

**Parenthetical CALEEMOD Assumptions
For: Serrano Summit
Date: June 2011**

LAND USES

Amount	Land Use Type	Unit Type	Trip Rate
Phase 1			
8	SF Residential	dwelling units	9.57
21.5	Community Facility	thousand square feet	45.48
Phase 2			
9	SF Residential	dwelling units	9.57
112	Condo/Townhouse	dwelling units	6.59
Phase 3			
43	SF Residential	dwelling units	9.57
217	Condo/Townhouse	dwelling units	6.59
Phase 4			
106	Condo/Townhouse	dwelling units	6.59
Phase 5			
23	Condo/Townhouse	dwelling units	6.59
Phase 6			
94	Government Office Building	Thousand square feet	68.93

PHASE 1

Grading Equipment (CALEEMOD Default):

Quantity	Type	Hours of Daily Operation
1	Grader	8
1	Rubber Tired Dozer	8
1	Tractor/Loaders/Backhoe	7

Paving Equipment (CALEEMOD Default):

Quantity	Type	Hours of Daily Operation
1	Cement and Mortar Mixers	8
1	Paver	7
1	Roller	7
1	Tractor/Loader/Backhoe	7

Building Equipment (CALEEMOD Default):

Quantity	Type	Hours of Daily Operation
1	Crane	8
2	Forklift	7
1	Generator Set	8
1	Tractor/Loader/Backhoe	6
3	Welders	8

Architectural Coating Equipment (CALEEMOD Default):

Quantity	Type	Hours of Daily Operation
1	Air Compressor	6

PHASE 2

Grading Equipment (CALEEMOD Default):

Quantity	Type	Hours of Daily Operation
1	Excavators	8
1	Grader	8
1	Rubber Tired Dozer	8
3	Tractor/Loaders/Backhoe	8

Paving Equipment (CALEEMOD Default):

Quantity	Type	Hours of Daily Operation
2	Pavers	8
2	Paving Equipment	8
2	Rollers	8

Building Equipment (CALEEMOD Default):

Quantity	Type	Hours of Daily Operation
1	Crane	7
3	Forklifts	8
1	Generator Set	8
3	Tractor/Loader/Backhoe	7
1	Welder	8

Architectural Coating Equipment (CALEEMOD Default):

Quantity	Type	Hours of Daily Operation
1	Air Compressor	6

PHASE 3

Grading Equipment (CALEEMOD Default):

Quantity	Type	Hours of Daily Operation
2	Excavators	8
1	Grader	8
1	Rubber Tired Dozer	8
2	Scrapers	8
2	Tractor/Loaders/Backhoe	8

Paving Equipment (CALEEMOD Default):

Quantity	Type	Hours of Daily Operation
2	Pavers	8
2	Paving Equipment	8
2	Rollers	8

Building Equipment (CALEEMOD Default):

Quantity	Type	Hours of Daily Operation
1	Crane	7
3	Forklifts	8
1	Generator Set	8
3	Tractor/Loader/Backhoe	7
1	Welder	8

Architectural Coating Equipment (CALEEMOD Default):

Quantity	Type	Hours of Daily Operation
1	Air Compressor	6

PHASE 4

Grading Equipment (CALEEMOD Default):

Quantity	Type	Hours of Daily Operation
1	Excavators	8
1	Grader	8
1	Rubber Tired Dozer	8
3	Tractor/Loaders/Backhoe	8

Paving Equipment (CALEEMOD Default):

Quantity	Type	Hours of Daily Operation
2	Pavers	8
2	Paving Equipment	8
2	Rollers	8

Building Equipment (CALEEMOD Default):

Quantity	Type	Hours of Daily Operation
1	Crane	7
3	Forklifts	8
1	Generator Set	8
3	Tractor/Loader/Backhoe	7
1	Welder	8

Architectural Coating Equipment (CALEEMOD Default):

Quantity	Type	Hours of Daily Operation
1	Air Compressor	6

PHASE 5

Grading Equipment (CALEEMOD Default):

Quantity	Type	Hours of Daily Operation
1	Grader	6
1	Rubber Tired Dozer	6
1	Tractor/Loaders/Backhoe	7

Paving Equipment (CALEEMOD Default):

Quantity	Type	Hours of Daily Operation
1	Cement and Mortar Mixer	6
1	Paver	6
1	Paving Equipment	8
1	Rollers	7
1	Tractor/Loaders/Backhoe	8

Building Equipment (CALEEMOD Default):

Quantity	Type	Hours of Daily Operation
1	Crane	6
1	Forklifts	6
1	Generator Set	8
1	Tractor/Loader/Backhoe	6
3	Welder	8

Architectural Coating Equipment (CALEEMOD Default):

Quantity	Type	Hours of Daily Operation
1	Air Compressor	6

PHASE 6

Grading Equipment (CALEEMOD Default):

Quantity	Type	Hours of Daily Operation
1	Grader	8
1	Rubber Tired Dozer	8
2	Tractor/Loaders/Backhoe	7

Paving Equipment (CALEEMOD Default):

Quantity	Type	Hours of Daily Operation
1	Cement and Mortar Mixer	8
1	Paver	8
1	Paving Equipment	8
1	Rollers	8
1	Tractor/Loaders/Backhoe	8

Building Equipment (CALEEMOD Default):

Quantity	Type	Hours of Daily Operation
1	Crane	8
2	Forklifts	7
1	Generator Set	8
1	Tractor/Loader/Backhoe	6
3	Welder	8

Architectural Coating Equipment (CALEEMOD Default):

Quantity	Type	Hours of Daily Operation
1	Air Compressor	6

Serrano Summit Construction Phase 1
South Coast AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
User Defined Recreational	21.5	User Defined Unit
Single Family Housing	8	Dwelling Unit

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Utility Company	Southern California Edison
Climate Zone	9	Precipitation Freq (Days)	31		

1.3 User Entered Comments

- Project Characteristics -
- Land Use - User defined uses include community center and police center
- Construction Phase - construction schedule based on information provided by applicant
- Off-road Equipment -
- Trips and VMT -
- Demolition -

Grading - Total acreage=9.85

Vehicle Trips -

Woodstoves - Wood stoves are not proposed, fireplaces would be gas

Energy Use -

Land Use Change -

Sequestration -

Construction Off-road Equipment Mitigation - Construction mitigation per SCAQMD

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

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					
2013	0.50	3.32	2.17	0.00	0.33	0.19	0.52	0.17	0.19	0.37	0.00	333.46	333.46	0.04	0.00	334.32
2014	0.53	1.28	0.95	0.00	0.01	0.08	0.09	0.00	0.08	0.08	0.00	145.72	145.72	0.02	0.00	146.11
Total	1.03	4.60	3.12	0.00	0.34	0.27	0.61	0.17	0.27	0.45	0.00	479.18	479.18	0.06	0.00	480.43

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					
2013	0.50	3.32	2.17	0.00	0.13	0.19	0.32	0.06	0.19	0.26	0.00	333.46	333.46	0.04	0.00	334.32
2014	0.53	1.28	0.95	0.00	0.01	0.08	0.09	0.00	0.08	0.08	0.00	145.72	145.72	0.02	0.00	146.11
Total	1.03	4.60	3.12	0.00	0.14	0.27	0.41	0.06	0.27	0.34	0.00	479.18	479.18	0.06	0.00	480.43

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	0.19	0.00	0.17	0.00		0.00	0.01		0.00	0.01	0.85	5.10	5.95	0.00	0.00	6.04
Energy	0.00	0.02	0.01	0.00		0.00	0.00		0.00	0.00	0.00	33.47	33.47	0.00	0.00	33.67
Mobile	0.06	0.14	0.53	0.00	0.14	0.01	0.15	0.00	0.01	0.01	0.00	106.77	106.77	0.00	0.00	106.86
Waste						0.00	0.00		0.00	0.00	1.91	0.00	1.91	0.11	0.00	4.29
Water						0.00	0.00		0.00	0.00	0.00	3.04	3.04	0.02	0.00	3.52
Total	0.25	0.16	0.71	0.00	0.14	0.01	0.16	0.00	0.01	0.02	2.76	148.38	151.14	0.13	0.00	154.38

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	0.16	0.00	0.12	0.00		0.00	0.00		0.00	0.00	0.00	0.20	0.20	0.00	0.00	0.20
Energy	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00	0.00	28.68	28.68	0.00	0.00	28.85
Mobile	0.05	0.13	0.47	0.00	0.12	0.01	0.13	0.00	0.01	0.01	0.00	92.14	92.14	0.00	0.00	92.22
Waste						0.00	0.00		0.00	0.00	1.91	0.00	1.91	0.11	0.00	4.29
Water						0.00	0.00		0.00	0.00	0.00	2.58	2.58	0.01	0.00	2.96
Total	0.21	0.14	0.60	0.00	0.12	0.01	0.13	0.00	0.01	0.01	1.91	123.60	125.51	0.12	0.00	128.52

3.0 Construction Detail

3.1 Mitigation Measures Construction

- Use DPF for Construction Equipment
- Replace Ground Cover
- Water Exposed Area
- Water Unpaved Roads
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

3.2 Mass Grading - 2013

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					0.19	0.00	0.19	0.11	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.15	1.19	0.71	0.00		0.06	0.06		0.06	0.06	0.00	111.08	111.08	0.01	0.00	111.34
Total	0.15	1.19	0.71	0.00	0.19	0.06	0.25	0.11	0.06	0.17	0.00	111.08	111.08	0.01	0.00	111.34

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	0.00	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
Vendor	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
Worker	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.44	3.44	0.00	0.00	3.44
Total	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.44	3.44	0.00	0.00	3.44

3.2 Mass Grading - 2013

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					0.07	0.00	0.07	0.04	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.15	1.19	0.71	0.00		0.06	0.06		0.06	0.06	0.00	111.08	111.08	0.01	0.00	111.34
Total	0.15	1.19	0.71	0.00	0.07	0.06	0.13	0.04	0.06	0.10	0.00	111.08	111.08	0.01	0.00	111.34

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	0.00	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
Vendor	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
Worker	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.44	3.44	0.00	0.00	3.44
Total	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.44	3.44	0.00	0.00	3.44

3.3 Fine Grading - 2013

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					0.12	0.00	0.12	0.06	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.09	0.72	0.43	0.00		0.04	0.04		0.04	0.04	0.00	67.69	67.69	0.01	0.00	67.85
Total	0.09	0.72	0.43	0.00	0.12	0.04	0.16	0.06	0.04	0.10	0.00	67.69	67.69	0.01	0.00	67.85

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	0.00	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
Vendor	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
Worker	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.09	2.09	0.00	0.00	2.10
Total	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.09	2.09	0.00	0.00	2.10

3.3 Fine Grading - 2013

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					0.04	0.00	0.04	0.02	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.09	0.72	0.43	0.00		0.04	0.04		0.04	0.04	0.00	67.69	67.69	0.01	0.00	67.85
Total	0.09	0.72	0.43	0.00	0.04	0.04	0.08	0.02	0.04	0.06	0.00	67.69	67.69	0.01	0.00	67.85

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	0.00	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
Vendor	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
Worker	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.09	2.09	0.00	0.00	2.10
Total	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.09	2.09	0.00	0.00	2.10

3.4 Paving - 2013

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	0.02	0.13	0.08	0.00		0.01	0.01		0.01	0.01	0.00	10.85	10.85	0.00	0.00	10.89
Paving	0.00					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.02	0.13	0.08	0.00		0.01	0.01		0.01	0.01	0.00	10.85	10.85	0.00	0.00	10.89

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	0.00	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
Vendor	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
Worker	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.81	0.81	0.00	0.00	0.81
Total	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.81	0.81	0.00	0.00	0.81

3.4 Paving - 2013

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	0.02	0.13	0.08	0.00		0.01	0.01		0.01	0.01	0.00	10.85	10.85	0.00	0.00	10.89
Paving	0.00					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.02	0.13	0.08	0.00		0.01	0.01		0.01	0.01	0.00	10.85	10.85	0.00	0.00	10.89

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	0.00	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
Vendor	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
Worker	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.81	0.81	0.00	0.00	0.81
Total	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.81	0.81	0.00	0.00	0.81

3.5 Building - 2013

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	0.23	1.25	0.85	0.00		0.08	0.08		0.08	0.08	0.00	127.55	127.55	0.02	0.00	127.94
Total	0.23	1.25	0.85	0.00		0.08	0.08		0.08	0.08	0.00	127.55	127.55	0.02	0.00	127.94

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	0.00	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
Vendor	0.00	0.03	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.34	4.34	0.00	0.00	4.34
Worker	0.00	0.00	0.04	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	5.61	5.61	0.00	0.00	5.61
Total	0.00	0.03	0.06	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	9.95	9.95	0.00	0.00	9.95

3.5 Building - 2013

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	0.23	1.25	0.85	0.00		0.08	0.08		0.08	0.08	0.00	127.55	127.55	0.02	0.00	127.94
Total	0.23	1.25	0.85	0.00		0.08	0.08		0.08	0.08	0.00	127.55	127.55	0.02	0.00	127.94

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	0.00	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
Vendor	0.00	0.03	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.34	4.34	0.00	0.00	4.34
Worker	0.00	0.00	0.04	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	5.61	5.61	0.00	0.00	5.61
Total	0.00	0.03	0.06	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	9.95	9.95	0.00	0.00	9.95

3.5 Building - 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	0.20	1.10	0.79	0.00		0.07	0.07		0.07	0.07	0.00	121.69	121.69	0.02	0.00	122.02
Total	0.20	1.10	0.79	0.00		0.07	0.07		0.07	0.07	0.00	121.69	121.69	0.02	0.00	122.02

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	0.00	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
Vendor	0.00	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.15	4.15	0.00	0.00	4.15
Worker	0.00	0.00	0.03	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	5.25	5.25	0.00	0.00	5.26
Total	0.00	0.02	0.05	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	9.40	9.40	0.00	0.00	9.41

3.5 Building - 2014

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	0.20	1.10	0.79	0.00		0.07	0.07		0.07	0.07	0.00	121.69	121.69	0.02	0.00	122.02
Total	0.20	1.10	0.79	0.00		0.07	0.07		0.07	0.07	0.00	121.69	121.69	0.02	0.00	122.02

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	0.00	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
Vendor	0.00	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.15	4.15	0.00	0.00	4.15
Worker	0.00	0.00	0.03	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	5.25	5.25	0.00	0.00	5.26
Total	0.00	0.02	0.05	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	9.40	9.40	0.00	0.00	9.41

3.6 Architectural Coating - 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					
Archit. Coating	0.31					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.02	0.15	0.10	0.00		0.01	0.01		0.01	0.01	0.00	13.52	13.52	0.00	0.00	13.56
Total	0.33	0.15	0.10	0.00		0.01	0.01		0.01	0.01	0.00	13.52	13.52	0.00	0.00	13.56

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	0.00	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
Vendor	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
Worker	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.12	1.12	0.00	0.00	1.12
Total	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.12	1.12	0.00	0.00	1.12

3.6 Architectural Coating - 2014

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	0.31					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.02	0.15	0.10	0.00		0.01	0.01		0.01	0.01	0.00	13.52	13.52	0.00	0.00	13.56
Total	0.33	0.15	0.10	0.00		0.01	0.01		0.01	0.01	0.00	13.52	13.52	0.00	0.00	13.56

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	0.00	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
Vendor	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
Worker	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.12	1.12	0.00	0.00	1.12
Total	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.12	1.12	0.00	0.00	1.12

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

- Increase Density
- Improve Walkability Design
- Improve Pedestrian Network
- Implement Trip Reduction Program
- Provide Riade Sharing Program

	ROG	NOx	CO	SO2	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	0.05	0.13	0.47	0.00	0.12	0.01	0.13	0.00	0.01	0.01	0.00	92.14	92.14	0.00	0.00	92.22
Unmitigated	0.06	0.14	0.53	0.00	0.14	0.01	0.15	0.00	0.01	0.01	0.00	106.77	106.77	0.00	0.00	106.86
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	76.56	80.64	70.16	253,885	218,081
User Defined Recreational	0.00	0.00	0.00		
Total	76.56	80.64	70.16	253,885	218,081

4.3 Trip Type Information

Land Use	Miles			Trip %		
	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
Single Family Housing	12.70	7.00	9.50	40.20	19.20	40.60
User Defined Recreational	8.90	13.30	7.40	0.00	0.00	0.00

5.0 Energy Detail

5.1 Mitigation Measures Energy

Exceed Title 24

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						0.00	0.00		0.00	0.00	0.00	14.03	14.03	0.00	0.00	14.12
Electricity Unmitigated						0.00	0.00		0.00	0.00	0.00	15.79	15.79	0.00	0.00	15.89
NaturalGas Mitigated	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00	0.00	14.65	14.65	0.00	0.00	14.74
NaturalGas Unmitigated	0.00	0.02	0.01	0.00		0.00	0.00		0.00	0.00	0.00	17.67	17.67	0.00	0.00	17.78
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	tons/yr										MT/yr					
Single Family Housing	331216	0.00	0.02	0.01	0.00		0.00	0.00		0.00	0.00	0.00	17.67	17.67	0.00	0.00	17.78
User Defined Recreational	0	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
Total		0.00	0.02	0.01	0.00		0.00	0.00		0.00	0.00	0.00	17.67	17.67	0.00	0.00	17.78

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	tons/yr										MT/yr					
Single Family Housing	274471	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00	0.00	14.65	14.65	0.00	0.00	14.74
User Defined Recreational	0	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
Total		0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00	0.00	14.65	14.65	0.00	0.00	14.74

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
Single Family Housing	54294					15.79	0.00	0.00	15.89
User Defined Recreational	0					0.00	0.00	0.00	0.00
Total						15.79	0.00	0.00	15.89

Mitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
Single Family Housing	48231.6					14.03	0.00	0.00	14.12
User Defined Recreational	0					0.00	0.00	0.00	0.00
Total						14.03	0.00	0.00	14.12

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
- Use only Natural Gas Hearths
- No Hearths Installed

