

Whole Foods Malibu
South Coast Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	220.00	Space	1.98	88,000.00	0
Regional Shopping Center	38.50	1000sqft	0.88	38,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	8			Operational Year	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 2018 occupancy

Land Use - 38,500 sqft shopping center and 220 space parking lot.

Construction Phase - Grading: 10/1/16-11/16/16

Constr: 11/17/16-12/1/17

Paving: 11/17/16-12/5/16

Coating: 10/24/17-12/1/17

Grading - 5,251 cy of fill imported, 5.88 acres

Construction Off-road Equipment Mitigation - Assume 3x watering per day.

Area Mitigation -

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Energy Use -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	29.00
tblConstructionPhase	NumDays	220.00	272.00
tblConstructionPhase	NumDays	6.00	33.00
tblConstructionPhase	NumDays	10.00	13.00
tblConstructionPhase	PhaseEndDate	1/13/2017	12/1/2017
tblConstructionPhase	PhaseEndDate	12/20/2017	12/5/2016
tblConstructionPhase	PhaseStartDate	12/6/2016	10/24/2017
tblConstructionPhase	PhaseStartDate	12/2/2017	11/17/2016
tblGrading	AcresOfGrading	16.50	5.88
tblGrading	MaterialImported	0.00	5,251.00
tblProjectCharacteristics	OperationalYear	2014	2018

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	tons/yr										MT/yr					
Area	0.5051	3.0000e-005	3.3400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.4200e-003	6.4200e-003	2.0000e-005	0.0000	6.7900e-003
Energy	4.3000e-004	3.8700e-003	3.2500e-003	2.0000e-005		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004	0.0000	167.3956	167.3956	7.5800e-003	1.6300e-003	168.0598
Mobile	0.8158	2.0296	8.1400	0.0194	1.3069	0.0278	1.3347	0.3497	0.0256	0.3753	0.0000	1,453.5612	1,453.5612	0.0564	0.0000	1,454.7450
Waste						0.0000	0.0000		0.0000	0.0000	8.2069	0.0000	8.2069	0.4850	0.0000	18.3923
Water						0.0000	0.0000		0.0000	0.0000	0.9047	16.1833	17.0881	0.0937	2.3500e-003	19.7830
Total	1.3213	2.0335	8.1465	0.0194	1.3069	0.0281	1.3350	0.3497	0.0259	0.3756	9.1117	1,637.1465	1,646.2581	0.6427	3.9800e-003	1,660.9869

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.5051	3.0000e-005	3.3400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.4200e-003	6.4200e-003	2.0000e-005	0.0000	6.7900e-003
Energy	4.3000e-004	3.8700e-003	3.2500e-003	2.0000e-005		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004	0.0000	167.3956	167.3956	7.5800e-003	1.6300e-003	168.0598
Mobile	0.8158	2.0296	8.1400	0.0194	1.3069	0.0278	1.3347	0.3497	0.0256	0.3753	0.0000	1,453.5612	1,453.5612	0.0564	0.0000	1,454.7450
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.7238	13.7191	14.4429	0.0750	1.8800e-003	16.6007
Total	1.3213	2.0335	8.1465	0.0194	1.3069	0.0281	1.3350	0.3497	0.0259	0.3756	0.7238	1,634.6822	1,635.4060	0.1389	3.5100e-003	1,639.4123

	ROG	NOx	CO	SO2	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	92.06	0.15	0.66	78.38	11.81	1.30

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	10/1/2016	11/16/2016	5	33	
2	Building Construction	Building Construction	11/17/2016	12/1/2017	5	272	
3	Paving	Paving	11/17/2016	12/5/2016	5	13	
4	Architectural Coating	Architectural Coating	10/24/2017	12/1/2017	5	29	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 5.88

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 61,710; Non-Residential Outdoor: 20,570 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	8.00	226	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	125	0.42
Paving	Paving Equipment	1	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	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
Grading	4	10.00	0.00	656.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	49.00	21.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Clean Paved Roads

