6667	3,043.6667	0.9326			3,063.2507
Total	3.4555	35.9825	25.3812	0.0297	2.2933	2.0388	4.3321	1.1786	1.8757	3.0543	0.0000	3,043.6667	3,043.6667	0.9326			3,063.2507

3.4 Grading - 2017

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	0.0586	0.0863	0.9891	1.5600e-003	0.1232	8.3000e-004	0.1241	0.0327	7.6000e-004	0.0334		123.3760	123.3760	7.2100e-003			123.5274
Total	0.0586	0.0863	0.9891	1.5600e-003	0.1232	8.3000e-004	0.1241	0.0327	7.6000e-004	0.0334		123.3760	123.3760	7.2100e-003			123.5274

3.5 Building Construction - 2017

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	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730		2,639.8053	2,639.8053	0.6497			2,653.4490
Total	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730		2,639.8053	2,639.8053	0.6497			2,653.4490

3.5 Building Construction - 2017

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	0.6138	3.7132	7.6620	0.0116	0.3486	0.0974	0.4460	0.0989	0.0896	0.1885		1,137.0470	1,137.0470	6.3100e-003			1,137.1796
Worker	0.5004	0.7364	8.4400	0.0133	1.0515	7.0500e-003	1.0585	0.2789	6.4700e-003	0.2854		1,052.8086	1,052.8086	0.0615			1,054.1008
Total	1.1141	4.4496	16.1019	0.0249	1.4000	0.1045	1.5045	0.3778	0.0961	0.4739		2,189.8556	2,189.8556	0.0678			2,191.2804

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	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730	0.0000	2,639.8053	2,639.8053	0.6497			2,653.4490
Total	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730	0.0000	2,639.8053	2,639.8053	0.6497			2,653.4490

3.5 Building Construction - 2017

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	0.6138	3.7132	7.6620	0.0116	0.3486	0.0974	0.4460	0.0989	0.0896	0.1885		1,137.0470	1,137.0470	6.3100e-003			1,137.1796
Worker	0.5004	0.7364	8.4400	0.0133	1.0515	7.0500e-003	1.0585	0.2789	6.4700e-003	0.2854		1,052.8086	1,052.8086	0.0615			1,054.1008
Total	1.1141	4.4496	16.1019	0.0249	1.4000	0.1045	1.5045	0.3778	0.0961	0.4739		2,189.8556	2,189.8556	0.0678			2,191.2804

3.5 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	2.6687	23.2608	17.5327	0.0268		1.4943	1.4943		1.4048	1.4048		2,609.9390	2,609.9390	0.6387			2,623.3517
Total	2.6687	23.2608	17.5327	0.0268		1.4943	1.4943		1.4048	1.4048		2,609.9390	2,609.9390	0.6387			2,623.3517

3.5 Building Construction - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.5515	3.3270	7.0236	0.0115	0.3485	0.0908	0.4393	0.0989	0.0835	0.1824		1,117.3646	1,117.3646	6.1400e-003			1,117.4935
Worker	0.4341	0.6649	7.5430	0.0133	1.0515	6.8100e-003	1.0583	0.2789	6.2900e-003	0.2852		1,013.1815	1,013.1815	0.0565			1,014.3685
Total	0.9856	3.9919	14.5666	0.0248	1.4000	0.0976	1.4976	0.3778	0.0898	0.4676		2,130.5461	2,130.5461	0.0627			2,131.8619

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	2.6687	23.2608	17.5327	0.0268		1.4943	1.4943		1.4048	1.4048	0.0000	2,609.9389	2,609.9389	0.6387			2,623.3517
Total	2.6687	23.2608	17.5327	0.0268		1.4943	1.4943		1.4048	1.4048	0.0000	2,609.9389	2,609.9389	0.6387			2,623.3517

3.5 Building Construction - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.5515	3.3270	7.0236	0.0115	0.3485	0.0908	0.4393	0.0989	0.0835	0.1824		1,117.3646	1,117.3646	6.1400e-003			1,117.4935
Worker	0.4341	0.6649	7.5430	0.0133	1.0515	6.8100e-003	1.0583	0.2789	6.2900e-003	0.2852		1,013.1815	1,013.1815	0.0565			1,014.3685
Total	0.9856	3.9919	14.5666	0.0248	1.4000	0.0976	1.4976	0.3778	0.0898	0.4676		2,130.5461	2,130.5461	0.0627			2,131.8619