	ROG	NOx	CO	SO2	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	0.16	0.00	0.12	0.00		0.00	0.00		0.00	0.00	0.00	0.20	0.20	0.00	0.00	0.20
Unmitigated	0.19	0.00	0.17	0.00		0.00	0.01		0.00	0.01	0.85	5.10	5.95	0.00	0.00	6.04
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	0.03					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.13					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.03	0.00	0.05	0.00		0.00	0.01		0.00	0.01	0.85	4.90	5.75	0.00	0.00	5.84	
Landscaping	0.00	0.00	0.12	0.00		0.00	0.00		0.00	0.00	0.00	0.20	0.20	0.00	0.00	0.20	
Total	0.19	0.00	0.17	0.00		0.00	0.01		0.00	0.01	0.85	5.10	5.95	0.00	0.00	6.04	

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	0.03					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.13					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	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
Landscaping	0.00	0.00	0.12	0.00		0.00	0.00		0.00	0.00	0.00	0.20	0.20	0.00	0.00	0.20
Total	0.16	0.00	0.12	0.00		0.00	0.00		0.00	0.00	0.00	0.20	0.20	0.00	0.00	0.20

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

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr				MT/yr			
Mitigated					2.58	0.01	0.00	2.96
Unmitigated					3.04	0.02	0.00	3.52
Total	NA	NA	NA	NA	NA	NA	NA	NA

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
Single Family Housing	0.521232 / 0.328603					3.04	0.02	0.00	3.52
User Defined Recreational	0 / 0					0.00	0.00	0.00	0.00
Total						3.04	0.02	0.00	3.52

Mitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
Single Family Housing	0.416986 / 0.308558					2.58	0.01	0.00	2.96
User Defined Recreational	0 / 0					0.00	0.00	0.00	0.00
Total						2.58	0.01	0.00	2.96

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
	tons/yr				MT/yr			
Mitigated					1.91	0.11	0.00	4.29
Unmitigated					1.91	0.11	0.00	4.29
Total	NA	NA	NA	NA	NA	NA	NA	NA

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
Single Family Housing	9.43					1.91	0.11	0.00	4.29
User Defined Recreational	0					0.00	0.00	0.00	0.00
Total						1.91	0.11	0.00	4.29

8.2 Waste by Land Use

Mitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
Single Family Housing	9.43					1.91	0.11	0.00	4.29
User Defined Recreational	0					0.00	0.00	0.00	0.00
Total						1.91	0.11	0.00	4.29

9.0 Vegetation

Serrano Summit Construction Phase 1
South Coast AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
User Defined Recreational	21.5	User Defined Unit
Single Family Housing	8	Dwelling Unit

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Utility Company	Southern California Edison
Climate Zone	9	Precipitation Freq (Days)	31		

1.3 User Entered Comments

- Project Characteristics -
- Land Use - User defined uses include community center and police center
- Construction Phase - construction schedule based on information provided by applicant
- Off-road Equipment -
- Trips and VMT -
- Demolition -

Grading - Total acreage=9.85

Vehicle Trips -

Woodstoves - Wood stoves are not proposed, fireplaces would be gas

Energy Use -

Land Use Change -

Sequestration -

Construction Off-road Equipment Mitigation - Construction mitigation per SCAQMD

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

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					
2013	9.53	74.37	45.80	0.08	12.48	3.89	16.38	6.62	3.89	10.52	0.00	7,907.29	0.00	0.86	0.00	7,925.30
2014	6.22	27.30	20.30	0.04	0.22	1.71	1.94	0.00	1.71	1.72	0.00	3,492.24	0.00	0.44	0.00	3,501.42
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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					
2013	9.53	74.37	45.80	0.08	4.74	3.89	8.63	2.46	3.89	6.35	0.00	7,907.29	0.00	0.86	0.00	7,925.30
2014	6.22	27.30	20.30	0.04	0.17	1.71	1.88	0.00	1.71	1.72	0.00	3,492.24	0.00	0.44	0.00	3,501.42
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	1.75	0.05	3.32	0.01		0.00	0.43		0.00	0.43	56.45	145.20		0.22	0.00	207.45
Energy	0.01	0.08	0.04	0.00		0.00	0.01		0.00	0.01		106.76		0.00	0.00	107.41
Mobile	0.35	0.81	3.18	0.01	0.89	0.04	0.93	0.01	0.04	0.05		718.97		0.03		719.53
Total	2.11	0.94	6.54	0.02	0.89	0.04	1.37	0.01	0.04	0.49	56.45	970.93		0.25	0.00	1,034.39

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	0.90	0.01	0.67	0.00		0.00	0.00		0.00	0.00	0.00	1.20		0.00	0.00	1.23
Energy	0.01	0.07	0.03	0.00		0.00	0.01		0.00	0.01		88.47		0.00	0.00	89.01
Mobile	0.31	0.73	2.80	0.01	0.76	0.04	0.80	0.01	0.04	0.05		620.38		0.02		620.87
Total	1.22	0.81	3.50	0.01	0.76	0.04	0.81	0.01	0.04	0.06	0.00	710.05		0.02	0.00	711.11

3.0 Construction Detail

3.1 Mitigation Measures Construction

- Use DPF for Construction Equipment
- Replace Ground Cover
- Water Exposed Area
- Water Unpaved Roads
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

3.2 Mass Grading - 2013

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					6.07	0.00	6.07	3.31	0.00	3.31						0.00
Off-Road	4.70	37.12	22.15	0.04		1.94	1.94		1.94	1.94		3,827.58		0.42		3,836.44
Total	4.70	37.12	22.15	0.04	6.07	1.94	8.01	3.31	1.94	5.25		3,827.58		0.42		3,836.44

3.2 Mass Grading - 2013

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.06	0.06	0.74	0.00	0.15	0.01	0.16	0.00	0.00	0.01		126.06		0.01		126.21
Total	0.06	0.06	0.74	0.00	0.15	0.01	0.16	0.00	0.00	0.01		126.06		0.01		126.21

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					2.25	0.00	2.25	1.23	0.00	1.23						0.00
Off-Road	4.70	37.12	22.15	0.04		1.94	1.94		1.94	1.94	0.00	3,827.58		0.42		3,836.44
Total	4.70	37.12	22.15	0.04	2.25	1.94	4.19	1.23	1.94	3.17	0.00	3,827.58		0.42		3,836.44

3.2 Mass Grading - 2013

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.06	0.06	0.74	0.00	0.12	0.01	0.12	0.00	0.00	0.01		126.06		0.01		126.21
Total	0.06	0.06	0.74	0.00	0.12	0.01	0.12	0.00	0.00	0.01		126.06		0.01		126.21

3.3 Fine Grading - 2013

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					6.10	0.00	6.10	3.31	0.00	3.31						0.00
Off-Road	4.70	37.12	22.15	0.04		1.94	1.94		1.94	1.94		3,827.58		0.42		3,836.44
Total	4.70	37.12	22.15	0.04	6.10	1.94	8.04	3.31	1.94	5.25		3,827.58		0.42		3,836.44

3.3 Fine Grading - 2013

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.06	0.06	0.74	0.00	0.15	0.01	0.16	0.00	0.00	0.01		126.06		0.01		126.21
Total	0.06	0.06	0.74	0.00	0.15	0.01	0.16	0.00	0.00	0.01		126.06		0.01		126.21

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					2.26	0.00	2.26	1.23	0.00	1.23						0.00
Off-Road	4.70	37.12	22.15	0.04		1.94	1.94		1.94	1.94	0.00	3,827.58		0.42		3,836.44
Total	4.70	37.12	22.15	0.04	2.26	1.94	4.20	1.23	1.94	3.17	0.00	3,827.58		0.42		3,836.44

3.3 Fine Grading - 2013

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.06	0.06	0.74	0.00	0.12	0.01	0.12	0.00	0.00	0.01		126.06		0.01		126.21
Total	0.06	0.06	0.74	0.00	0.12	0.01	0.12	0.00	0.00	0.01		126.06		0.01		126.21

3.4 Paving - 2013

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	4.16	25.92	16.81	0.03		2.21	2.21		2.21	2.21		2,393.42		0.37		2,401.25
Paving	0.00					0.00	0.00		0.00	0.00						0.00
Total	4.16	25.92	16.81	0.03		2.21	2.21		2.21	2.21		2,393.42		0.37		2,401.25

3.4 Paving - 2013

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.09	0.10	1.12	0.00	0.23	0.01	0.24	0.00	0.01	0.01		189.09		0.01		189.32
Total	0.09	0.10	1.12	0.00	0.23	0.01	0.24	0.00	0.01	0.01		189.09		0.01		189.32

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	4.16	25.92	16.81	0.03		2.21	2.21		2.21	2.21	0.00	2,393.42		0.37		2,401.25
Paving	0.00					0.00	0.00		0.00	0.00						0.00
Total	4.16	25.92	16.81	0.03		2.21	2.21		2.21	2.21	0.00	2,393.42		0.37		2,401.25

3.4 Paving - 2013

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.09	0.10	1.12	0.00	0.17	0.01	0.18	0.00	0.01	0.01		189.09		0.01		189.32
Total	0.09	0.10	1.12	0.00	0.17	0.01	0.18	0.00	0.01	0.01		189.09		0.01		189.32

3.5 Building - 2013

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	5.20	28.63	19.52	0.04		1.88	1.88		1.88	1.88		3,233.11		0.47		3,242.90
Total	5.20	28.63	19.52	0.04		1.88	1.88		1.88	1.88		3,233.11		0.47		3,242.90

3.5 Building - 2013

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.06	0.66	0.38	0.00	0.04	0.02	0.06	0.00	0.02	0.02		110.31		0.00		110.37
Worker	0.08	0.08	0.89	0.00	0.18	0.01	0.19	0.00	0.01	0.01		151.27		0.01		151.46
Total	0.14	0.74	1.27	0.00	0.22	0.03	0.25	0.00	0.03	0.03		261.58		0.01		261.83

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	5.20	28.63	19.52	0.04		1.88	1.88		1.88	1.88	0.00	3,233.11		0.47		3,242.90
Total	5.20	28.63	19.52	0.04		1.88	1.88		1.88	1.88	0.00	3,233.11		0.47		3,242.90

3.5 Building - 2013

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.06	0.66	0.38	0.00	0.03	0.02	0.05	0.00	0.02	0.02		110.31		0.00		110.37
Worker	0.08	0.08	0.89	0.00	0.14	0.01	0.14	0.00	0.01	0.01		151.27		0.01		151.46
Total	0.14	0.74	1.27	0.00	0.17	0.03	0.19	0.00	0.03	0.03		261.58		0.01		261.83

3.5 Building - 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	4.75	26.63	19.13	0.04		1.69	1.69		1.69	1.69		3,233.11		0.43		3,242.06
Total	4.75	26.63	19.13	0.04		1.69	1.69		1.69	1.69		3,233.11		0.43		3,242.06

3.5 Building - 2014

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.05	0.60	0.35	0.00	0.04	0.02	0.06	0.00	0.02	0.02		110.52		0.00		110.57
Worker	0.07	0.07	0.82	0.00	0.18	0.01	0.19	0.00	0.01	0.01		148.61		0.01		148.78
Total	0.12	0.67	1.17	0.00	0.22	0.03	0.25	0.00	0.03	0.03		259.13		0.01		259.35

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	4.75	26.63	19.13	0.04		1.69	1.69		1.69	1.69	0.00	3,233.11		0.43		3,242.06
Total	4.75	26.63	19.13	0.04		1.69	1.69		1.69	1.69	0.00	3,233.11		0.43		3,242.06

3.5 Building - 2014

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.05	0.60	0.35	0.00	0.03	0.02	0.05	0.00	0.02	0.02		110.52		0.00		110.57
Worker	0.07	0.07	0.82	0.00	0.14	0.01	0.14	0.00	0.01	0.01		148.61		0.01		148.78
Total	0.12	0.67	1.17	0.00	0.17	0.03	0.19	0.00	0.03	0.03		259.13		0.01		259.35

3.6 Architectural Coating - 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					
Archit. Coating	5.76					0.00	0.00		0.00	0.00						0.00
Off-Road	0.45	2.77	1.92	0.00		0.24	0.24		0.24	0.24		281.19		0.04		282.03
Total	6.21	2.77	1.92	0.00		0.24	0.24		0.24	0.24		281.19		0.04		282.03

3.6 Architectural Coating - 2014

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.01	0.01	0.14	0.00	0.03	0.00	0.03	0.00	0.00	0.00		24.77		0.00		24.80
Total	0.01	0.01	0.14	0.00	0.03	0.00	0.03	0.00	0.00	0.00		24.77		0.00		24.80

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	5.76					0.00	0.00		0.00	0.00						0.00
Off-Road	0.45	2.77	1.92	0.00		0.24	0.24		0.24	0.24	0.00	281.19		0.04		282.03
Total	6.21	2.77	1.92	0.00		0.24	0.24		0.24	0.24	0.00	281.19		0.04		282.03

3.6 Architectural Coating - 2014

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.01	0.01	0.14	0.00	0.02	0.00	0.02	0.00	0.00	0.00		24.77		0.00		24.80
Total	0.01	0.01	0.14	0.00	0.02	0.00	0.02	0.00	0.00	0.00		24.77		0.00		24.80

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

- Increase Density
- Improve Walkability Design
- Improve Pedestrian Network
- Implement Trip Reduction Program
- Provide Ride Sharing Program

	ROG	NOx	CO	SO2	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	0.31	0.73	2.80	0.01	0.76	0.04	0.80	0.01	0.04	0.05		620.38		0.02		620.87
Unmitigated	0.35	0.81	3.18	0.01	0.89	0.04	0.93	0.01	0.04	0.05		718.97		0.03		719.53
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	76.56	80.64	70.16	253,885	218,081
User Defined Recreational	0.00	0.00	0.00		
Total	76.56	80.64	70.16	253,885	218,081

4.3 Trip Type Information

Land Use	Miles			Trip %		
	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
Single Family Housing	12.70	7.00	9.50	40.20	19.20	40.60
User Defined Recreational	8.90	13.30	7.40	0.00	0.00	0.00

5.0 Energy Detail

5.1 Mitigation Measures Energy

Exceed Title 24

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	lb/day										lb/day					
NaturalGas Mitigated	0.01	0.07	0.03	0.00		0.00	0.01		0.00	0.01		88.47		0.00	0.00	89.01
NaturalGas Unmitigated	0.01	0.08	0.04	0.00		0.00	0.01		0.00	0.01		106.76		0.00	0.00	107.41
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	lb/day										lb/day					
Single Family Housing	907.441	0.01	0.08	0.04	0.00		0.00	0.01		0.00	0.01		106.76		0.00	0.00	107.41
User Defined Recreational	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Total		0.01	0.08	0.04	0.00		0.00	0.01		0.00	0.01		106.76		0.00	0.00	107.41

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	lb/day										lb/day					
Single Family Housing	0.751976	0.01	0.07	0.03	0.00		0.00	0.01		0.00	0.01		88.47		0.00	0.00	89.01
User Defined Recreational	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Total		0.01	0.07	0.03	0.00		0.00	0.01		0.00	0.01		88.47		0.00	0.00	89.01

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
- Use only Natural Gas Hearths
- No Hearths Installed

	ROG	NOx	CO	SO2	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	0.90	0.01	0.67	0.00		0.00	0.00		0.00	0.00	0.00	1.20		0.00	0.00	1.23
Unmitigated	1.75	0.05	3.32	0.01		0.00	0.43		0.00	0.43	56.45	145.20		0.22	0.00	207.45
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	0.17					0.00	0.00		0.00	0.00						0.00
Consumer Products	0.71					0.00	0.00		0.00	0.00						0.00
Hearth	0.85	0.04	2.65	0.01		0.00	0.42		0.00	0.42	56.45	144.00		0.22	0.00	206.22
Landscaping	0.02	0.01	0.67	0.00		0.00	0.00		0.00	0.00		1.20		0.00		1.23
Total	1.75	0.05	3.32	0.01		0.00	0.42		0.00	0.42	56.45	145.20		0.22	0.00	207.45

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	0.17					0.00	0.00		0.00	0.00							0.00
Consumer Products	0.71					0.00	0.00		0.00	0.00							0.00
Hearth	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
Landscaping	0.02	0.01	0.67	0.00		0.00	0.00		0.00	0.00		1.20		0.00			1.23
Total	0.90	0.01	0.67	0.00		0.00	0.00		0.00	0.00	0.00	1.20		0.00	0.00		1.23

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

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

Serrano Summit Construction Phase 1
South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
User Defined Recreational	21.5	User Defined Unit
Single Family Housing	8	Dwelling Unit

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Utility Company	Southern California Edison
Climate Zone	9	Precipitation Freq (Days)	31		

1.3 User Entered Comments

- Project Characteristics -
- Land Use - User defined uses include community center and police center
- Construction Phase - construction schedule based on information provided by applicant
- Off-road Equipment -
- Trips and VMT -
- Demolition -

Grading - Total acreage=9.85

Vehicle Trips -

Woodstoves - Wood stoves are not proposed, fireplaces would be gas

Energy Use -

Land Use Change -

Sequestration -

Construction Off-road Equipment Mitigation - Construction mitigation per SCAQMD

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

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					
2013	9.53	74.39	45.68	0.08	12.48	3.89	16.38	6.62	3.89	10.52	0.00	7,885.48	0.00	0.86	0.00	7,903.48
2014	6.22	27.34	20.28	0.04	0.22	1.71	1.94	0.00	1.71	1.72	0.00	3,478.47	0.00	0.44	0.00	3,487.64
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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					
2013	9.53	74.39	45.68	0.08	4.74	3.89	8.63	2.46	3.89	6.35	0.00	7,885.48	0.00	0.86	0.00	7,903.48
2014	6.22	27.34	20.28	0.04	0.17	1.71	1.88	0.00	1.71	1.72	0.00	3,478.47	0.00	0.44	0.00	3,487.64
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	1.75	0.05	3.32	0.01		0.00	0.43		0.00	0.43	56.45	145.20		0.22	0.00	207.45
Energy	0.01	0.08	0.04	0.00		0.00	0.01		0.00	0.01		106.76		0.00	0.00	107.41
Mobile	0.36	0.86	3.06	0.01	0.89	0.04	0.93	0.01	0.04	0.05		669.18		0.03		669.75
Total	2.12	0.99	6.42	0.02	0.89	0.04	1.37	0.01	0.04	0.49	56.45	921.14		0.25	0.00	984.61