3.2 Grading - 2016

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					0.1028	0.0000	0.1028	0.0550	0.0000	0.0550	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0471	0.4941	0.3240	3.4000e-004		0.0275	0.0275		0.0253	0.0253	0.0000	32.0218	32.0218	9.6600e-003	0.0000	32.2247
Total	0.0471	0.4941	0.3240	3.4000e-004	0.1028	0.0275	0.1303	0.0550	0.0253	0.0803	0.0000	32.0218	32.0218	9.6600e-003	0.0000	32.2247

3.2 Grading - 2016

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	5.8800e-003	0.0957	0.0719	2.4000e-004	5.6200e-003	1.4100e-003	7.0300e-003	1.5400e-003	1.2900e-003	2.8300e-003	0.0000	22.1175	22.1175	1.6000e-004	0.0000	22.1209
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.6000e-004	9.7000e-004	0.0101	2.0000e-005	1.8100e-003	2.0000e-005	1.8300e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.6960	1.6960	9.0000e-005	0.0000	1.6980
Total	6.5400e-003	0.0966	0.0820	2.6000e-004	7.4300e-003	1.4300e-003	8.8600e-003	2.0200e-003	1.3000e-003	3.3200e-003	0.0000	23.8135	23.8135	2.5000e-004	0.0000	23.8188

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0401	0.0000	0.0401	0.0215	0.0000	0.0215	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0471	0.4941	0.3240	3.4000e-004		0.0275	0.0275		0.0253	0.0253	0.0000	32.0218	32.0218	9.6600e-003	0.0000	32.2246
Total	0.0471	0.4941	0.3240	3.4000e-004	0.0401	0.0275	0.0676	0.0215	0.0253	0.0468	0.0000	32.0218	32.0218	9.6600e-003	0.0000	32.2246

3.2 Grading - 2016

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	5.8800e-003	0.0957	0.0719	2.4000e-004	5.6200e-003	1.4100e-003	7.0300e-003	1.5400e-003	1.2900e-003	2.8300e-003	0.0000	22.1175	22.1175	1.6000e-004	0.0000	22.1209
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.6000e-004	9.7000e-004	0.0101	2.0000e-005	1.8100e-003	2.0000e-005	1.8300e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.6960	1.6960	9.0000e-005	0.0000	1.6980
Total	6.5400e-003	0.0966	0.0820	2.6000e-004	7.4300e-003	1.4300e-003	8.8600e-003	2.0200e-003	1.3000e-003	3.3200e-003	0.0000	23.8135	23.8135	2.5000e-004	0.0000	23.8188

3.3 Building Construction - 2016

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	0.0592	0.3941	0.2675	4.0000e-004		0.0260	0.0260		0.0249	0.0249	0.0000	34.1424	34.1424	7.8700e-003	0.0000	34.3076
Total	0.0592	0.3941	0.2675	4.0000e-004		0.0260	0.0260		0.0249	0.0249	0.0000	34.1424	34.1424	7.8700e-003	0.0000	34.3076

3.3 Building Construction - 2016

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	0.0000
Vendor	2.9900e-003	0.0305	0.0392	7.0000e-005	2.0700e-003	4.8000e-004	2.5400e-003	5.9000e-004	4.4000e-004	1.0300e-003	0.0000	6.6276	6.6276	5.0000e-005	0.0000	6.6286	
Worker	3.1400e-003	4.6200e-003	0.0480	1.1000e-004	8.6000e-003	7.0000e-005	8.6700e-003	2.2800e-003	7.0000e-005	2.3500e-003	0.0000	8.0587	8.0587	4.3000e-004	0.0000	8.0678	
Total	6.1300e-003	0.0351	0.0872	1.8000e-004	0.0107	5.5000e-004	0.0112	2.8700e-003	5.1000e-004	3.3800e-003	0.0000	14.6863	14.6863	4.8000e-004	0.0000	14.6964	