3.6 Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	1.6114	17.1628	14.4944	0.0223		0.9386	0.9386		0.8635	0.8635		2,245.2695	2,245.2695	0.6990			2,259.9481
Paving	0.5947					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	2.2062	17.1628	14.4944	0.0223		0.9386	0.9386		0.8635	0.8635		2,245.2695	2,245.2695	0.6990			2,259.9481

3.6 Paving - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0509	0.0779	0.8840	1.5600e-003	0.1232	8.0000e-004	0.1240	0.0327	7.4000e-004	0.0334		118.7322	118.7322	6.6200e-003			118.8713
Total	0.0509	0.0779	0.8840	1.5600e-003	0.1232	8.0000e-004	0.1240	0.0327	7.4000e-004	0.0334		118.7322	118.7322	6.6200e-003			118.8713

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	1.6114	17.1628	14.4944	0.0223		0.9386	0.9386		0.8635	0.8635	0.0000	2,245.2695	2,245.2695	0.6990			2,259.9481
Paving	0.5947					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	2.2062	17.1628	14.4944	0.0223		0.9386	0.9386		0.8635	0.8635	0.0000	2,245.2695	2,245.2695	0.6990			2,259.9481

3.6 Paving - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0509	0.0779	0.8840	1.5600e-003	0.1232	8.0000e-004	0.1240	0.0327	7.4000e-004	0.0334		118.7322	118.7322	6.6200e-003		118.8713
Total	0.0509	0.0779	0.8840	1.5600e-003	0.1232	8.0000e-004	0.1240	0.0327	7.4000e-004	0.0334		118.7322	118.7322	6.6200e-003		118.8713

3.7 Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	152.7331					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.0102
Total	153.0317	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.0102

3.7 Architectural Coating - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0882	0.1351	1.5322	2.7000e-003	0.2136	1.3800e-003	0.2150	0.0567	1.2800e-003	0.0579		205.8025	205.8025	0.0115			206.0436
Total	0.0882	0.1351	1.5322	2.7000e-003	0.2136	1.3800e-003	0.2150	0.0567	1.2800e-003	0.0579		205.8025	205.8025	0.0115			206.0436

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Archit. Coating	152.7331					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267			282.0102
Total	153.0317	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267			282.0102

3.7 Architectural Coating - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0882	0.1351	1.5322	2.7000e-003	0.2136	1.3800e-003	0.2150	0.0567	1.2800e-003	0.0579		205.8025	205.8025	0.0115			206.0436
Total	0.0882	0.1351	1.5322	2.7000e-003	0.2136	1.3800e-003	0.2150	0.0567	1.2800e-003	0.0579		205.8025	205.8025	0.0115			206.0436

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive 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					
Unmitigated	64.1425	106.7546	620.7010	0.6180	35.7021	1.3927	37.0948	9.5322	1.2795	10.8117		52,825.92 12	52,825.92 12	2.3210		52,874.66 15
Mitigated	64.0399	106.1184	618.0851	0.6124	35.3451	1.3802	36.7253	9.4368	1.2680	10.7049		52,340.48 73	52,340.48 73	2.3039		52,388.86 92

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Convenience Market With Gas Pumps	3,348.58	5,735.39	4681.04	2,081,195	2,060,383
Fast Food Restaurant w/o Drive Thru	2,935.60	2,853.60	2050.00	4,510,952	4,465,843
Fast Food Restaurant with Drive Thru	1,165.88	1,696.77	1275.39	1,174,790	1,163,042
Hardware/Paint Store	884.24	1,422.64	1183.53	1,460,444	1,445,839
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Strip Mall	1,833.96	1,739.62	845.39	2,586,115	2,560,254
Supermarket	1,263.69	2,195.01	2057.20	1,717,644	1,700,468
Total	11,431.95	15,643.03	12,092.55	13,531,140	13,395,829

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Convenience Market With Gas	9.50	7.30	7.30	0.80	80.20	19.00	14	21	65
Fast Food Restaurant w/o Drive	9.50	7.30	7.30	1.50	79.50	19.00	51	37	12
Fast Food Restaurant with Drive	9.50	7.30	7.30	2.20	78.80	19.00	29	21	50
Hardware/Paint Store	9.50	7.30	7.30	13.60	67.40	19.00	45	29	26
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15
Supermarket	9.50	7.30	7.30	6.50	74.50	19.00	34	30	36

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.435336	0.069414	0.182577	0.159271	0.045516	0.007670	0.006726	0.077089	0.000846	0.001121	0.010234	0.000591	0.003610