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	0.90	0.01	0.67	0.00		0.00	0.00		0.00	0.00	0.00	1.20		0.00	0.00	1.23
Energy	0.01	0.07	0.03	0.00		0.00	0.01		0.00	0.01		88.47		0.00	0.00	89.01
Mobile	0.32	0.77	2.72	0.01	0.76	0.04	0.80	0.01	0.04	0.05		577.45		0.02		577.95
Total	1.23	0.85	3.42	0.01	0.76	0.04	0.81	0.01	0.04	0.06	0.00	667.12		0.02	0.00	668.19

3.0 Construction Detail

3.1 Mitigation Measures Construction

- Use DPF for Construction Equipment
- Replace Ground Cover
- Water Exposed Area
- Water Unpaved Roads
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

3.2 Mass Grading - 2013

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					6.07	0.00	6.07	3.31	0.00	3.31						0.00
Off-Road	4.70	37.12	22.15	0.04		1.94	1.94		1.94	1.94		3,827.58		0.42		3,836.44
Total	4.70	37.12	22.15	0.04	6.07	1.94	8.01	3.31	1.94	5.25		3,827.58		0.42		3,836.44

3.2 Mass Grading - 2013

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.07	0.07	0.69	0.00	0.15	0.01	0.16	0.00	0.00	0.01		115.16		0.01		115.30
Total	0.07	0.07	0.69	0.00	0.15	0.01	0.16	0.00	0.00	0.01		115.16		0.01		115.30

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					2.25	0.00	2.25	1.23	0.00	1.23						0.00
Off-Road	4.70	37.12	22.15	0.04		1.94	1.94		1.94	1.94	0.00	3,827.58		0.42		3,836.44
Total	4.70	37.12	22.15	0.04	2.25	1.94	4.19	1.23	1.94	3.17	0.00	3,827.58		0.42		3,836.44

3.2 Mass Grading - 2013

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.07	0.07	0.69	0.00	0.12	0.01	0.12	0.00	0.00	0.01		115.16		0.01		115.30
Total	0.07	0.07	0.69	0.00	0.12	0.01	0.12	0.00	0.00	0.01		115.16		0.01		115.30

3.3 Fine Grading - 2013

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					6.10	0.00	6.10	3.31	0.00	3.31						0.00
Off-Road	4.70	37.12	22.15	0.04		1.94	1.94		1.94	1.94		3,827.58		0.42		3,836.44
Total	4.70	37.12	22.15	0.04	6.10	1.94	8.04	3.31	1.94	5.25		3,827.58		0.42		3,836.44

3.3 Fine Grading - 2013

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.07	0.07	0.69	0.00	0.15	0.01	0.16	0.00	0.00	0.01		115.16		0.01		115.30
Total	0.07	0.07	0.69	0.00	0.15	0.01	0.16	0.00	0.00	0.01		115.16		0.01		115.30

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					2.26	0.00	2.26	1.23	0.00	1.23						0.00
Off-Road	4.70	37.12	22.15	0.04		1.94	1.94		1.94	1.94	0.00	3,827.58		0.42		3,836.44
Total	4.70	37.12	22.15	0.04	2.26	1.94	4.20	1.23	1.94	3.17	0.00	3,827.58		0.42		3,836.44

3.3 Fine Grading - 2013

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.07	0.07	0.69	0.00	0.12	0.01	0.12	0.00	0.00	0.01		115.16		0.01		115.30
Total	0.07	0.07	0.69	0.00	0.12	0.01	0.12	0.00	0.00	0.01		115.16		0.01		115.30

3.4 Paving - 2013

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	4.16	25.92	16.81	0.03		2.21	2.21		2.21	2.21		2,393.42		0.37		2,401.25
Paving	0.00					0.00	0.00		0.00	0.00						0.00
Total	4.16	25.92	16.81	0.03		2.21	2.21		2.21	2.21		2,393.42		0.37		2,401.25

3.4 Paving - 2013

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.10	0.11	1.03	0.00	0.23	0.01	0.24	0.00	0.01	0.01		172.73		0.01		172.95
Total	0.10	0.11	1.03	0.00	0.23	0.01	0.24	0.00	0.01	0.01		172.73		0.01		172.95

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	4.16	25.92	16.81	0.03		2.21	2.21		2.21	2.21	0.00	2,393.42		0.37		2,401.25
Paving	0.00					0.00	0.00		0.00	0.00						0.00
Total	4.16	25.92	16.81	0.03		2.21	2.21		2.21	2.21	0.00	2,393.42		0.37		2,401.25

3.4 Paving - 2013

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.10	0.11	1.03	0.00	0.17	0.01	0.18	0.00	0.01	0.01		172.73		0.01		172.95
Total	0.10	0.11	1.03	0.00	0.17	0.01	0.18	0.00	0.01	0.01		172.73		0.01		172.95

3.5 Building - 2013

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	5.20	28.63	19.52	0.04		1.88	1.88		1.88	1.88		3,233.11		0.47		3,242.90
Total	5.20	28.63	19.52	0.04		1.88	1.88		1.88	1.88		3,233.11		0.47		3,242.90

3.5 Building - 2013

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.06	0.69	0.43	0.00	0.04	0.02	0.06	0.00	0.02	0.02		109.45		0.00		109.51
Worker	0.08	0.09	0.83	0.00	0.18	0.01	0.19	0.00	0.01	0.01		138.19		0.01		138.36
Total	0.14	0.78	1.26	0.00	0.22	0.03	0.25	0.00	0.03	0.03		247.64		0.01		247.87

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	5.20	28.63	19.52	0.04		1.88	1.88		1.88	1.88	0.00	3,233.11		0.47		3,242.90
Total	5.20	28.63	19.52	0.04		1.88	1.88		1.88	1.88	0.00	3,233.11		0.47		3,242.90

3.5 Building - 2013

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.06	0.69	0.43	0.00	0.03	0.02	0.05	0.00	0.02	0.02		109.45		0.00		109.51
Worker	0.08	0.09	0.83	0.00	0.14	0.01	0.14	0.00	0.01	0.01		138.19		0.01		138.36
Total	0.14	0.78	1.26	0.00	0.17	0.03	0.19	0.00	0.03	0.03		247.64		0.01		247.87

3.5 Building - 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	4.75	26.63	19.13	0.04		1.69	1.69		1.69	1.69		3,233.11		0.43		3,242.06
Total	4.75	26.63	19.13	0.04		1.69	1.69		1.69	1.69		3,233.11		0.43		3,242.06

3.5 Building - 2014

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.06	0.63	0.40	0.00	0.04	0.02	0.06	0.00	0.02	0.02		109.64		0.00		109.70
Worker	0.07	0.08	0.76	0.00	0.18	0.01	0.19	0.00	0.01	0.01		135.72		0.01		135.89
Total	0.13	0.71	1.16	0.00	0.22	0.03	0.25	0.00	0.03	0.03		245.36		0.01		245.59

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	4.75	26.63	19.13	0.04		1.69	1.69		1.69	1.69	0.00	3,233.11		0.43		3,242.06
Total	4.75	26.63	19.13	0.04		1.69	1.69		1.69	1.69	0.00	3,233.11		0.43		3,242.06

3.5 Building - 2014

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.06	0.63	0.40	0.00	0.03	0.02	0.05	0.00	0.02	0.02		109.64		0.00		109.70
Worker	0.07	0.08	0.76	0.00	0.14	0.01	0.14	0.00	0.01	0.01		135.72		0.01		135.89
Total	0.13	0.71	1.16	0.00	0.17	0.03	0.19	0.00	0.03	0.03		245.36		0.01		245.59

3.6 Architectural Coating - 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					
Archit. Coating	5.76					0.00	0.00		0.00	0.00						0.00
Off-Road	0.45	2.77	1.92	0.00		0.24	0.24		0.24	0.24		281.19		0.04		282.03
Total	6.21	2.77	1.92	0.00		0.24	0.24		0.24	0.24		281.19		0.04		282.03

3.6 Architectural Coating - 2014

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.01	0.01	0.13	0.00	0.03	0.00	0.03	0.00	0.00	0.00		22.62		0.00		22.65
Total	0.01	0.01	0.13	0.00	0.03	0.00	0.03	0.00	0.00	0.00		22.62		0.00		22.65

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	5.76					0.00	0.00		0.00	0.00						0.00
Off-Road	0.45	2.77	1.92	0.00		0.24	0.24		0.24	0.24	0.00	281.19		0.04		282.03
Total	6.21	2.77	1.92	0.00		0.24	0.24		0.24	0.24	0.00	281.19		0.04		282.03

3.6 Architectural Coating - 2014

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.01	0.01	0.13	0.00	0.02	0.00	0.02	0.00	0.00	0.00		22.62		0.00		22.65
Total	0.01	0.01	0.13	0.00	0.02	0.00	0.02	0.00	0.00	0.00		22.62		0.00		22.65

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

- Increase Density
- Improve Walkability Design
- Improve Pedestrian Network
- Implement Trip Reduction Program
- Provide Riade Sharing Program

	ROG	NOx	CO	SO2	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	0.32	0.77	2.72	0.01	0.76	0.04	0.80	0.01	0.04	0.05		577.45		0.02		577.95
Unmitigated	0.36	0.86	3.06	0.01	0.89	0.04	0.93	0.01	0.04	0.05		669.18		0.03		669.75
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	76.56	80.64	70.16	253,885	218,081
User Defined Recreational	0.00	0.00	0.00		
Total	76.56	80.64	70.16	253,885	218,081

4.3 Trip Type Information

Land Use	Miles			Trip %		
	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
Single Family Housing	12.70	7.00	9.50	40.20	19.20	40.60
User Defined Recreational	8.90	13.30	7.40	0.00	0.00	0.00

5.0 Energy Detail

5.1 Mitigation Measures Energy

Exceed Title 24

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	lb/day										lb/day					
NaturalGas Mitigated	0.01	0.07	0.03	0.00		0.00	0.01		0.00	0.01		88.47		0.00	0.00	89.01
NaturalGas Unmitigated	0.01	0.08	0.04	0.00		0.00	0.01		0.00	0.01		106.76		0.00	0.00	107.41
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	lb/day										lb/day					
Single Family Housing	907.441	0.01	0.08	0.04	0.00		0.00	0.01		0.00	0.01		106.76		0.00	0.00	107.41
User Defined Recreational	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Total		0.01	0.08	0.04	0.00		0.00	0.01		0.00	0.01		106.76		0.00	0.00	107.41

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	lb/day										lb/day					
Single Family Housing	0.751976	0.01	0.07	0.03	0.00		0.00	0.01		0.00	0.01		88.47		0.00	0.00	89.01
User Defined Recreational	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Total		0.01	0.07	0.03	0.00		0.00	0.01		0.00	0.01		88.47		0.00	0.00	89.01

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
- Use only Natural Gas Hearths
- No Hearths Installed

	ROG	NOx	CO	SO2	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	0.90	0.01	0.67	0.00		0.00	0.00		0.00	0.00	0.00	1.20		0.00	0.00	1.23
Unmitigated	1.75	0.05	3.32	0.01		0.00	0.43		0.00	0.43	56.45	145.20		0.22	0.00	207.45
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	0.17					0.00	0.00		0.00	0.00						0.00
Consumer Products	0.71					0.00	0.00		0.00	0.00						0.00
Hearth	0.85	0.04	2.65	0.01		0.00	0.42		0.00	0.42	56.45	144.00		0.22	0.00	206.22
Landscaping	0.02	0.01	0.67	0.00		0.00	0.00		0.00	0.00		1.20		0.00		1.23
Total	1.75	0.05	3.32	0.01		0.00	0.42		0.00	0.42	56.45	145.20		0.22	0.00	207.45

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	0.17					0.00	0.00		0.00	0.00							0.00
Consumer Products	0.71					0.00	0.00		0.00	0.00							0.00
Hearth	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
Landscaping	0.02	0.01	0.67	0.00		0.00	0.00		0.00	0.00		1.20		0.00			1.23
Total	0.90	0.01	0.67	0.00		0.00	0.00		0.00	0.00	0.00	1.20		0.00	0.00		1.23

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

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

Serrano Summit Construction Phase 2
South Coast AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Condo/Townhouse	112	Dwelling Unit
Single Family Housing	9	Dwelling Unit

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Utility Company	Southern California Edison
Climate Zone	9	Precipitation Freq (Days)	31		

1.3 User Entered Comments

- Project Characteristics -
- Land Use -
- Construction Phase - construction schedule based on information provided by applicant
- Off-road Equipment -
- Trips and VMT -
- Demolition -

Grading - Total acreage=9.85

Vehicle Trips -

Woodstoves - Wood stoves are not proposed, fireplaces would be gas

Energy Use -

Land Use Change -

Sequestration -

Construction Off-road Equipment Mitigation - Construction mitigation per SCAQMD

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

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	0.57	4.02	3.02	0.01	0.39	0.23	0.62	0.17	0.23	0.41	0.00	480.04	480.04	0.05	0.00	481.03
2015	0.73	1.43	1.35	0.00	0.06	0.09	0.15	0.00	0.09	0.09	0.00	221.95	221.95	0.02	0.00	222.35
Total	1.30	5.45	4.37	0.01	0.45	0.32	0.77	0.17	0.32	0.50	0.00	701.99	701.99	0.07	0.00	703.38

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	0.57	4.02	3.02	0.01	0.17	0.23	0.40	0.06	0.23	0.30	0.00	480.04	480.04	0.05	0.00	481.03
2015	0.73	1.43	1.35	0.00	0.05	0.09	0.14	0.00	0.09	0.09	0.00	221.95	221.95	0.02	0.00	222.35
Total	1.30	5.45	4.37	0.01	0.22	0.32	0.54	0.06	0.32	0.39	0.00	701.99	701.99	0.07	0.00	703.38

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	0.97	0.03	2.61	0.00		0.00	0.13		0.00	0.13	12.85	77.10	89.96	0.04	0.00	91.39
Energy	0.02	0.14	0.06	0.00		0.00	0.01		0.00	0.01	0.00	326.45	326.45	0.01	0.01	328.47
Mobile	0.62	1.52	5.78	0.01	1.49	0.08	1.57	0.02	0.08	0.10	0.00	1,155.03	1,155.03	0.05	0.00	1,155.98
Waste						0.00	0.00		0.00	0.00	12.62	0.00	12.62	0.75	0.00	28.29
Water						0.00	0.00		0.00	0.00	0.00	46.01	46.01	0.24	0.01	53.20
Total	1.61	1.69	8.45	0.01	1.49	0.08	1.71	0.02	0.08	0.24	25.47	1,604.59	1,630.07	1.09	0.02	1,657.33

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	0.57	0.02	1.85	0.00		0.00	0.01		0.00	0.01	0.00	3.01	3.01	0.00	0.00	3.07
Energy	0.01	0.12	0.05	0.00		0.00	0.01		0.00	0.01	0.00	279.91	279.91	0.01	0.00	281.64
Mobile	0.56	1.37	5.13	0.01	1.28	0.07	1.35	0.02	0.07	0.09	0.00	996.76	996.76	0.04	0.00	997.58
Waste						0.00	0.00		0.00	0.00	12.62	0.00	12.62	0.75	0.00	28.29
Water						0.00	0.00		0.00	0.00	0.00	39.04	39.04	0.19	0.01	44.81
Total	1.14	1.51	7.03	0.01	1.28	0.07	1.37	0.02	0.07	0.11	12.62	1,318.72	1,331.34	0.99	0.01	1,355.39

3.0 Construction Detail

3.1 Mitigation Measures Construction

- Use DPF for Construction Equipment
- Replace Ground Cover
- Water Exposed Area
- Water Unpaved Roads
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

3.2 Mass Grading - 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					0.20	0.00	0.20	0.11	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.19	1.46	0.97	0.00		0.08	0.08		0.08	0.08	0.00	152.08	152.08	0.02	0.00	152.40
Total	0.19	1.46	0.97	0.00	0.20	0.08	0.28	0.11	0.08	0.19	0.00	152.08	152.08	0.02	0.00	152.40

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	0.00	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
Vendor	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
Worker	0.00	0.00	0.03	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	5.06	5.06	0.00	0.00	5.07
Total	0.00	0.00	0.03	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	5.06	5.06	0.00	0.00	5.07

3.2 Mass Grading - 2014

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					0.07	0.00	0.07	0.04	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.19	1.46	0.97	0.00		0.08	0.08		0.08	0.08	0.00	152.08	152.08	0.02	0.00	152.40
Total	0.19	1.46	0.97	0.00	0.07	0.08	0.15	0.04	0.08	0.12	0.00	152.08	152.08	0.02	0.00	152.40

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	0.00	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
Vendor	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
Worker	0.00	0.00	0.03	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	5.06	5.06	0.00	0.00	5.07
Total	0.00	0.00	0.03	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	5.06	5.06	0.00	0.00	5.07

3.3 Fine Grading - 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					0.12	0.00	0.12	0.07	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.12	0.89	0.59	0.00		0.05	0.05		0.05	0.05	0.00	92.67	92.67	0.01	0.00	92.87
Total	0.12	0.89	0.59	0.00	0.12	0.05	0.17	0.07	0.05	0.12	0.00	92.67	92.67	0.01	0.00	92.87

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	0.00	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
Vendor	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
Worker	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.09	3.09	0.00	0.00	3.09
Total	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.09	3.09	0.00	0.00	3.09

3.3 Fine Grading - 2014

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					0.05	0.00	0.05	0.02	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.12	0.89	0.59	0.00		0.05	0.05		0.05	0.05	0.00	92.67	92.67	0.01	0.00	92.87
Total	0.12	0.89	0.59	0.00	0.05	0.05	0.10	0.02	0.05	0.07	0.00	92.67	92.67	0.01	0.00	92.87