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	0.0592	0.3941	0.2675	4.0000e-004		0.0260	0.0260		0.0249	0.0249	0.0000	34.1424	34.1424	7.8700e-003	0.0000	34.3076
Total	0.0592	0.3941	0.2675	4.0000e-004		0.0260	0.0260		0.0249	0.0249	0.0000	34.1424	34.1424	7.8700e-003	0.0000	34.3076

3.3 Building Construction - 2016

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	2.9900e-003	0.0305	0.0392	7.0000e-005	2.0700e-003	4.8000e-004	2.5400e-003	5.9000e-004	4.4000e-004	1.0300e-003	0.0000	6.6276	6.6276	5.0000e-005	0.0000	6.6286
Worker	3.1400e-003	4.6200e-003	0.0480	1.1000e-004	8.6000e-003	7.0000e-005	8.6700e-003	2.2800e-003	7.0000e-005	2.3500e-003	0.0000	8.0587	8.0587	4.3000e-004	0.0000	8.0678
Total	6.1300e-003	0.0351	0.0872	1.8000e-004	0.0107	5.5000e-004	0.0112	2.8700e-003	5.1000e-004	3.3800e-003	0.0000	14.6863	14.6863	4.8000e-004	0.0000	14.6964

3.3 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	tons/yr										MT/yr					
Off-Road	0.3993	2.7430	1.9499	2.9900e-003		0.1755	0.1755		0.1680	0.1680	0.0000	254.1769	254.1769	0.0565	0.0000	255.3632
Total	0.3993	2.7430	1.9499	2.9900e-003		0.1755	0.1755		0.1680	0.1680	0.0000	254.1769	254.1769	0.0565	0.0000	255.3632

3.3 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	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	0.0205	0.2082	0.2783	5.5000e-004	0.0155	3.1800e-003	0.0187	4.4300e-003	2.9300e-003	7.3600e-003	0.0000	48.9020	48.9020	3.5000e-004	0.0000	48.9094
Worker	0.0211	0.0313	0.3250	7.9000e-004	0.0645	5.3000e-004	0.0650	0.0171	4.9000e-004	0.0176	0.0000	58.1201	58.1201	3.0000e-003	0.0000	58.1831
Total	0.0416	0.2395	0.6033	1.3400e-003	0.0800	3.7100e-003	0.0837	0.0216	3.4200e-003	0.0250	0.0000	107.0221	107.0221	3.3500e-003	0.0000	107.0925

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	0.3993	2.7430	1.9499	2.9900e-003		0.1755	0.1755		0.1680	0.1680	0.0000	254.1766	254.1766	0.0565	0.0000	255.3629
Total	0.3993	2.7430	1.9499	2.9900e-003		0.1755	0.1755		0.1680	0.1680	0.0000	254.1766	254.1766	0.0565	0.0000	255.3629

3.3 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	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	0.0205	0.2082	0.2783	5.5000e-004	0.0155	3.1800e-003	0.0187	4.4300e-003	2.9300e-003	7.3600e-003	0.0000	48.9020	48.9020	3.5000e-004	0.0000	48.9094
Worker	0.0211	0.0313	0.3250	7.9000e-004	0.0645	5.3000e-004	0.0650	0.0171	4.9000e-004	0.0176	0.0000	58.1201	58.1201	3.0000e-003	0.0000	58.1831
Total	0.0416	0.2395	0.6033	1.3400e-003	0.0800	3.7100e-003	0.0837	0.0216	3.4200e-003	0.0250	0.0000	107.0221	107.0221	3.3500e-003	0.0000	107.0925

3.4 Paving - 2016

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	0.0116	0.1165	0.0789	1.1000e-004		7.3100e-003	7.3100e-003		6.7400e-003	6.7400e-003	0.0000	10.6427	10.6427	3.1500e-003	0.0000	10.7089
Paving	2.5900e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0142	0.1165	0.0789	1.1000e-004		7.3100e-003	7.3100e-003		6.7400e-003	6.7400e-003	0.0000	10.6427	10.6427	3.1500e-003	0.0000	10.7089