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
NaturalGas Mitigated	0.0645	0.5859	0.4922	3.5200e-003		0.0445	0.0445		0.0445	0.0445		703.0899	703.0899	0.0135	0.0129	707.3688
NaturalGas Unmitigated	0.0645	0.5859	0.4922	3.5200e-003		0.0445	0.0445		0.0445	0.0445		703.0899	703.0899	0.0135	0.0129	707.3688

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					
Fast Food Restaurant with Drive Thru	1786.71	0.0193	0.1752	0.1471	1.0500e-003		0.0133	0.0133		0.0133	0.0133		210.2010	210.2010	4.0300e-003	3.8500e-003	211.4802
Hardware/Paint Store	109.58	1.1800e-003	0.0107	9.0200e-003	6.0000e-005		8.2000e-004	8.2000e-004		8.2000e-004	8.2000e-004		12.8918	12.8918	2.5000e-004	2.4000e-004	12.9703
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	263.018	2.8400e-003	0.0258	0.0217	1.5000e-004		1.9600e-003	1.9600e-003		1.9600e-003	1.9600e-003		30.9433	30.9433	5.9000e-004	5.7000e-004	31.1316
Supermarket	674.551	7.2700e-003	0.0661	0.0556	4.0000e-004		5.0300e-003	5.0300e-003		5.0300e-003	5.0300e-003		79.3590	79.3590	1.5200e-003	1.4500e-003	79.8419
Convenience Market With Gas Pumps	25.1704	2.7000e-004	2.4700e-003	2.0700e-003	1.0000e-005		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004		2.9612	2.9612	6.0000e-005	5.0000e-005	2.9793
Fast Food Restaurant w/o Drive Thru	3117.24	0.0336	0.3056	0.2567	1.8300e-003		0.0232	0.0232		0.0232	0.0232		366.7336	366.7336	7.0300e-003	6.7200e-003	368.9655
Total		0.0645	0.5859	0.4922	3.5000e-003		0.0445	0.0445		0.0445	0.0445		703.0899	703.0899	0.0135	0.0129	707.3688

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Fast Food Restaurant with Drive Thru	1.78671	0.0193	0.1752	0.1471	1.0500e-003		0.0133	0.0133		0.0133	0.0133		210.2010	210.2010	4.0300e-003	3.8500e-003	211.4802
Hardware/Paint Store	0.10958	1.1800e-003	0.0107	9.0200e-003	6.0000e-005		8.2000e-004	8.2000e-004		8.2000e-004	8.2000e-004		12.8918	12.8918	2.5000e-004	2.4000e-004	12.9703
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.263018	2.8400e-003	0.0258	0.0217	1.5000e-004		1.9600e-003	1.9600e-003		1.9600e-003	1.9600e-003		30.9433	30.9433	5.9000e-004	5.7000e-004	31.1316
Supermarket	0.674551	7.2700e-003	0.0661	0.0556	4.0000e-004		5.0300e-003	5.0300e-003		5.0300e-003	5.0300e-003		79.3590	79.3590	1.5200e-003	1.4500e-003	79.8419
Convenience Market With Gas Pumps	0.0251704	2.7000e-004	2.4700e-003	2.0700e-003	1.0000e-005		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004		2.9612	2.9612	6.0000e-005	5.0000e-005	2.9793
Fast Food Restaurant w/o Drive Thru	3.11724	0.0336	0.3056	0.2567	1.8300e-003		0.0232	0.0232		0.0232	0.0232		366.7336	366.7336	7.0300e-003	6.7200e-003	368.9655
Total		0.0645	0.5859	0.4922	3.5000e-003		0.0445	0.0445		0.0445	0.0445		703.0899	703.0899	0.0135	0.0129	707.3688

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive 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					
Unmitigated	7.7630	3.2000e-004	0.0337	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0708	0.0708	2.0000e-004		0.0749
Mitigated	7.7630	3.2000e-004	0.0337	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0708	0.0708	2.0000e-004		0.0749

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.8369					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.9229					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.2500e-003	3.2000e-004	0.0337	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0708	0.0708	2.0000e-004		0.0749
Total	7.7630	3.2000e-004	0.0337	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0708	0.0708	2.0000e-004		0.0749

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.8369					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.9229					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.2500e-003	3.2000e-004	0.0337	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0708	0.0708	2.0000e-004		0.0749
Total	7.7630	3.2000e-004	0.0337	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0708	0.0708	2.0000e-004		0.0749

7.0 Water Detail

7.1 Mitigation Measures Water

Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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