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	0.00	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
Vendor	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
Worker	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.09	3.09	0.00	0.00	3.09
Total	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.09	3.09	0.00	0.00	3.09

3.4 Paving - 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	0.02	0.14	0.09	0.00		0.01	0.01		0.01	0.01	0.00	11.91	11.91	0.00	0.00	11.95
Paving	0.00					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.02	0.14	0.09	0.00		0.01	0.01		0.01	0.01	0.00	11.91	11.91	0.00	0.00	11.95

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	0.00	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
Vendor	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
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.71	0.71	0.00	0.00	0.71
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.71	0.71	0.00	0.00	0.71

3.4 Paving - 2014

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	0.02	0.14	0.09	0.00		0.01	0.01		0.01	0.01	0.00	11.91	11.91	0.00	0.00	11.95
Paving	0.00					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.02	0.14	0.09	0.00		0.01	0.01		0.01	0.01	0.00	11.91	11.91	0.00	0.00	11.95

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	0.00	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
Vendor	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
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.71	0.71	0.00	0.00	0.71
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.71	0.71	0.00	0.00	0.71

3.5 Building - 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	0.21	1.41	1.02	0.00		0.09	0.09		0.09	0.09	0.00	161.24	161.24	0.02	0.00	161.60
Total	0.21	1.41	1.02	0.00		0.09	0.09		0.09	0.09	0.00	161.24	161.24	0.02	0.00	161.60

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	0.00	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
Vendor	0.01	0.09	0.05	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	14.29	14.29	0.00	0.00	14.30
Worker	0.02	0.02	0.24	0.00	0.05	0.00	0.05	0.00	0.00	0.00	0.00	38.99	38.99	0.00	0.00	39.04
Total	0.03	0.11	0.29	0.00	0.05	0.00	0.06	0.00	0.00	0.00	0.00	53.28	53.28	0.00	0.00	53.34

3.5 Building - 2014

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	0.21	1.41	1.02	0.00		0.09	0.09		0.09	0.09	0.00	161.24	161.24	0.02	0.00	161.60
Total	0.21	1.41	1.02	0.00		0.09	0.09		0.09	0.09	0.00	161.24	161.24	0.02	0.00	161.60

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	0.00	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
Vendor	0.01	0.09	0.05	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	14.29	14.29	0.00	0.00	14.30
Worker	0.02	0.02	0.24	0.00	0.04	0.00	0.04	0.00	0.00	0.00	0.00	38.99	38.99	0.00	0.00	39.04
Total	0.03	0.11	0.29	0.00	0.04	0.00	0.05	0.00	0.00	0.00	0.00	53.28	53.28	0.00	0.00	53.34

3.5 Building - 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	0.18	1.20	0.94	0.00		0.07	0.07		0.07	0.07	0.00	150.25	150.25	0.01	0.00	150.55
Total	0.18	1.20	0.94	0.00		0.07	0.07		0.07	0.07	0.00	150.25	150.25	0.01	0.00	150.55

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	0.00	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
Vendor	0.01	0.07	0.05	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	13.34	13.34	0.00	0.00	13.34
Worker	0.02	0.02	0.21	0.00	0.05	0.00	0.05	0.00	0.00	0.00	0.00	35.55	35.55	0.00	0.00	35.59
Total	0.03	0.09	0.26	0.00	0.05	0.00	0.06	0.00	0.00	0.00	0.00	48.89	48.89	0.00	0.00	48.93

3.5 Building - 2015

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	0.18	1.20	0.94	0.00		0.07	0.07		0.07	0.07	0.00	150.25	150.25	0.01	0.00	150.55
Total	0.18	1.20	0.94	0.00		0.07	0.07		0.07	0.07	0.00	150.25	150.25	0.01	0.00	150.55

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	0.00	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
Vendor	0.01	0.07	0.05	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	13.34	13.34	0.00	0.00	13.34
Worker	0.02	0.02	0.21	0.00	0.04	0.00	0.04	0.00	0.00	0.00	0.00	35.55	35.55	0.00	0.00	35.59
Total	0.03	0.09	0.26	0.00	0.04	0.00	0.05	0.00	0.00	0.00	0.00	48.89	48.89	0.00	0.00	48.93

3.6 Architectural Coating - 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					
Archit. Coating	0.50					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.02	0.14	0.10	0.00		0.01	0.01		0.01	0.01	0.00	13.52	13.52	0.00	0.00	13.55
Total	0.52	0.14	0.10	0.00		0.01	0.01		0.01	0.01	0.00	13.52	13.52	0.00	0.00	13.55

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	0.00	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
Vendor	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
Worker	0.00	0.00	0.05	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	9.30	9.30	0.00	0.00	9.31
Total	0.00	0.00	0.05	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	9.30	9.30	0.00	0.00	9.31

3.6 Architectural Coating - 2015

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	0.50					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.02	0.14	0.10	0.00		0.01	0.01		0.01	0.01	0.00	13.52	13.52	0.00	0.00	13.55
Total	0.52	0.14	0.10	0.00		0.01	0.01		0.01	0.01	0.00	13.52	13.52	0.00	0.00	13.55

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	0.00	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
Vendor	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
Worker	0.00	0.00	0.05	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	9.30	9.30	0.00	0.00	9.31
Total	0.00	0.00	0.05	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	9.30	9.30	0.00	0.00	9.31

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

- Increase Density
- Improve Walkability Design
- Improve Pedestrian Network
- Implement Trip Reduction Program
- Provide Riade Sharing Program

	ROG	NOx	CO	SO2	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	0.56	1.37	5.13	0.01	1.28	0.07	1.35	0.02	0.07	0.09	0.00	996.76	996.76	0.04	0.00	997.58
Unmitigated	0.62	1.52	5.78	0.01	1.49	0.08	1.57	0.02	0.08	0.10	0.00	1,155.03	1,155.03	0.05	0.00	1,155.98
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	86.13	90.72	78.93	285,621	245,341
Condo/Townhouse	738.08	801.92	679.84	2,460,895	2,113,846
Total	824.21	892.64	758.77	2,746,515	2,359,187

4.3 Trip Type Information

Land Use	Miles			Trip %		
	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
Single Family Housing	12.70	7.00	9.50	40.20	19.20	40.60
Condo/Townhouse	12.70	7.00	9.50	40.20	19.20	40.60

5.0 Energy Detail

5.1 Mitigation Measures Energy

Exceed Title 24

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						0.00	0.00		0.00	0.00	0.00	141.57	141.57	0.01	0.00	142.45
Electricity Unmitigated						0.00	0.00		0.00	0.00	0.00	159.30	159.30	0.01	0.00	160.30
NaturalGas Mitigated	0.01	0.12	0.05	0.00		0.00	0.01		0.00	0.01	0.00	138.35	138.35	0.00	0.00	139.19
NaturalGas Unmitigated	0.02	0.14	0.06	0.00		0.00	0.01		0.00	0.01	0.00	167.15	167.15	0.00	0.00	168.17
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	tons/yr										MT/yr					
Condo/Townhouse	2.75964e+006	0.01	0.13	0.05	0.00		0.00	0.01		0.00	0.01	0.00	147.26	147.26	0.00	0.00	148.16
Single Family Housing	372618	0.00	0.02	0.01	0.00		0.00	0.00		0.00	0.00	0.00	19.88	19.88	0.00	0.00	20.01
Total		0.01	0.15	0.06	0.00		0.00	0.01		0.00	0.01	0.00	167.14	167.14	0.00	0.00	168.17

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	tons/yr										MT/yr					
Condo/Townhouse	2.28373e+006	0.01	0.11	0.04	0.00		0.00	0.01		0.00	0.01	0.00	121.87	121.87	0.00	0.00	122.61
Single Family Housing	308780	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00	0.00	16.48	16.48	0.00	0.00	16.58
Total		0.01	0.12	0.05	0.00		0.00	0.01		0.00	0.01	0.00	138.35	138.35	0.00	0.00	139.19

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
Condo/Townhouse	486593					141.54	0.01	0.00	142.42
Single Family Housing	61080.8					17.77	0.00	0.00	17.88
Total						159.31	0.01	0.00	160.30

Mitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
Condo/Townhouse	432440					125.78	0.01	0.00	126.57
Single Family Housing	54260.5					15.78	0.00	0.00	15.88
Total						141.56	0.01	0.00	142.45

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
- Use only Natural Gas Hearths
- No Hearths Installed

	ROG	NOx	CO	SO2	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	0.57	0.02	1.85	0.00		0.00	0.01		0.00	0.01	0.00	3.01	3.01	0.00	0.00	3.07
Unmitigated	0.97	0.03	2.61	0.00		0.00	0.13		0.00	0.13	12.85	77.10	89.96	0.04	0.00	91.39
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	0.05					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.46					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.40	0.01	0.76	0.00		0.00	0.12		0.00	0.12	12.85	74.09	86.95	0.04	0.00	88.32	
Landscaping	0.06	0.02	1.85	0.00		0.00	0.01		0.00	0.01	0.00	3.01	3.01	0.00	0.00	3.07	
Total	0.97	0.03	2.61	0.00		0.00	0.13		0.00	0.13	12.85	77.10	89.96	0.04	0.00	91.39	

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	0.05					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.46					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	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
Landscaping	0.06	0.02	1.85	0.00		0.00	0.01		0.00	0.01	0.00	3.01	3.01	0.00	0.00	3.07
Total	0.57	0.02	1.85	0.00		0.00	0.01		0.00	0.01	0.00	3.01	3.01	0.00	0.00	3.07

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

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr				MT/yr			
Mitigated					39.04	0.19	0.01	44.81
Unmitigated					46.01	0.24	0.01	53.20
Total	NA	NA	NA	NA	NA	NA	NA	NA

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
Condo/Townhouse	7.29725 / 4.60044					42.59	0.22	0.01	49.24
Single Family Housing	0.586386 / 0.369678					3.42	0.02	0.00	3.96
Total						46.01	0.24	0.01	53.20

Mitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
Condo/Townhouse	5.8378 / 4.31981					36.14	0.18	0.01	41.47
Single Family Housing	0.469109 / 0.347128					2.90	0.01	0.00	3.33
Total						39.04	0.19	0.01	44.80

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
	tons/yr				MT/yr			
Mitigated					12.62	0.75	0.00	28.29
Unmitigated					12.62	0.75	0.00	28.29
Total	NA	NA	NA	NA	NA	NA	NA	NA

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
Condo/Townhouse	51.52					10.46	0.62	0.00	23.44
Single Family Housing	10.66					2.16	0.13	0.00	4.85
Total						12.62	0.75	0.00	28.29

8.2 Waste by Land Use

Mitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
Condo/Townhouse	51.52					10.46	0.62	0.00	23.44
Single Family Housing	10.66					2.16	0.13	0.00	4.85
Total						12.62	0.75	0.00	28.29

9.0 Vegetation

Serrano Summit Construction Phase 2
South Coast AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Condo/Townhouse	112	Dwelling Unit
Single Family Housing	9	Dwelling Unit

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Utility Company	Southern California Edison
Climate Zone	9	Precipitation Freq (Days)	31		

1.3 User Entered Comments

- Project Characteristics -
- Land Use -
- Construction Phase - construction schedule based on information provided by applicant
- Off-road Equipment -
- Trips and VMT -
- Demolition -

Grading - Total acreage=9.85

Vehicle Trips -

Woodstoves - Wood stoves are not proposed, fireplaces would be gas

Energy Use -

Land Use Change -

Sequestration -

Construction Off-road Equipment Mitigation - Construction mitigation per SCAQMD

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

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	6.06	45.75	31.21	0.06	6.52	2.74	9.01	3.31	2.74	5.79	0.00	5,440.08	0.00	0.54	0.00	5,451.52
2015	9.95	31.38	29.31	0.06	1.41	1.90	3.31	0.02	1.89	1.91	0.00	5,418.47	0.00	0.45	0.00	5,427.94
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	6.06	45.75	31.21	0.06	2.50	2.74	4.99	1.23	2.74	3.71	0.00	5,440.08	0.00	0.54	0.00	5,451.52
2015	9.95	31.38	29.31	0.06	1.06	1.90	2.96	0.02	1.89	1.91	0.00	5,418.47	0.00	0.45	0.00	5,427.94
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	16.00	0.71	50.19	0.10		0.00	6.45		0.00	6.45	853.86	2,196.19		3.40	0.05	3,137.61
Energy	0.09	0.79	0.34	0.01		0.00	0.06		0.00	0.06		1,009.59		0.02	0.02	1,015.73
Mobile	3.85	9.01	35.21	0.09	9.85	0.48	10.33	0.14	0.46	0.60		7,958.61		0.29		7,964.79
Total	19.94	10.51	85.74	0.20	9.85	0.48	16.84	0.14	0.46	7.11	853.86	11,164.39		3.71	0.07	12,118.13

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	3.12	0.12	10.13	0.00		0.00	0.06		0.00	0.06	0.00	18.19		0.02	0.00	18.57
Energy	0.08	0.65	0.28	0.00		0.00	0.05		0.00	0.05		835.62		0.02	0.02	840.71
Mobile	3.48	8.10	30.98	0.08	8.46	0.42	8.87	0.12	0.40	0.52		6,867.29		0.26		6,872.67
Total	6.68	8.87	41.39	0.08	8.46	0.42	8.98	0.12	0.40	0.63	0.00	7,721.10		0.30	0.02	7,731.95

3.0 Construction Detail

3.1 Mitigation Measures Construction

- Use DPF for Construction Equipment
- Replace Ground Cover
- Water Exposed Area
- Water Unpaved Roads
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

3.2 Mass Grading - 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					6.19	0.00	6.19	3.31	0.00	3.31						0.00
Off-Road	5.98	45.66	30.18	0.05		2.47	2.47		2.47	2.47		5,240.06		0.53		5,251.29
Total	5.98	45.66	30.18	0.05	6.19	2.47	8.66	3.31	2.47	5.78		5,240.06		0.53		5,251.29

3.2 Mass Grading - 2014

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.09	0.09	1.03	0.00	0.23	0.01	0.24	0.00	0.01	0.01		185.76		0.01		185.98
Total	0.09	0.09	1.03	0.00	0.23	0.01	0.24	0.00	0.01	0.01		185.76		0.01		185.98

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					2.29	0.00	2.29	1.23	0.00	1.23						0.00
Off-Road	5.98	45.66	30.18	0.05		2.47	2.47		2.47	2.47	0.00	5,240.06		0.53		5,251.29
Total	5.98	45.66	30.18	0.05	2.29	2.47	4.76	1.23	2.47	3.70	0.00	5,240.06		0.53		5,251.29

3.2 Mass Grading - 2014

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.09	0.09	1.03	0.00	0.17	0.01	0.18	0.00	0.01	0.01		185.76		0.01		185.98
Total	0.09	0.09	1.03	0.00	0.17	0.01	0.18	0.00	0.01	0.01		185.76		0.01		185.98

3.3 Fine Grading - 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					6.29	0.00	6.29	3.31	0.00	3.31						0.00
Off-Road	5.98	45.66	30.18	0.05		2.47	2.47		2.47	2.47		5,240.06		0.53		5,251.29
Total	5.98	45.66	30.18	0.05	6.29	2.47	8.76	3.31	2.47	5.78		5,240.06		0.53		5,251.29

3.3 Fine Grading - 2014

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.09	0.09	1.03	0.00	0.23	0.01	0.24	0.00	0.01	0.01		185.76		0.01		185.98
Total	0.09	0.09	1.03	0.00	0.23	0.01	0.24	0.00	0.01	0.01		185.76		0.01		185.98

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					2.33	0.00	2.33	1.23	0.00	1.23						0.00
Off-Road	5.98	45.66	30.18	0.05		2.47	2.47		2.47	2.47	0.00	5,240.06		0.53		5,251.29
Total	5.98	45.66	30.18	0.05	2.33	2.47	4.80	1.23	2.47	3.70	0.00	5,240.06		0.53		5,251.29

3.3 Fine Grading - 2014

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.09	0.09	1.03	0.00	0.17	0.01	0.18	0.00	0.01	0.01		185.76		0.01		185.98
Total	0.09	0.09	1.03	0.00	0.17	0.01	0.18	0.00	0.01	0.01		185.76		0.01		185.98

3.4 Paving - 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	5.20	32.09	20.70	0.03		2.74	2.74		2.74	2.74		2,917.65		0.47		2,927.48
Paving	0.00					0.00	0.00		0.00	0.00						0.00
Total	5.20	32.09	20.70	0.03		2.74	2.74		2.74	2.74		2,917.65		0.47		2,927.48

3.4 Paving - 2014

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.09	0.09	1.03	0.00	0.23	0.01	0.24	0.00	0.01	0.01		185.76		0.01		185.98
Total	0.09	0.09	1.03	0.00	0.23	0.01	0.24	0.00	0.01	0.01		185.76		0.01		185.98

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	5.20	32.09	20.70	0.03		2.74	2.74		2.74	2.74	0.00	2,917.65		0.47		2,927.48
Paving	0.00					0.00	0.00		0.00	0.00						0.00
Total	5.20	32.09	20.70	0.03		2.74	2.74		2.74	2.74	0.00	2,917.65		0.47		2,927.48

3.4 Paving - 2014

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.09	0.09	1.03	0.00	0.17	0.01	0.18	0.00	0.01	0.01		185.76		0.01		185.98
Total	0.09	0.09	1.03	0.00	0.17	0.01	0.18	0.00	0.01	0.01		185.76		0.01		185.98

3.5 Building - 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	4.74	32.06	23.20	0.04		2.02	2.02		2.02	2.02		4,040.61		0.42		4,049.51
Total	4.74	32.06	23.20	0.04		2.02	2.02		2.02	2.02		4,040.61		0.42		4,049.51

3.5 Building - 2014

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.17	1.96	1.13	0.00	0.12	0.07	0.19	0.00	0.06	0.06		359.19		0.01		359.37
Worker	0.49	0.49	5.76	0.01	1.29	0.04	1.33	0.02	0.04	0.06		1,040.27		0.06		1,041.47
Total	0.66	2.45	6.89	0.01	1.41	0.11	1.52	0.02	0.10	0.12		1,399.46		0.07		1,400.84