3.4 Paving - 2016**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	3.9000e-004	5.7000e-004	5.9700e-003	1.0000e-005	1.0700e-003	1.0000e-005	1.0800e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	1.0022	1.0022	5.0000e-005	0.0000	1.0033
Total	3.9000e-004	5.7000e-004	5.9700e-003	1.0000e-005	1.0700e-003	1.0000e-005	1.0800e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	1.0022	1.0022	5.0000e-005	0.0000	1.0033

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	0.0116	0.1165	0.0789	1.1000e-004		7.3100e-003	7.3100e-003		6.7400e-003	6.7400e-003	0.0000	10.6427	10.6427	3.1500e-003	0.0000	10.7089
Paving	2.5900e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0142	0.1165	0.0789	1.1000e-004		7.3100e-003	7.3100e-003		6.7400e-003	6.7400e-003	0.0000	10.6427	10.6427	3.1500e-003	0.0000	10.7089

3.4 Paving - 2016

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	3.9000e-004	5.7000e-004	5.9700e-003	1.0000e-005	1.0700e-003	1.0000e-005	1.0800e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	1.0022	1.0022	5.0000e-005	0.0000	1.0033
Total	3.9000e-004	5.7000e-004	5.9700e-003	1.0000e-005	1.0700e-003	1.0000e-005	1.0800e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	1.0022	1.0022	5.0000e-005	0.0000	1.0033

3.5 Architectural Coating - 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	tons/yr										MT/yr					
Archit. Coating	0.4767					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.8200e-003	0.0317	0.0271	4.0000e-005		2.5100e-003	2.5100e-003		2.5100e-003	2.5100e-003	0.0000	3.7022	3.7022	3.9000e-004	0.0000	3.7104
Total	0.4815	0.0317	0.0271	4.0000e-005		2.5100e-003	2.5100e-003		2.5100e-003	2.5100e-003	0.0000	3.7022	3.7022	3.9000e-004	0.0000	3.7104

3.5 Architectural Coating - 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	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	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.2000e-004	7.7000e-004	8.0100e-003	2.0000e-005	1.5900e-003	1.0000e-005	1.6000e-003	4.2000e-004	1.0000e-005	4.3000e-004	0.0000	1.4332	1.4332	7.0000e-005	0.0000	1.4348	
Total	5.2000e-004	7.7000e-004	8.0100e-003	2.0000e-005	1.5900e-003	1.0000e-005	1.6000e-003	4.2000e-004	1.0000e-005	4.3000e-004	0.0000	1.4332	1.4332	7.0000e-005	0.0000	1.4348	

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.4767					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.8200e-003	0.0317	0.0271	4.0000e-005		2.5100e-003	2.5100e-003		2.5100e-003	2.5100e-003	0.0000	3.7022	3.7022	3.9000e-004	0.0000	3.7104
Total	0.4815	0.0317	0.0271	4.0000e-005		2.5100e-003	2.5100e-003		2.5100e-003	2.5100e-003	0.0000	3.7022	3.7022	3.9000e-004	0.0000	3.7104

3.5 Architectural Coating - 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	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	5.2000e-004	7.7000e-004	8.0100e-003	2.0000e-005	1.5900e-003	1.0000e-005	1.6000e-003	4.2000e-004	1.0000e-005	4.3000e-004	0.0000	1.4332	1.4332	7.0000e-005	0.0000	1.4348
Total	5.2000e-004	7.7000e-004	8.0100e-003	2.0000e-005	1.5900e-003	1.0000e-005	1.6000e-003	4.2000e-004	1.0000e-005	4.3000e-004	0.0000	1.4332	1.4332	7.0000e-005	0.0000	1.4348

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	tons/yr										MT/yr					
Mitigated	0.8158	2.0296	8.1400	0.0194	1.3069	0.0278	1.3347	0.3497	0.0256	0.3753	0.0000	1,453.5612	1,453.5612	0.0564	0.0000	1,454.7450
Unmitigated	0.8158	2.0296	8.1400	0.0194	1.3069	0.0278	1.3347	0.3497	0.0256	0.3753	0.0000	1,453.5612	1,453.5612	0.0564	0.0000	1,454.7450