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	4.74	32.06	23.20	0.04		2.02	2.02		2.02	2.02	0.00	4,040.61		0.42		4,049.51
Total	4.74	32.06	23.20	0.04		2.02	2.02		2.02	2.02	0.00	4,040.61		0.42		4,049.51

3.5 Building - 2014

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.17	1.96	1.13	0.00	0.09	0.07	0.16	0.00	0.06	0.06		359.19		0.01		359.37
Worker	0.49	0.49	5.76	0.01	0.97	0.04	1.01	0.02	0.04	0.06		1,040.27		0.06		1,041.47
Total	0.66	2.45	6.89	0.01	1.06	0.11	1.17	0.02	0.10	0.12		1,399.46		0.07		1,400.84

3.5 Building - 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	4.34	29.16	22.98	0.04		1.80	1.80		1.80	1.80		4,040.61		0.39		4,048.81
Total	4.34	29.16	22.98	0.04		1.80	1.80		1.80	1.80		4,040.61		0.39		4,048.81

3.5 Building - 2015

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.16	1.78	1.03	0.00	0.12	0.06	0.18	0.00	0.05	0.06		359.84		0.01		360.00
Worker	0.46	0.44	5.30	0.01	1.29	0.04	1.33	0.02	0.04	0.06		1,018.02		0.05		1,019.13
Total	0.62	2.22	6.33	0.01	1.41	0.10	1.51	0.02	0.09	0.12		1,377.86		0.06		1,379.13

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	4.34	29.16	22.98	0.04		1.80	1.80		1.80	1.80	0.00	4,040.61		0.39		4,048.81
Total	4.34	29.16	22.98	0.04		1.80	1.80		1.80	1.80	0.00	4,040.61		0.39		4,048.81

3.5 Building - 2015

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.16	1.78	1.03	0.00	0.09	0.06	0.15	0.00	0.05	0.06		359.84		0.01		360.00
Worker	0.46	0.44	5.30	0.01	0.97	0.04	1.01	0.02	0.04	0.06		1,018.02		0.05		1,019.13
Total	0.62	2.22	6.33	0.01	1.06	0.10	1.16	0.02	0.09	0.12		1,377.86		0.06		1,379.13

3.6 Architectural Coating - 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					
Archit. Coating	9.45					0.00	0.00		0.00	0.00						0.00
Off-Road	0.41	2.57	1.90	0.00		0.22	0.22		0.22	0.22		281.19		0.04		281.96
Total	9.86	2.57	1.90	0.00		0.22	0.22		0.22	0.22		281.19		0.04		281.96

3.6 Architectural Coating - 2015

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.09	0.09	1.07	0.00	0.26	0.01	0.27	0.00	0.01	0.01		206.03		0.01		206.25
Total	0.09	0.09	1.07	0.00	0.26	0.01	0.27	0.00	0.01	0.01		206.03		0.01		206.25

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	9.45					0.00	0.00		0.00	0.00						0.00
Off-Road	0.41	2.57	1.90	0.00		0.22	0.22		0.22	0.22	0.00	281.19		0.04		281.96
Total	9.86	2.57	1.90	0.00		0.22	0.22		0.22	0.22	0.00	281.19		0.04		281.96

3.6 Architectural Coating - 2015

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.09	0.09	1.07	0.00	0.20	0.01	0.20	0.00	0.01	0.01		206.03		0.01		206.25
Total	0.09	0.09	1.07	0.00	0.20	0.01	0.20	0.00	0.01	0.01		206.03		0.01		206.25

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

- Increase Density
- Improve Walkability Design
- Improve Pedestrian Network
- Implement Trip Reduction Program
- Provide Riade Sharing Program

	ROG	NOx	CO	SO2	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	3.48	8.10	30.98	0.08	8.46	0.42	8.87	0.12	0.40	0.52		6,867.29		0.26		6,872.67
Unmitigated	3.85	9.01	35.21	0.09	9.85	0.48	10.33	0.14	0.46	0.60		7,958.61		0.29		7,964.79
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	86.13	90.72	78.93	285,621	245,341
Condo/Townhouse	738.08	801.92	679.84	2,460,895	2,113,846
Total	824.21	892.64	758.77	2,746,515	2,359,187

4.3 Trip Type Information

Land Use	Miles			Trip %		
	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
Single Family Housing	12.70	7.00	9.50	40.20	19.20	40.60
Condo/Townhouse	12.70	7.00	9.50	40.20	19.20	40.60

5.0 Energy Detail

5.1 Mitigation Measures Energy

Exceed Title 24

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	lb/day										lb/day					
NaturalGas Mitigated	0.08	0.65	0.28	0.00		0.00	0.05		0.00	0.05		835.62		0.02	0.02	840.71
NaturalGas Unmitigated	0.09	0.79	0.34	0.01		0.00	0.06		0.00	0.06		1,009.59		0.02	0.02	1,015.73
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	lb/day										lb/day					
Condo/Townhouse	7560.65	0.08	0.70	0.30	0.00		0.00	0.06		0.00	0.06		889.49		0.02	0.02	894.90
Single Family Housing	1020.87	0.01	0.09	0.04	0.00		0.00	0.01		0.00	0.01		120.10		0.00	0.00	120.83
Total		0.09	0.79	0.34	0.00		0.00	0.07		0.00	0.07		1,009.59		0.02	0.02	1,015.73

5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	lb/day										lb/day					
Condo/Townhouse	6.2568	0.07	0.58	0.25	0.00		0.00	0.05		0.00	0.05		736.09		0.01	0.01	740.57
Single Family Housing	0.845973	0.01	0.08	0.03	0.00		0.00	0.01		0.00	0.01		99.53		0.00	0.00	100.13
Total		0.08	0.66	0.28	0.00		0.00	0.06		0.00	0.06		835.62		0.01	0.01	840.70

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
- Use only Natural Gas Hearths
- No Hearths Installed

	ROG	NOx	CO	SO2	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	3.12	0.12	10.13	0.00		0.00	0.06		0.00	0.06	0.00	18.19		0.02	0.00	18.57
Unmitigated	16.00	0.71	50.19	0.10		0.00	6.45		0.00	6.45	853.86	2,196.19		3.40	0.05	3,137.61
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	0.27					0.00	0.00		0.00	0.00						0.00
Consumer Products	2.54					0.00	0.00		0.00	0.00						0.00
Hearth	12.88	0.59	40.05	0.10		0.00	6.40		0.00	6.40	853.86	2,178.00		3.38	0.05	3,119.05
Landscaping	0.31	0.12	10.13	0.00		0.00	0.06		0.00	0.06		18.19		0.02		18.57
Total	16.00	0.71	50.18	0.10		0.00	6.46		0.00	6.46	853.86	2,196.19		3.40	0.05	3,137.62

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	0.27					0.00	0.00		0.00	0.00						0.00
Consumer Products	2.54					0.00	0.00		0.00	0.00						0.00
Hearth	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
Landscaping	0.31	0.12	10.13	0.00		0.00	0.06		0.00	0.06		18.19		0.02		18.57
Total	3.12	0.12	10.13	0.00		0.00	0.06		0.00	0.06	0.00	18.19		0.02	0.00	18.57

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

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

Serrano Summit Construction Phase 2
South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Condo/Townhouse	112	Dwelling Unit
Single Family Housing	9	Dwelling Unit

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Utility Company	Southern California Edison
Climate Zone	9	Precipitation Freq (Days)	31		

1.3 User Entered Comments

- Project Characteristics -
- Land Use -
- Construction Phase - construction schedule based on information provided by applicant
- Off-road Equipment -
- Trips and VMT -
- Demolition -

Grading - Total acreage=9.85

Vehicle Trips -

Woodstoves - Wood stoves are not proposed, fireplaces would be gas

Energy Use -

Land Use Change -

Sequestration -

Construction Off-road Equipment Mitigation - Construction mitigation per SCAQMD

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

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	6.07	45.76	31.13	0.06	6.52	2.74	9.01	3.31	2.74	5.79	0.00	5,409.72	0.00	0.54	0.00	5,421.15
2015	9.96	31.51	29.04	0.06	1.41	1.90	3.31	0.02	1.89	1.91	0.00	5,327.01	0.00	0.45	0.00	5,336.43
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	6.07	45.76	31.13	0.06	2.50	2.74	4.99	1.23	2.74	3.71	0.00	5,409.72	0.00	0.54	0.00	5,421.15
2015	9.96	31.51	29.04	0.06	1.06	1.90	2.96	0.02	1.89	1.91	0.00	5,327.01	0.00	0.45	0.00	5,336.43
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	16.00	0.71	50.19	0.10		0.00	6.45		0.00	6.45	853.86	2,196.19		3.40	0.05	3,137.61
Energy	0.09	0.79	0.34	0.01		0.00	0.06		0.00	0.06		1,009.59		0.02	0.02	1,015.73
Mobile	3.97	9.55	33.88	0.09	9.85	0.49	10.33	0.14	0.47	0.61		7,407.46		0.30		7,413.76
Total	20.06	11.05	84.41	0.20	9.85	0.49	16.84	0.14	0.47	7.12	853.86	10,613.24		3.72	0.07	11,567.10

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	3.12	0.12	10.13	0.00		0.00	0.06		0.00	0.06	0.00	18.19		0.02	0.00	18.57
Energy	0.08	0.65	0.28	0.00		0.00	0.05		0.00	0.05		835.62		0.02	0.02	840.71
Mobile	3.57	8.54	30.13	0.07	8.46	0.42	8.88	0.12	0.41	0.53		6,392.04		0.26		6,397.54
Total	6.77	9.31	40.54	0.07	8.46	0.42	8.99	0.12	0.41	0.64	0.00	7,245.85		0.30	0.02	7,256.82

3.0 Construction Detail

3.1 Mitigation Measures Construction

- Use DPF for Construction Equipment
- Replace Ground Cover
- Water Exposed Area
- Water Unpaved Roads
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

3.2 Mass Grading - 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					6.19	0.00	6.19	3.31	0.00	3.31						0.00
Off-Road	5.98	45.66	30.18	0.05		2.47	2.47		2.47	2.47		5,240.06		0.53		5,251.29
Total	5.98	45.66	30.18	0.05	6.19	2.47	8.66	3.31	2.47	5.78		5,240.06		0.53		5,251.29

3.2 Mass Grading - 2014

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.09	0.10	0.95	0.00	0.23	0.01	0.24	0.00	0.01	0.01		169.66		0.01		169.86
Total	0.09	0.10	0.95	0.00	0.23	0.01	0.24	0.00	0.01	0.01		169.66		0.01		169.86

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					2.29	0.00	2.29	1.23	0.00	1.23						0.00
Off-Road	5.98	45.66	30.18	0.05		2.47	2.47		2.47	2.47	0.00	5,240.06		0.53		5,251.29
Total	5.98	45.66	30.18	0.05	2.29	2.47	4.76	1.23	2.47	3.70	0.00	5,240.06		0.53		5,251.29

3.2 Mass Grading - 2014

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.09	0.10	0.95	0.00	0.17	0.01	0.18	0.00	0.01	0.01		169.66		0.01		169.86
Total	0.09	0.10	0.95	0.00	0.17	0.01	0.18	0.00	0.01	0.01		169.66		0.01		169.86

3.3 Fine Grading - 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					6.29	0.00	6.29	3.31	0.00	3.31						0.00
Off-Road	5.98	45.66	30.18	0.05		2.47	2.47		2.47	2.47		5,240.06		0.53		5,251.29
Total	5.98	45.66	30.18	0.05	6.29	2.47	8.76	3.31	2.47	5.78		5,240.06		0.53		5,251.29

3.3 Fine Grading - 2014

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.09	0.10	0.95	0.00	0.23	0.01	0.24	0.00	0.01	0.01		169.66		0.01		169.86
Total	0.09	0.10	0.95	0.00	0.23	0.01	0.24	0.00	0.01	0.01		169.66		0.01		169.86

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					2.33	0.00	2.33	1.23	0.00	1.23						0.00
Off-Road	5.98	45.66	30.18	0.05		2.47	2.47		2.47	2.47	0.00	5,240.06		0.53		5,251.29
Total	5.98	45.66	30.18	0.05	2.33	2.47	4.80	1.23	2.47	3.70	0.00	5,240.06		0.53		5,251.29

3.3 Fine Grading - 2014

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.09	0.10	0.95	0.00	0.17	0.01	0.18	0.00	0.01	0.01		169.66		0.01		169.86
Total	0.09	0.10	0.95	0.00	0.17	0.01	0.18	0.00	0.01	0.01		169.66		0.01		169.86

3.4 Paving - 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	5.20	32.09	20.70	0.03		2.74	2.74		2.74	2.74		2,917.65		0.47		2,927.48
Paving	0.00					0.00	0.00		0.00	0.00						0.00
Total	5.20	32.09	20.70	0.03		2.74	2.74		2.74	2.74		2,917.65		0.47		2,927.48

3.4 Paving - 2014

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.09	0.10	0.95	0.00	0.23	0.01	0.24	0.00	0.01	0.01		169.66		0.01		169.86
Total	0.09	0.10	0.95	0.00	0.23	0.01	0.24	0.00	0.01	0.01		169.66		0.01		169.86

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	5.20	32.09	20.70	0.03		2.74	2.74		2.74	2.74	0.00	2,917.65		0.47		2,927.48
Paving	0.00					0.00	0.00		0.00	0.00						0.00
Total	5.20	32.09	20.70	0.03		2.74	2.74		2.74	2.74	0.00	2,917.65		0.47		2,927.48

3.4 Paving - 2014

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.09	0.10	0.95	0.00	0.17	0.01	0.18	0.00	0.01	0.01		169.66		0.01		169.86
Total	0.09	0.10	0.95	0.00	0.17	0.01	0.18	0.00	0.01	0.01		169.66		0.01		169.86

3.5 Building - 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	4.74	32.06	23.20	0.04		2.02	2.02		2.02	2.02		4,040.61		0.42		4,049.51
Total	4.74	32.06	23.20	0.04		2.02	2.02		2.02	2.02		4,040.61		0.42		4,049.51

3.5 Building - 2014

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.18	2.04	1.29	0.00	0.12	0.07	0.19	0.00	0.06	0.07		356.32		0.01		356.51
Worker	0.52	0.56	5.31	0.01	1.29	0.04	1.33	0.02	0.04	0.06		950.07		0.05		951.21
Total	0.70	2.60	6.60	0.01	1.41	0.11	1.52	0.02	0.10	0.13		1,306.39		0.06		1,307.72

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	4.74	32.06	23.20	0.04		2.02	2.02		2.02	2.02	0.00	4,040.61		0.42		4,049.51
Total	4.74	32.06	23.20	0.04		2.02	2.02		2.02	2.02	0.00	4,040.61		0.42		4,049.51

3.5 Building - 2014

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.18	2.04	1.29	0.00	0.09	0.07	0.16	0.00	0.06	0.07		356.32		0.01		356.51
Worker	0.52	0.56	5.31	0.01	0.97	0.04	1.01	0.02	0.04	0.06		950.07		0.05		951.21
Total	0.70	2.60	6.60	0.01	1.06	0.11	1.17	0.02	0.10	0.13		1,306.39		0.06		1,307.72

3.5 Building - 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	4.34	29.16	22.98	0.04		1.80	1.80		1.80	1.80		4,040.61		0.39		4,048.81
Total	4.34	29.16	22.98	0.04		1.80	1.80		1.80	1.80		4,040.61		0.39		4,048.81

3.5 Building - 2015

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.16	1.85	1.19	0.00	0.12	0.06	0.18	0.00	0.06	0.06		356.90		0.01		357.07
Worker	0.48	0.51	4.87	0.01	1.29	0.04	1.33	0.02	0.04	0.06		929.49		0.05		930.54
Total	0.64	2.36	6.06	0.01	1.41	0.10	1.51	0.02	0.10	0.12		1,286.39		0.06		1,287.61

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	4.34	29.16	22.98	0.04		1.80	1.80		1.80	1.80	0.00	4,040.61		0.39		4,048.81
Total	4.34	29.16	22.98	0.04		1.80	1.80		1.80	1.80	0.00	4,040.61		0.39		4,048.81

3.5 Building - 2015

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.16	1.85	1.19	0.00	0.09	0.06	0.15	0.00	0.06	0.06		356.90		0.01		357.07
Worker	0.48	0.51	4.87	0.01	0.97	0.04	1.01	0.02	0.04	0.06		929.49		0.05		930.54
Total	0.64	2.36	6.06	0.01	1.06	0.10	1.16	0.02	0.10	0.12		1,286.39		0.06		1,287.61

3.6 Architectural Coating - 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					
Archit. Coating	9.45					0.00	0.00		0.00	0.00						0.00
Off-Road	0.41	2.57	1.90	0.00		0.22	0.22		0.22	0.22		281.19		0.04		281.96
Total	9.86	2.57	1.90	0.00		0.22	0.22		0.22	0.22		281.19		0.04		281.96

3.6 Architectural Coating - 2015

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.10	0.10	0.99	0.00	0.26	0.01	0.27	0.00	0.01	0.01		188.11		0.01		188.32
Total	0.10	0.10	0.99	0.00	0.26	0.01	0.27	0.00	0.01	0.01		188.11		0.01		188.32

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	9.45					0.00	0.00		0.00	0.00						0.00
Off-Road	0.41	2.57	1.90	0.00		0.22	0.22		0.22	0.22	0.00	281.19		0.04		281.96
Total	9.86	2.57	1.90	0.00		0.22	0.22		0.22	0.22	0.00	281.19		0.04		281.96

3.6 Architectural Coating - 2015

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.10	0.10	0.99	0.00	0.20	0.01	0.20	0.00	0.01	0.01		188.11		0.01		188.32
Total	0.10	0.10	0.99	0.00	0.20	0.01	0.20	0.00	0.01	0.01		188.11		0.01		188.32

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

- Increase Density
- Improve Walkability Design
- Improve Pedestrian Network
- Implement Trip Reduction Program
- Provide Riade Sharing Program

	ROG	NOx	CO	SO2	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	3.57	8.54	30.13	0.07	8.46	0.42	8.88	0.12	0.41	0.53		6,392.04		0.26		6,397.54
Unmitigated	3.97	9.55	33.88	0.09	9.85	0.49	10.33	0.14	0.47	0.61		7,407.46		0.30		7,413.76
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	86.13	90.72	78.93	285,621	245,341
Condo/Townhouse	738.08	801.92	679.84	2,460,895	2,113,846
Total	824.21	892.64	758.77	2,746,515	2,359,187

4.3 Trip Type Information

Land Use	Miles			Trip %		
	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
Single Family Housing	12.70	7.00	9.50	40.20	19.20	40.60
Condo/Townhouse	12.70	7.00	9.50	40.20	19.20	40.60

5.0 Energy Detail

5.1 Mitigation Measures Energy

Exceed Title 24

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	lb/day										lb/day					
NaturalGas Mitigated	0.08	0.65	0.28	0.00		0.00	0.05		0.00	0.05		835.62		0.02	0.02	840.71
NaturalGas Unmitigated	0.09	0.79	0.34	0.01		0.00	0.06		0.00	0.06		1,009.59		0.02	0.02	1,015.73
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	lb/day										lb/day					
Condo/Townhouse	7560.65	0.08	0.70	0.30	0.00		0.00	0.06		0.00	0.06		889.49		0.02	0.02	894.90
Single Family Housing	1020.87	0.01	0.09	0.04	0.00		0.00	0.01		0.00	0.01		120.10		0.00	0.00	120.83
Total		0.09	0.79	0.34	0.00		0.00	0.07		0.00	0.07		1,009.59		0.02	0.02	1,015.73

5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	lb/day										lb/day					
Condo/Townhouse	6.2568	0.07	0.58	0.25	0.00		0.00	0.05		0.00	0.05		736.09		0.01	0.01	740.57
Single Family Housing	0.845973	0.01	0.08	0.03	0.00		0.00	0.01		0.00	0.01		99.53		0.00	0.00	100.13
Total		0.08	0.66	0.28	0.00		0.00	0.06		0.00	0.06		835.62		0.01	0.01	840.70

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
- Use only Natural Gas Hearths
- No Hearths Installed

	ROG	NOx	CO	SO2	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	3.12	0.12	10.13	0.00		0.00	0.06		0.00	0.06	0.00	18.19		0.02	0.00	18.57
Unmitigated	16.00	0.71	50.19	0.10		0.00	6.45		0.00	6.45	853.86	2,196.19		3.40	0.05	3,137.61
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	0.27					0.00	0.00		0.00	0.00						0.00
Consumer Products	2.54					0.00	0.00		0.00	0.00						0.00
Hearth	12.88	0.59	40.05	0.10		0.00	6.40		0.00	6.40	853.86	2,178.00		3.38	0.05	3,119.05
Landscaping	0.31	0.12	10.13	0.00		0.00	0.06		0.00	0.06		18.19		0.02		18.57
Total	16.00	0.71	50.18	0.10		0.00	6.46		0.00	6.46	853.86	2,196.19		3.40	0.05	3,137.62

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	0.27					0.00	0.00		0.00	0.00						0.00
Consumer Products	2.54					0.00	0.00		0.00	0.00						0.00
Hearth	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
Landscaping	0.31	0.12	10.13	0.00		0.00	0.06		0.00	0.06		18.19		0.02		18.57
Total	3.12	0.12	10.13	0.00		0.00	0.06		0.00	0.06	0.00	18.19		0.02	0.00	18.57

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

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

Serrano Summit Construction Phase 3
South Coast AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Condo/Townhouse	217	Dwelling Unit
Single Family Housing	43	Dwelling Unit

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Utility Company	Southern California Edison
Climate Zone	9	Precipitation Freq (Days)	31		

1.3 User Entered Comments

- Project Characteristics -
- Land Use -
- Construction Phase - construction schedule based on information provided by applicant
- Off-road Equipment -
- Trips and VMT -
- Demolition -

Grading - Total acreage=9.85

Vehicle Trips -

Woodstoves - Wood stoves are not proposed, fireplaces would be gas

Energy Use -

Land Use Change -

Sequestration -

Construction Off-road Equipment Mitigation - Construction mitigation per SCAQMD

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

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					
2015	0.82	5.93	4.26	0.01	0.56	0.30	0.86	0.19	0.30	0.48	0.00	801.91	801.91	0.07	0.00	803.32
2016	1.39	1.40	1.62	0.00	0.13	0.08	0.22	0.00	0.08	0.09	0.00	282.42	282.42	0.02	0.00	282.84
Total	2.21	7.33	5.88	0.01	0.69	0.38	1.08	0.19	0.38	0.57	0.00	1,084.33	1,084.33	0.09	0.00	1,086.16

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					
2015	0.82	5.93	4.26	0.01	0.26	0.30	0.55	0.07	0.30	0.37	0.00	801.91	801.91	0.07	0.00	803.32
2016	1.39	1.40	1.62	0.00	0.10	0.08	0.18	0.00	0.08	0.09	0.00	282.42	282.42	0.02	0.00	282.84
Total	2.21	7.33	5.88	0.01	0.36	0.38	0.73	0.07	0.38	0.46	0.00	1,084.33	1,084.33	0.09	0.00	1,086.16

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	2.16	0.07	5.60	0.00		0.00	0.28		0.00	0.28	27.62	165.68	193.30	0.09	0.00	196.38
Energy	0.04	0.33	0.14	0.00		0.00	0.03		0.00	0.03	0.00	739.44	739.44	0.02	0.01	744.00
Mobile	1.39	3.40	12.90	0.03	3.33	0.18	3.51	0.05	0.17	0.23	0.00	2,579.03	2,579.03	0.10	0.00	2,581.15
Waste						0.00	0.00		0.00	0.00	30.50	0.00	30.50	1.80	0.00	68.35
Water						0.00	0.00		0.00	0.00	0.00	98.86	98.86	0.52	0.01	114.31
Total	3.59	3.80	18.64	0.03	3.33	0.18	3.82	0.05	0.17	0.54	58.12	3,583.01	3,641.13	2.53	0.02	3,704.19

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	1.30	0.05	3.97	0.00		0.00	0.02		0.00	0.02	0.00	6.47	6.47	0.01	0.00	6.60
Energy	0.03	0.27	0.12	0.00		0.00	0.02		0.00	0.02	0.00	633.96	633.96	0.02	0.01	637.88
Mobile	1.26	3.06	11.45	0.03	2.86	0.16	3.02	0.05	0.15	0.20	0.00	2,225.63	2,225.63	0.09	0.00	2,227.48
Waste						0.00	0.00		0.00	0.00	30.50	0.00	30.50	1.80	0.00	68.35
Water						0.00	0.00		0.00	0.00	0.00	83.89	83.89	0.42	0.01	96.28
Total	2.59	3.38	15.54	0.03	2.86	0.16	3.06	0.05	0.15	0.24	30.50	2,949.95	2,980.45	2.34	0.02	3,036.59

3.0 Construction Detail

3.1 Mitigation Measures Construction

- Use DPF for Construction Equipment
- Replace Ground Cover
- Water Exposed Area
- Water Unpaved Roads
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

3.2 Mass Grading - 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					
Fugitive Dust					0.25	0.00	0.25	0.11	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.34	2.66	1.57	0.00		0.12	0.12		0.12	0.12	0.00	315.08	315.08	0.03	0.00	315.66
Total	0.34	2.66	1.57	0.00	0.25	0.12	0.37	0.11	0.12	0.23	0.00	315.08	315.08	0.03	0.00	315.66

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	0.00	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
Vendor	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
Worker	0.00	0.00	0.04	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	6.61	6.61	0.00	0.00	6.61
Total	0.00	0.00	0.04	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	6.61	6.61	0.00	0.00	6.61

3.2 Mass Grading - 2015

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					0.09	0.00	0.09	0.04	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.34	2.66	1.57	0.00		0.12	0.12		0.12	0.12	0.00	315.08	315.08	0.03	0.00	315.66
Total	0.34	2.66	1.57	0.00	0.09	0.12	0.21	0.04	0.12	0.16	0.00	315.08	315.08	0.03	0.00	315.66

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	0.00	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
Vendor	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
Worker	0.00	0.00	0.04	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	6.61	6.61	0.00	0.00	6.61
Total	0.00	0.00	0.04	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	6.61	6.61	0.00	0.00	6.61

3.3 Fine Grading - 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					
Fugitive Dust					0.18	0.00	0.18	0.07	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.21	1.62	0.96	0.00		0.07	0.07		0.07	0.07	0.00	192.00	192.00	0.02	0.00	192.35
Total	0.21	1.62	0.96	0.00	0.18	0.07	0.25	0.07	0.07	0.14	0.00	192.00	192.00	0.02	0.00	192.35

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	0.00	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
Vendor	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
Worker	0.00	0.00	0.02	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	4.03	4.03	0.00	0.00	4.03
Total	0.00	0.00	0.02	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	4.03	4.03	0.00	0.00	4.03

3.3 Fine Grading - 2015

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					0.07	0.00	0.07	0.03	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.21	1.62	0.96	0.00		0.07	0.07		0.07	0.07	0.00	192.00	192.00	0.02	0.00	192.35
Total	0.21	1.62	0.96	0.00	0.07	0.07	0.14	0.03	0.07	0.10	0.00	192.00	192.00	0.02	0.00	192.35

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	0.00	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
Vendor	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
Worker	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.03	4.03	0.00	0.00	4.03
Total	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.03	4.03	0.00	0.00	4.03

3.4 Paving - 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	0.02	0.15	0.10	0.00		0.01	0.01		0.01	0.01	0.00	13.23	13.23	0.00	0.00	13.27
Paving	0.00					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.02	0.15	0.10	0.00		0.01	0.01		0.01	0.01	0.00	13.23	13.23	0.00	0.00	13.27

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	0.00	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
Vendor	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
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.77	0.77	0.00	0.00	0.78
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.77	0.77	0.00	0.00	0.78

3.4 Paving - 2015

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	0.02	0.15	0.10	0.00		0.01	0.01		0.01	0.01	0.00	13.23	13.23	0.00	0.00	13.27
Paving	0.00					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.02	0.15	0.10	0.00		0.01	0.01		0.01	0.01	0.00	13.23	13.23	0.00	0.00	13.27

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	0.00	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
Vendor	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
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.77	0.77	0.00	0.00	0.78
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.77	0.77	0.00	0.00	0.78

3.5 Building - 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	0.19	1.28	1.01	0.00		0.08	0.08		0.08	0.08	0.00	161.24	161.24	0.02	0.00	161.57
Total	0.19	1.28	1.01	0.00		0.08	0.08		0.08	0.08	0.00	161.24	161.24	0.02	0.00	161.57

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	0.00	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
Vendor	0.02	0.17	0.11	0.00	0.01	0.01	0.02	0.00	0.01	0.01	0.00	30.83	30.83	0.00	0.00	30.85
Worker	0.04	0.04	0.45	0.00	0.10	0.00	0.11	0.00	0.00	0.01	0.00	78.12	78.12	0.00	0.00	78.21
Total	0.06	0.21	0.56	0.00	0.11	0.01	0.13	0.00	0.01	0.02	0.00	108.95	108.95	0.00	0.00	109.06

3.5 Building - 2015

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	0.19	1.28	1.01	0.00		0.08	0.08		0.08	0.08	0.00	161.24	161.24	0.02	0.00	161.57
Total	0.19	1.28	1.01	0.00		0.08	0.08		0.08	0.08	0.00	161.24	161.24	0.02	0.00	161.57

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	0.00	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
Vendor	0.02	0.17	0.11	0.00	0.01	0.01	0.01	0.00	0.01	0.01	0.00	30.83	30.83	0.00	0.00	30.85
Worker	0.04	0.04	0.45	0.00	0.08	0.00	0.08	0.00	0.00	0.01	0.00	78.12	78.12	0.00	0.00	78.21
Total	0.06	0.21	0.56	0.00	0.09	0.01	0.09	0.00	0.01	0.02	0.00	108.95	108.95	0.00	0.00	109.06

3.5 Building - 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	0.16	1.09	0.93	0.00		0.06	0.06		0.06	0.06	0.00	150.25	150.25	0.01	0.00	150.53
Total	0.16	1.09	0.93	0.00		0.06	0.06		0.06	0.06	0.00	150.25	150.25	0.01	0.00	150.53

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	0.00	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
Vendor	0.01	0.14	0.09	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	28.80	28.80	0.00	0.00	28.81
Worker	0.04	0.04	0.39	0.00	0.10	0.00	0.10	0.00	0.00	0.00	0.00	71.57	71.57	0.00	0.00	71.64
Total	0.05	0.18	0.48	0.00	0.11	0.00	0.11	0.00	0.00	0.00	0.00	100.37	100.37	0.00	0.00	100.45

3.5 Building - 2016

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	0.16	1.09	0.93	0.00		0.06	0.06		0.06	0.06	0.00	150.25	150.25	0.01	0.00	150.53
Total	0.16	1.09	0.93	0.00		0.06	0.06		0.06	0.06	0.00	150.25	150.25	0.01	0.00	150.53

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	0.00	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
Vendor	0.01	0.14	0.09	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	28.80	28.80	0.00	0.00	28.81
Worker	0.04	0.04	0.39	0.00	0.07	0.00	0.08	0.00	0.00	0.00	0.00	71.57	71.57	0.00	0.00	71.64
Total	0.05	0.18	0.48	0.00	0.08	0.00	0.09	0.00	0.00	0.00	0.00	100.37	100.37	0.00	0.00	100.45

3.6 Architectural Coating - 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					
Archit. Coating	1.15					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.02	0.13	0.10	0.00		0.01	0.01		0.01	0.01	0.00	13.52	13.52	0.00	0.00	13.55
Total	1.17	0.13	0.10	0.00		0.01	0.01		0.01	0.01	0.00	13.52	13.52	0.00	0.00	13.55

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	0.00	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
Vendor	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
Worker	0.01	0.01	0.10	0.00	0.02	0.00	0.03	0.00	0.00	0.00	0.00	18.29	18.29	0.00	0.00	18.31
Total	0.01	0.01	0.10	0.00	0.02	0.00	0.03	0.00	0.00	0.00	0.00	18.29	18.29	0.00	0.00	18.31

3.6 Architectural Coating - 2016

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	1.15					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.02	0.13	0.10	0.00		0.01	0.01		0.01	0.01	0.00	13.52	13.52	0.00	0.00	13.55
Total	1.17	0.13	0.10	0.00		0.01	0.01		0.01	0.01	0.00	13.52	13.52	0.00	0.00	13.55

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	0.00	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
Vendor	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
Worker	0.01	0.01	0.10	0.00	0.02	0.00	0.02	0.00	0.00	0.00	0.00	18.29	18.29	0.00	0.00	18.31
Total	0.01	0.01	0.10	0.00	0.02	0.00	0.02	0.00	0.00	0.00	0.00	18.29	18.29	0.00	0.00	18.31

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

- Increase Density
- Improve Walkability Design
- Improve Pedestrian Network
- Implement Trip Reduction Program
- Provide Riade Sharing Program

	ROG	NOx	CO	SO2	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	1.26	3.06	11.45	0.03	2.86	0.16	3.02	0.05	0.15	0.20	0.00	2,225.63	2,225.63	0.09	0.00	2,227.48
Unmitigated	1.39	3.40	12.90	0.03	3.33	0.18	3.51	0.05	0.17	0.23	0.00	2,579.03	2,579.03	0.10	0.00	2,581.15
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	411.51	433.44	377.11	1,364,632	1,172,184
Condo/Townhouse	1,430.03	1,553.72	1317.19	4,767,984	4,095,576
Total	1,841.54	1,987.16	1,694.30	6,132,615	5,267,760

4.3 Trip Type Information

Land Use	Miles			Trip %		
	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
Single Family Housing	12.70	7.00	9.50	40.20	19.20	40.60
Condo/Townhouse	12.70	7.00	9.50	40.20	19.20	40.60

5.0 Energy Detail

5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

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					
Electricity Mitigated						0.00	0.00		0.00	0.00	0.00	319.11	319.11	0.01	0.01	321.11
Electricity Unmitigated						0.00	0.00		0.00	0.00	0.00	359.11	359.11	0.02	0.01	361.36
NaturalGas Mitigated	0.03	0.27	0.12	0.00		0.00	0.02		0.00	0.02	0.00	314.85	314.85	0.01	0.01	316.76
NaturalGas Unmitigated	0.04	0.33	0.14	0.00		0.00	0.03		0.00	0.03	0.00	380.33	380.33	0.01	0.01	382.64
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	tons/yr										MT/yr					
Condo/Townhouse	5.3468e+006	0.03	0.25	0.10	0.00		0.00	0.02		0.00	0.02	0.00	285.33	285.33	0.01	0.01	287.06
Single Family Housing	1.78029e+006	0.01	0.08	0.03	0.00		0.00	0.01		0.00	0.01	0.00	95.00	95.00	0.00	0.00	95.58
Total		0.04	0.33	0.13	0.00		0.00	0.03		0.00	0.03	0.00	380.33	380.33	0.01	0.01	382.64

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	tons/yr										MT/yr					
Condo/Townhouse	4.42473e+006	0.02	0.20	0.09	0.00		0.00	0.02		0.00	0.02	0.00	236.12	236.12	0.00	0.00	237.56
Single Family Housing	1.47528e+006	0.01	0.07	0.03	0.00		0.00	0.01		0.00	0.01	0.00	78.73	78.73	0.00	0.00	79.21
Total		0.03	0.27	0.12	0.00		0.00	0.03		0.00	0.03	0.00	314.85	314.85	0.00	0.00	316.77

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
Condo/Townhouse	942774					274.23	0.01	0.00	275.94
Single Family Housing	291830					84.88	0.00	0.00	85.42
Total						359.11	0.01	0.00	361.36

Mitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
Condo/Townhouse	837852					243.71	0.01	0.00	245.23
Single Family Housing	259245					75.41	0.00	0.00	75.88
Total						319.12	0.01	0.00	321.11