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	1,653.19	1,923.85	971.74	3,448,666	3,448,666
Total	1,653.19	1,923.85	971.74	3,448,666	3,448,666

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
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.512137	0.059943	0.180601	0.139123	0.042256	0.006647	0.016115	0.031670	0.001940	0.002502	0.004362	0.000588	0.002117

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	163.1838	163.1838	7.5000e-003	1.5500e-003	163.8224
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	163.1838	163.1838	7.5000e-003	1.5500e-003	163.8224
NaturalGas Mitigated	4.3000e-004	3.8700e-003	3.2500e-003	2.0000e-005		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004	0.0000	4.2117	4.2117	8.0000e-005	8.0000e-005	4.2374
NaturalGas Unmitigated	4.3000e-004	3.8700e-003	3.2500e-003	2.0000e-005		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004	0.0000	4.2117	4.2117	8.0000e-005	8.0000e-005	4.2374

5.2 Energy by Land Use - NaturalGas
Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	78925	4.3000e-004	3.8700e-003	3.2500e-003	2.0000e-005		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004	0.0000	4.2117	4.2117	8.0000e-005	8.0000e-005	4.2374
Total		4.3000e-004	3.8700e-003	3.2500e-003	2.0000e-005		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004	0.0000	4.2117	4.2117	8.0000e-005	8.0000e-005	4.2374

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	tons/yr										MT/yr					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	78925	4.3000e-004	3.8700e-003	3.2500e-003	2.0000e-005		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004	0.0000	4.2117	4.2117	8.0000e-005	8.0000e-005	4.2374
Total		4.3000e-004	3.8700e-003	3.2500e-003	2.0000e-005		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004	0.0000	4.2117	4.2117	8.0000e-005	8.0000e-005	4.2374

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	77440	22.1608	1.0200e-003	2.1000e-004	22.2475
Regional Shopping Center	492800	141.0230	6.4800e-003	1.3400e-003	141.5749
Total		163.1838	7.5000e-003	1.5500e-003	163.8224

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	77440	22.1608	1.0200e-003	2.1000e-004	22.2475
Regional Shopping Center	492800	141.0230	6.4800e-003	1.3400e-003	141.5749
Total		163.1838	7.5000e-003	1.5500e-003	163.8224

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

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	tons/yr										MT/yr					
Mitigated	0.5051	3.0000e-005	3.3400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.4200e-003	6.4200e-003	2.0000e-005	0.0000	6.7900e-003
Unmitigated	0.5051	3.0000e-005	3.3400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.4200e-003	6.4200e-003	2.0000e-005	0.0000	6.7900e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0477					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4571					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.2000e-004	3.0000e-005	3.3400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.4200e-003	6.4200e-003	2.0000e-005	0.0000	6.7900e-003
Total	0.5051	3.0000e-005	3.3400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.4200e-003	6.4200e-003	2.0000e-005	0.0000	6.7900e-003

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0477					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4571					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.2000e-004	3.0000e-005	3.3400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.4200e-003	6.4200e-003	2.0000e-005	0.0000	6.7900e-003
Total	0.5051	3.0000e-005	3.3400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.4200e-003	6.4200e-003	2.0000e-005	0.0000	6.7900e-003

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

Use Water Efficient Landscaping

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	14.4429	0.0750	1.8800e-003	16.6007
Unmitigated	17.0881	0.0937	2.3500e-003	19.7830

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	2.85179 / 1.74787	17.0881	0.0937	2.3500e-003	19.7830
Total		17.0881	0.0937	2.3500e-003	19.7830

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	2.28143 / 1.64125	14.4429	0.0750	1.8800e-003	16.6007
Total		14.4429	0.0750	1.8800e-003	16.6007

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	8.2069	0.4850	0.0000	18.3923

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	40.43	8.2069	0.4850	0.0000	18.3923
Total		8.2069	0.4850	0.0000	18.3923

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot		0.0000	0.0000	0.0000	0.0000
Regional Shopping Center		0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

9.0 Operational Offroad

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

10.0 Vegetation