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
- Use only Natural Gas Hearths
- No Hearths Installed

	ROG	NOx	CO	SO2	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	1.30	0.05	3.97	0.00		0.00	0.02		0.00	0.02	0.00	6.47	6.47	0.01	0.00	6.60
Unmitigated	2.16	0.07	5.60	0.00		0.00	0.28		0.00	0.28	27.62	165.68	193.30	0.09	0.00	196.38
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	0.12					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	1.06					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.86	0.02	1.63	0.00		0.00	0.26		0.00	0.26	27.62	159.21	186.83	0.08	0.00	189.78
Landscaping	0.12	0.05	3.97	0.00		0.00	0.02		0.00	0.02	0.00	6.47	6.47	0.01	0.00	6.60
Total	2.16	0.07	5.60	0.00		0.00	0.28		0.00	0.28	27.62	165.68	193.30	0.09	0.00	196.38

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	0.12					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	1.06					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	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
Landscaping	0.12	0.05	3.97	0.00		0.00	0.02		0.00	0.02	0.00	6.47	6.47	0.01	0.00	6.60
Total	1.30	0.05	3.97	0.00		0.00	0.02		0.00	0.02	0.00	6.47	6.47	0.01	0.00	6.60

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

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr				MT/yr			
Mitigated					83.89	0.42	0.01	96.28
Unmitigated					98.86	0.52	0.01	114.31
Total	NA	NA	NA	NA	NA	NA	NA	NA

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
Condo/Townhouse	14.1384 / 8.91335					82.51	0.44	0.01	95.41
Single Family Housing	2.80162 / 1.76624					16.35	0.09	0.00	18.91
Total						98.86	0.53	0.01	114.32

Mitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
Condo/Townhouse	11.3107 / 8.36964					70.01	0.35	0.01	80.36
Single Family Housing	2.2413 / 1.6585					13.87	0.07	0.00	15.92
Total						83.88	0.42	0.01	96.28

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
	tons/yr				MT/yr			
Mitigated					30.50	1.80	0.00	68.35
Unmitigated					30.50	1.80	0.00	68.35
Total	NA	NA	NA	NA	NA	NA	NA	NA

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
Condo/Townhouse	99.82					20.26	1.20	0.00	45.41
Single Family Housing	50.43					10.24	0.60	0.00	22.94
Total						30.50	1.80	0.00	68.35

8.2 Waste by Land Use

Mitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
Condo/Townhouse	99.82					20.26	1.20	0.00	45.41
Single Family Housing	50.43					10.24	0.60	0.00	22.94
Total						30.50	1.80	0.00	68.35

9.0 Vegetation

Serrano Summit Construction Phase 3
South Coast AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Condo/Townhouse	217	Dwelling Unit
Single Family Housing	43	Dwelling Unit

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Utility Company	Southern California Edison
Climate Zone	9	Precipitation Freq (Days)	31		

1.3 User Entered Comments

- Project Characteristics -
- Land Use -
- Construction Phase - construction schedule based on information provided by applicant
- Off-road Equipment -
- Trips and VMT -
- Demolition -

Grading - Total acreage=9.85

Vehicle Trips -

Woodstoves - Wood stoves are not proposed, fireplaces would be gas

Energy Use -

Land Use Change -

Sequestration -

Construction Off-road Equipment Mitigation - Construction mitigation per SCAQMD

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

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					
2015	10.68	83.34	50.30	0.10	9.39	3.81	13.20	3.31	3.81	7.12	0.00	11,099.04	0.00	0.95	0.00	11,119.07
2016	22.25	30.90	34.94	0.07	2.90	1.79	4.69	0.04	1.77	1.82	0.00	6,867.21	0.00	0.47	0.00	6,877.18
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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					
2015	10.68	83.34	50.30	0.10	3.59	3.81	7.40	1.23	3.81	5.04	0.00	11,099.04	0.00	0.95	0.00	11,119.07
2016	22.25	30.90	34.94	0.07	2.18	1.79	3.97	0.04	1.77	1.82	0.00	6,867.21	0.00	0.47	0.00	6,877.18
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	34.80	1.52	107.84	0.21		0.00	13.87		0.00	13.86	1,834.75	4,719.09		7.30	0.11	6,741.98
Energy	0.21	1.80	0.77	0.01		0.00	0.15		0.00	0.15		2,297.21		0.04	0.04	2,311.19
Mobile	8.56	20.06	78.38	0.21	21.92	1.07	22.99	0.31	1.03	1.35		17,717.14		0.65		17,730.90
Total	43.57	23.38	186.99	0.43	21.92	1.07	37.01	0.31	1.03	15.36	1,834.75	24,733.44		7.99	0.15	26,784.07

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	7.12	0.25	21.78	0.00		0.00	0.12		0.00	0.12	0.00	39.09		0.04	0.00	39.89
Energy	0.17	1.49	0.63	0.01		0.00	0.12		0.00	0.12		1,901.70		0.04	0.03	1,913.27
Mobile	7.75	18.03	68.97	0.18	18.83	0.93	19.76	0.27	0.89	1.16		15,287.68		0.57		15,299.66
Total	15.04	19.77	91.38	0.19	18.83	0.93	20.00	0.27	0.89	1.40	0.00	17,228.47		0.65	0.03	17,252.82

3.0 Construction Detail

3.1 Mitigation Measures Construction

- Use DPF for Construction Equipment
- Replace Ground Cover
- Water Exposed Area
- Water Unpaved Roads
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

3.2 Mass Grading - 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					
Fugitive Dust					7.89	0.00	7.89	3.31	0.00	3.31						0.00
Off-Road	10.57	83.24	49.03	0.10		3.80	3.80		3.80	3.80		10,856.65		0.94		10,876.42
Total	10.57	83.24	49.03	0.10	7.89	3.80	11.69	3.31	3.80	7.11		10,856.65		0.94		10,876.42

3.2 Mass Grading - 2015

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.11	0.11	1.26	0.00	0.31	0.01	0.32	0.00	0.01	0.01		242.38		0.01		242.65
Total	0.11	0.11	1.26	0.00	0.31	0.01	0.32	0.00	0.01	0.01		242.38		0.01		242.65

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					2.92	0.00	2.92	1.23	0.00	1.23						0.00
Off-Road	10.57	83.24	49.03	0.10		3.80	3.80		3.80	3.80	0.00	10,856.65		0.94		10,876.42
Total	10.57	83.24	49.03	0.10	2.92	3.80	6.72	1.23	3.80	5.03	0.00	10,856.65		0.94		10,876.42

3.2 Mass Grading - 2015

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.11	0.11	1.26	0.00	0.23	0.01	0.24	0.00	0.01	0.01		242.38		0.01		242.65
Total	0.11	0.11	1.26	0.00	0.23	0.01	0.24	0.00	0.01	0.01		242.38		0.01		242.65

3.3 Fine Grading - 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					
Fugitive Dust					9.08	0.00	9.08	3.31	0.00	3.31						0.00
Off-Road	10.57	83.24	49.03	0.10		3.80	3.80		3.80	3.80		10,856.65		0.94		10,876.42
Total	10.57	83.24	49.03	0.10	9.08	3.80	12.88	3.31	3.80	7.11		10,856.65		0.94		10,876.42

3.3 Fine Grading - 2015

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.11	0.11	1.26	0.00	0.31	0.01	0.32	0.00	0.01	0.01		242.38		0.01		242.65
Total	0.11	0.11	1.26	0.00	0.31	0.01	0.32	0.00	0.01	0.01		242.38		0.01		242.65

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					3.36	0.00	3.36	1.23	0.00	1.23						0.00
Off-Road	10.57	83.24	49.03	0.10		3.80	3.80		3.80	3.80	0.00	10,856.65		0.94		10,876.42
Total	10.57	83.24	49.03	0.10	3.36	3.80	7.16	1.23	3.80	5.03	0.00	10,856.65		0.94		10,876.42

3.3 Fine Grading - 2015

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.11	0.11	1.26	0.00	0.23	0.01	0.24	0.00	0.01	0.01		242.38		0.01		242.65
Total	0.11	0.11	1.26	0.00	0.23	0.01	0.24	0.00	0.01	0.01		242.38		0.01		242.65

3.4 Paving - 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	4.89	30.10	20.54	0.03		2.54	2.54		2.54	2.54		2,917.65		0.44		2,926.87
Paving	0.00					0.00	0.00		0.00	0.00						0.00
Total	4.89	30.10	20.54	0.03		2.54	2.54		2.54	2.54		2,917.65		0.44		2,926.87

3.4 Paving - 2015

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.08	0.08	0.95	0.00	0.23	0.01	0.24	0.00	0.01	0.01		181.79		0.01		181.99
Total	0.08	0.08	0.95	0.00	0.23	0.01	0.24	0.00	0.01	0.01		181.79		0.01		181.99

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	4.89	30.10	20.54	0.03		2.54	2.54		2.54	2.54	0.00	2,917.65		0.44		2,926.87
Paving	0.00					0.00	0.00		0.00	0.00						0.00
Total	4.89	30.10	20.54	0.03		2.54	2.54		2.54	2.54	0.00	2,917.65		0.44		2,926.87

3.4 Paving - 2015

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.08	0.08	0.95	0.00	0.17	0.01	0.18	0.00	0.01	0.01		181.79		0.01		181.99
Total	0.08	0.08	0.95	0.00	0.17	0.01	0.18	0.00	0.01	0.01		181.79		0.01		181.99

3.5 Building - 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	4.34	29.16	22.98	0.04		1.80	1.80		1.80	1.80		4,040.61		0.39		4,048.81
Total	4.34	29.16	22.98	0.04		1.80	1.80		1.80	1.80		4,040.61		0.39		4,048.81

3.5 Building - 2015

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.34	3.84	2.22	0.01	0.26	0.13	0.39	0.01	0.12	0.12		775.03		0.02		775.38
Worker	0.93	0.91	10.85	0.02	2.64	0.09	2.73	0.04	0.08	0.12		2,084.51		0.11		2,086.80
Total	1.27	4.75	13.07	0.03	2.90	0.22	3.12	0.05	0.20	0.24		2,859.54		0.13		2,862.18

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	4.34	29.16	22.98	0.04		1.80	1.80		1.80	1.80	0.00	4,040.61		0.39		4,048.81
Total	4.34	29.16	22.98	0.04		1.80	1.80		1.80	1.80	0.00	4,040.61		0.39		4,048.81

3.5 Building - 2015

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.34	3.84	2.22	0.01	0.20	0.13	0.33	0.01	0.12	0.12		775.03		0.02		775.38
Worker	0.93	0.91	10.85	0.02	1.98	0.09	2.07	0.04	0.08	0.12		2,084.51		0.11		2,086.80
Total	1.27	4.75	13.07	0.03	2.18	0.22	2.40	0.05	0.20	0.24		2,859.54		0.13		2,862.18

3.5 Building - 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	lb/day										lb/day					
Off-Road	3.99	26.52	22.80	0.04		1.58	1.58		1.58	1.58		4,040.61		0.36		4,048.10
Total	3.99	26.52	22.80	0.04		1.58	1.58		1.58	1.58		4,040.61		0.36		4,048.10

3.5 Building - 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	lb/day										lb/day					
Hauling	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
Vendor	0.31	3.54	2.05	0.01	0.26	0.12	0.38	0.01	0.11	0.11		777.00		0.02		777.32
Worker	0.88	0.83	10.09	0.02	2.64	0.09	2.73	0.04	0.09	0.12		2,049.60		0.10		2,051.76
Total	1.19	4.37	12.14	0.03	2.90	0.21	3.11	0.05	0.20	0.23		2,826.60		0.12		2,829.08

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	3.99	26.52	22.80	0.04		1.58	1.58		1.58	1.58	0.00	4,040.61		0.36		4,048.10
Total	3.99	26.52	22.80	0.04		1.58	1.58		1.58	1.58	0.00	4,040.61		0.36		4,048.10

3.5 Building - 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	lb/day										lb/day					
Hauling	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
Vendor	0.31	3.54	2.05	0.01	0.20	0.12	0.31	0.01	0.11	0.11		777.00		0.02		777.32
Worker	0.88	0.83	10.09	0.02	1.98	0.09	2.07	0.04	0.09	0.12		2,049.60		0.10		2,051.76
Total	1.19	4.37	12.14	0.03	2.18	0.21	2.38	0.05	0.20	0.23		2,826.60		0.12		2,829.08

3.6 Architectural Coating - 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	lb/day										lb/day					
Archit. Coating	21.70					0.00	0.00		0.00	0.00						0.00
Off-Road	0.37	2.37	1.88	0.00		0.20	0.20		0.20	0.20		281.19		0.03		281.89
Total	22.07	2.37	1.88	0.00		0.20	0.20		0.20	0.20		281.19		0.03		281.89

3.6 Architectural Coating - 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	lb/day										lb/day					
Hauling	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
Vendor	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
Worker	0.17	0.16	1.99	0.00	0.52	0.02	0.54	0.01	0.02	0.02		405.15		0.02		405.58
Total	0.17	0.16	1.99	0.00	0.52	0.02	0.54	0.01	0.02	0.02		405.15		0.02		405.58

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	21.70					0.00	0.00		0.00	0.00						0.00
Off-Road	0.37	2.37	1.88	0.00		0.20	0.20		0.20	0.20	0.00	281.19		0.03		281.89
Total	22.07	2.37	1.88	0.00		0.20	0.20		0.20	0.20	0.00	281.19		0.03		281.89

3.6 Architectural Coating - 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	lb/day										lb/day					
Hauling	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
Vendor	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
Worker	0.17	0.16	1.99	0.00	0.39	0.02	0.41	0.01	0.02	0.02		405.15		0.02		405.58
Total	0.17	0.16	1.99	0.00	0.39	0.02	0.41	0.01	0.02	0.02		405.15		0.02		405.58

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

- Increase Density
- Improve Walkability Design
- Improve Pedestrian Network
- Implement Trip Reduction Program
- Provide Riade Sharing Program

	ROG	NOx	CO	SO2	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	7.75	18.03	68.97	0.18	18.83	0.93	19.76	0.27	0.89	1.16		15,287.68		0.57		15,299.66
Unmitigated	8.56	20.06	78.38	0.21	21.92	1.07	22.99	0.31	1.03	1.35		17,717.14		0.65		17,730.90
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	411.51	433.44	377.11	1,364,632	1,172,184
Condo/Townhouse	1,430.03	1,553.72	1317.19	4,767,984	4,095,576
Total	1,841.54	1,987.16	1,694.30	6,132,615	5,267,760

4.3 Trip Type Information

Land Use	Miles			Trip %		
	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
Single Family Housing	12.70	7.00	9.50	40.20	19.20	40.60
Condo/Townhouse	12.70	7.00	9.50	40.20	19.20	40.60

5.0 Energy Detail

5.1 Mitigation Measures Energy

Exceed Title 24

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	lb/day										lb/day					
NaturalGas Mitigated	0.17	1.49	0.63	0.01		0.00	0.12		0.00	0.12		1,901.70		0.04	0.03	1,913.27
NaturalGas Unmitigated	0.21	1.80	0.77	0.01		0.00	0.15		0.00	0.15		2,297.21		0.04	0.04	2,311.19
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	lb/day										lb/day					
Condo/Townhouse	14648.8	0.16	1.35	0.57	0.01		0.00	0.11		0.00	0.11		1,723.38		0.03	0.03	1,733.87
Single Family Housing	4877.5	0.05	0.45	0.19	0.00		0.00	0.04		0.00	0.04		573.82		0.01	0.01	577.32
Total		0.21	1.80	0.76	0.01		0.00	0.15		0.00	0.15		2,297.20		0.04	0.04	2,311.19

5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	lb/day										lb/day					
Condo/Townhouse	12.1225	0.13	1.12	0.48	0.01		0.00	0.09		0.00	0.09		1,426.18		0.03	0.03	1,434.86
Single Family Housing	4.04187	0.04	0.37	0.16	0.00		0.00	0.03		0.00	0.03		475.51		0.01	0.01	478.41
Total		0.17	1.49	0.64	0.01		0.00	0.12		0.00	0.12		1,901.69		0.04	0.04	1,913.27

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
- Use only Natural Gas Hearths
- No Hearths Installed

	ROG	NOx	CO	SO2	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	7.12	0.25	21.78	0.00		0.00	0.12		0.00	0.12	0.00	39.09		0.04	0.00	39.89
Unmitigated	34.80	1.52	107.84	0.21		0.00	13.87		0.00	13.86	1,834.75	4,719.09		7.30	0.11	6,741.98
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	0.63					0.00	0.00		0.00	0.00						0.00
Consumer Products	5.83					0.00	0.00		0.00	0.00						0.00
Hearth	27.67	1.27	86.06	0.21		0.00	13.75		0.00	13.75	1,834.75	4,680.00		7.26	0.11	6,702.08
Landscaping	0.66	0.25	21.78	0.00		0.00	0.12		0.00	0.12		39.09		0.04		39.89
Total	34.79	1.52	107.84	0.21		0.00	13.87		0.00	13.87	1,834.75	4,719.09		7.30	0.11	6,741.97

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	0.63					0.00	0.00		0.00	0.00							0.00
Consumer Products	5.83					0.00	0.00		0.00	0.00							0.00
Hearth	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
Landscaping	0.66	0.25	21.78	0.00		0.00	0.12		0.00	0.12		39.09		0.04			39.89
Total	7.12	0.25	21.78	0.00		0.00	0.12		0.00	0.12	0.00	39.09		0.04	0.00		39.89

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

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

Serrano Summit Construction Phase 3
South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Condo/Townhouse	217	Dwelling Unit
Single Family Housing	43	Dwelling Unit

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Utility Company	Southern California Edison
Climate Zone	9	Precipitation Freq (Days)	31		

1.3 User Entered Comments

- Project Characteristics -
- Land Use -
- Construction Phase - construction schedule based on information provided by applicant
- Off-road Equipment -
- Trips and VMT -
- Demolition -

Grading - Total acreage=9.85

Vehicle Trips -

Woodstoves - Wood stoves are not proposed, fireplaces would be gas

Energy Use -

Land Use Change -

Sequestration -

Construction Off-road Equipment Mitigation - Construction mitigation per SCAQMD

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

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					
2015	10.68	83.36	50.19	0.10	9.39	3.81	13.20	3.31	3.81	7.12	0.00	11,077.96	0.00	0.95	0.00	11,097.98
2016	22.26	31.14	34.42	0.07	2.90	1.79	4.69	0.04	1.78	1.82	0.00	6,682.30	0.00	0.47	0.00	6,692.16
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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					
2015	10.68	83.36	50.19	0.10	3.59	3.81	7.40	1.23	3.81	5.04	0.00	11,077.96	0.00	0.95	0.00	11,097.98
2016	22.26	31.14	34.42	0.07	2.18	1.79	3.97	0.04	1.78	1.82	0.00	6,682.30	0.00	0.47	0.00	6,692.16
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	34.80	1.52	107.84	0.21		0.00	13.87		0.00	13.86	1,834.75	4,719.09		7.30	0.11	6,741.98
Energy	0.21	1.80	0.77	0.01		0.00	0.15		0.00	0.15		2,297.21		0.04	0.04	2,311.19
Mobile	8.83	21.25	75.43	0.19	21.92	1.08	23.00	0.31	1.04	1.35		16,490.20		0.67		16,504.22
Total	43.84	24.57	184.04	0.41	21.92	1.08	37.02	0.31	1.04	15.36	1,834.75	23,506.50		8.01	0.15	25,557.39

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	7.12	0.25	21.78	0.00		0.00	0.12		0.00	0.12	0.00	39.09		0.04	0.00	39.89
Energy	0.17	1.49	0.63	0.01		0.00	0.12		0.00	0.12		1,901.70		0.04	0.03	1,913.27
Mobile	7.95	19.01	67.07	0.17	18.83	0.94	19.76	0.27	0.90	1.17		14,229.71		0.58		14,241.95
Total	15.24	20.75	89.48	0.18	18.83	0.94	20.00	0.27	0.90	1.41	0.00	16,170.50		0.66	0.03	16,195.11

3.0 Construction Detail

3.1 Mitigation Measures Construction

- Use DPF for Construction Equipment
- Replace Ground Cover
- Water Exposed Area
- Water Unpaved Roads
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

3.2 Mass Grading - 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					
Fugitive Dust					7.89	0.00	7.89	3.31	0.00	3.31						0.00
Off-Road	10.57	83.24	49.03	0.10		3.80	3.80		3.80	3.80		10,856.65		0.94		10,876.42
Total	10.57	83.24	49.03	0.10	7.89	3.80	11.69	3.31	3.80	7.11		10,856.65		0.94		10,876.42

3.2 Mass Grading - 2015

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.12	0.12	1.16	0.00	0.31	0.01	0.32	0.00	0.01	0.01		221.31		0.01		221.56
Total	0.12	0.12	1.16	0.00	0.31	0.01	0.32	0.00	0.01	0.01		221.31		0.01		221.56

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					2.92	0.00	2.92	1.23	0.00	1.23						0.00
Off-Road	10.57	83.24	49.03	0.10		3.80	3.80		3.80	3.80	0.00	10,856.65		0.94		10,876.42
Total	10.57	83.24	49.03	0.10	2.92	3.80	6.72	1.23	3.80	5.03	0.00	10,856.65		0.94		10,876.42

3.2 Mass Grading - 2015

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.12	0.12	1.16	0.00	0.23	0.01	0.24	0.00	0.01	0.01		221.31		0.01		221.56
Total	0.12	0.12	1.16	0.00	0.23	0.01	0.24	0.00	0.01	0.01		221.31		0.01		221.56

3.3 Fine Grading - 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					
Fugitive Dust					9.08	0.00	9.08	3.31	0.00	3.31						0.00
Off-Road	10.57	83.24	49.03	0.10		3.80	3.80		3.80	3.80		10,856.65		0.94		10,876.42
Total	10.57	83.24	49.03	0.10	9.08	3.80	12.88	3.31	3.80	7.11		10,856.65		0.94		10,876.42

3.3 Fine Grading - 2015

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.12	0.12	1.16	0.00	0.31	0.01	0.32	0.00	0.01	0.01		221.31		0.01		221.56
Total	0.12	0.12	1.16	0.00	0.31	0.01	0.32	0.00	0.01	0.01		221.31		0.01		221.56

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					3.36	0.00	3.36	1.23	0.00	1.23						0.00
Off-Road	10.57	83.24	49.03	0.10		3.80	3.80		3.80	3.80	0.00	10,856.65		0.94		10,876.42
Total	10.57	83.24	49.03	0.10	3.36	3.80	7.16	1.23	3.80	5.03	0.00	10,856.65		0.94		10,876.42

3.3 Fine Grading - 2015

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.12	0.12	1.16	0.00	0.23	0.01	0.24	0.00	0.01	0.01		221.31		0.01		221.56
Total	0.12	0.12	1.16	0.00	0.23	0.01	0.24	0.00	0.01	0.01		221.31		0.01		221.56

3.4 Paving - 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	4.89	30.10	20.54	0.03		2.54	2.54		2.54	2.54		2,917.65		0.44		2,926.87
Paving	0.00					0.00	0.00		0.00	0.00						0.00
Total	4.89	30.10	20.54	0.03		2.54	2.54		2.54	2.54		2,917.65		0.44		2,926.87

3.4 Paving - 2015

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.09	0.09	0.87	0.00	0.23	0.01	0.24	0.00	0.01	0.01		165.98		0.01		166.17
Total	0.09	0.09	0.87	0.00	0.23	0.01	0.24	0.00	0.01	0.01		165.98		0.01		166.17

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	4.89	30.10	20.54	0.03		2.54	2.54		2.54	2.54	0.00	2,917.65		0.44		2,926.87
Paving	0.00					0.00	0.00		0.00	0.00						0.00
Total	4.89	30.10	20.54	0.03		2.54	2.54		2.54	2.54	0.00	2,917.65		0.44		2,926.87

3.4 Paving - 2015

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.09	0.09	0.87	0.00	0.17	0.01	0.18	0.00	0.01	0.01		165.98		0.01		166.17
Total	0.09	0.09	0.87	0.00	0.17	0.01	0.18	0.00	0.01	0.01		165.98		0.01		166.17

3.5 Building - 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	4.34	29.16	22.98	0.04		1.80	1.80		1.80	1.80		4,040.61		0.39		4,048.81
Total	4.34	29.16	22.98	0.04		1.80	1.80		1.80	1.80		4,040.61		0.39		4,048.81

3.5 Building - 2015

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.35	3.98	2.56	0.01	0.26	0.13	0.39	0.01	0.12	0.13		768.72		0.02		769.08
Worker	0.99	1.04	9.97	0.02	2.64	0.09	2.73	0.04	0.08	0.12		1,903.24		0.10		1,905.40
Total	1.34	5.02	12.53	0.03	2.90	0.22	3.12	0.05	0.20	0.25		2,671.96		0.12		2,674.48

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	4.34	29.16	22.98	0.04		1.80	1.80		1.80	1.80	0.00	4,040.61		0.39		4,048.81
Total	4.34	29.16	22.98	0.04		1.80	1.80		1.80	1.80	0.00	4,040.61		0.39		4,048.81

3.5 Building - 2015

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.35	3.98	2.56	0.01	0.20	0.13	0.33	0.01	0.12	0.13		768.72		0.02		769.08
Worker	0.99	1.04	9.97	0.02	1.98	0.09	2.07	0.04	0.08	0.12		1,903.24		0.10		1,905.40
Total	1.34	5.02	12.53	0.03	2.18	0.22	2.40	0.05	0.20	0.25		2,671.96		0.12		2,674.48

3.5 Building - 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	lb/day										lb/day					
Off-Road	3.99	26.52	22.80	0.04		1.58	1.58		1.58	1.58		4,040.61		0.36		4,048.10
Total	3.99	26.52	22.80	0.04		1.58	1.58		1.58	1.58		4,040.61		0.36		4,048.10

3.5 Building - 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	lb/day										lb/day					
Hauling	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
Vendor	0.33	3.66	2.38	0.01	0.26	0.12	0.38	0.01	0.11	0.11		770.55		0.02		770.88
Worker	0.93	0.96	9.24	0.02	2.64	0.09	2.73	0.04	0.09	0.12		1,871.14		0.10		1,873.17
Total	1.26	4.62	11.62	0.03	2.90	0.21	3.11	0.05	0.20	0.23		2,641.69		0.12		2,644.05

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	3.99	26.52	22.80	0.04		1.58	1.58		1.58	1.58	0.00	4,040.61		0.36		4,048.10
Total	3.99	26.52	22.80	0.04		1.58	1.58		1.58	1.58	0.00	4,040.61		0.36		4,048.10

3.5 Building - 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	lb/day										lb/day					
Hauling	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
Vendor	0.33	3.66	2.38	0.01	0.20	0.12	0.32	0.01	0.11	0.11		770.55		0.02		770.88
Worker	0.93	0.96	9.24	0.02	1.98	0.09	2.07	0.04	0.09	0.12		1,871.14		0.10		1,873.17
Total	1.26	4.62	11.62	0.03	2.18	0.21	2.39	0.05	0.20	0.23		2,641.69		0.12		2,644.05

3.6 Architectural Coating - 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	lb/day										lb/day					
Archit. Coating	21.70					0.00	0.00		0.00	0.00						0.00
Off-Road	0.37	2.37	1.88	0.00		0.20	0.20		0.20	0.20		281.19		0.03		281.89
Total	22.07	2.37	1.88	0.00		0.20	0.20		0.20	0.20		281.19		0.03		281.89

3.6 Architectural Coating - 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	lb/day										lb/day					
Hauling	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
Vendor	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
Worker	0.18	0.19	1.83	0.00	0.52	0.02	0.54	0.01	0.02	0.02		369.88		0.02		370.28
Total	0.18	0.19	1.83	0.00	0.52	0.02	0.54	0.01	0.02	0.02		369.88		0.02		370.28

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	21.70					0.00	0.00		0.00	0.00						0.00
Off-Road	0.37	2.37	1.88	0.00		0.20	0.20		0.20	0.20	0.00	281.19		0.03		281.89
Total	22.07	2.37	1.88	0.00		0.20	0.20		0.20	0.20	0.00	281.19		0.03		281.89

3.6 Architectural Coating - 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	lb/day										lb/day					
Hauling	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
Vendor	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
Worker	0.18	0.19	1.83	0.00	0.39	0.02	0.41	0.01	0.02	0.02		369.88		0.02		370.28
Total	0.18	0.19	1.83	0.00	0.39	0.02	0.41	0.01	0.02	0.02		369.88		0.02		370.28

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

- Increase Density
- Improve Walkability Design
- Improve Pedestrian Network
- Implement Trip Reduction Program
- Provide Riade Sharing Program

	ROG	NOx	CO	SO2	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	7.95	19.01	67.07	0.17	18.83	0.94	19.76	0.27	0.90	1.17		14,229.71		0.58		14,241.95
Unmitigated	8.83	21.25	75.43	0.19	21.92	1.08	23.00	0.31	1.04	1.35		16,490.20		0.67		16,504.22
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	411.51	433.44	377.11	1,364,632	1,172,184
Condo/Townhouse	1,430.03	1,553.72	1317.19	4,767,984	4,095,576
Total	1,841.54	1,987.16	1,694.30	6,132,615	5,267,760

4.3 Trip Type Information

Land Use	Miles			Trip %		
	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
Single Family Housing	12.70	7.00	9.50	40.20	19.20	40.60
Condo/Townhouse	12.70	7.00	9.50	40.20	19.20	40.60

5.0 Energy Detail

5.1 Mitigation Measures Energy

Exceed Title 24

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	lb/day										lb/day					
NaturalGas Mitigated	0.17	1.49	0.63	0.01		0.00	0.12		0.00	0.12		1,901.70		0.04	0.03	1,913.27
NaturalGas Unmitigated	0.21	1.80	0.77	0.01		0.00	0.15		0.00	0.15		2,297.21		0.04	0.04	2,311.19
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	lb/day										lb/day					
Condo/Townhouse	14648.8	0.16	1.35	0.57	0.01		0.00	0.11		0.00	0.11		1,723.38		0.03	0.03	1,733.87
Single Family Housing	4877.5	0.05	0.45	0.19	0.00		0.00	0.04		0.00	0.04		573.82		0.01	0.01	577.32
Total		0.21	1.80	0.76	0.01		0.00	0.15		0.00	0.15		2,297.20		0.04	0.04	2,311.19

5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	lb/day										lb/day					
Condo/Townhouse	12.1225	0.13	1.12	0.48	0.01		0.00	0.09		0.00	0.09		1,426.18		0.03	0.03	1,434.86
Single Family Housing	4.04187	0.04	0.37	0.16	0.00		0.00	0.03		0.00	0.03		475.51		0.01	0.01	478.41
Total		0.17	1.49	0.64	0.01		0.00	0.12		0.00	0.12		1,901.69		0.04	0.04	1,913.27

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
- Use only Natural Gas Hearths
- No Hearths Installed

	ROG	NOx	CO	SO2	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	7.12	0.25	21.78	0.00		0.00	0.12		0.00	0.12	0.00	39.09		0.04	0.00	39.89
Unmitigated	34.80	1.52	107.84	0.21		0.00	13.87		0.00	13.86	1,834.75	4,719.09		7.30	0.11	6,741.98
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	0.63					0.00	0.00		0.00	0.00						0.00
Consumer Products	5.83					0.00	0.00		0.00	0.00						0.00
Hearth	27.67	1.27	86.06	0.21		0.00	13.75		0.00	13.75	1,834.75	4,680.00		7.26	0.11	6,702.08
Landscaping	0.66	0.25	21.78	0.00		0.00	0.12		0.00	0.12		39.09		0.04		39.89
Total	34.79	1.52	107.84	0.21		0.00	13.87		0.00	13.87	1,834.75	4,719.09		7.30	0.11	6,741.97

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	0.63					0.00	0.00		0.00	0.00						0.00
Consumer Products	5.83					0.00	0.00		0.00	0.00						0.00
Hearth	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
Landscaping	0.66	0.25	21.78	0.00		0.00	0.12		0.00	0.12		39.09		0.04		39.89
Total	7.12	0.25	21.78	0.00		0.00	0.12		0.00	0.12	0.00	39.09		0.04	0.00	39.89

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

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

Serrano Summit Construction Phase 4
South Coast AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Condo/Townhouse	106	Dwelling Unit

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Utility Company	Southern California Edison
Climate Zone	9	Precipitation Freq (Days)	31		

1.3 User Entered Comments

- Project Characteristics -
- Land Use -
- Construction Phase - construction schedule based on information provided by applicant
- Off-road Equipment -
- Trips and VMT -
- Demolition -
- Grading - Total acreage=9.85

Vehicle Trips -

Woodstoves - Wood stoves are not proposed, fireplaces would be gas

Energy Use -

Land Use Change -

Sequestration -

Construction Off-road Equipment Mitigation - Construction mitigation per SCAQMD

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

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					
2016	0.49	3.36	2.84	0.01	0.38	0.19	0.57	0.17	0.19	0.36	0.00	471.54	471.54	0.04	0.00	472.39
2017	0.61	1.19	1.27	0.00	0.06	0.07	0.13	0.00	0.07	0.07	0.00	216.29	216.29	0.02	0.00	216.63
Total	1.10	4.55	4.11	0.01	0.44	0.26	0.70	0.17	0.26	0.43	0.00	687.83	687.83	0.06	0.00	689.02

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					
2016	0.49	3.36	2.84	0.01	0.17	0.19	0.35	0.06	0.19	0.25	0.00	471.54	471.54	0.04	0.00	472.39
2017	0.61	1.19	1.27	0.00	0.04	0.07	0.11	0.00	0.07	0.07	0.00	216.29	216.29	0.02	0.00	216.63
Total	1.10	4.55	4.11	0.01	0.21	0.26	0.46	0.06	0.26	0.32	0.00	687.83	687.83	0.06	0.00	689.02

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	0.83	0.03	2.29	0.00		0.00	0.11		0.00	0.11	11.26	67.55	78.80	0.04	0.00	80.06
Energy	0.01	0.12	0.05	0.00		0.00	0.01		0.00	0.01	0.00	273.33	273.33	0.01	0.00	275.02
Mobile	0.53	1.29	4.90	0.01	1.27	0.07	1.33	0.02	0.07	0.09	0.00	979.47	979.47	0.04	0.00	980.28
Waste						0.00	0.00		0.00	0.00	9.90	0.00	9.90	0.58	0.00	22.18
Water						0.00	0.00		0.00	0.00	0.00	40.30	40.30	0.21	0.01	46.60
Total	1.37	1.44	7.24	0.01	1.27	0.07	1.45	0.02	0.07	0.21	21.16	1,360.65	1,381.80	0.88	0.01	1,404.14

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	0.47	0.02	1.62	0.00		0.00	0.01		0.00	0.01	0.00	2.64	2.64	0.00	0.00	2.69
Energy	0.01	0.10	0.04	0.00		0.00	0.01		0.00	0.01	0.00	234.39	234.39	0.01	0.00	235.83
Mobile	0.48	1.16	4.35	0.01	1.09	0.06	1.15	0.02	0.06	0.07	0.00	845.26	845.26	0.03	0.00	845.96
Waste						0.00	0.00		0.00	0.00	9.90	0.00	9.90	0.58	0.00	22.18
Water						0.00	0.00		0.00	0.00	0.00	34.20	34.20	0.17	0.00	39.25
Total	0.96	1.28	6.01	0.01	1.09	0.06	1.17	0.02	0.06	0.09	9.90	1,116.49	1,126.39	0.79	0.00	1,145.91

3.0 Construction Detail

3.1 Mitigation Measures Construction

- Use DPF for Construction Equipment
- Replace Ground Cover
- Water Exposed Area
- Water Unpaved Roads
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

3.2 Mass 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					0.20	0.00	0.20	0.11	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.17	1.23	0.92	0.00		0.06	0.06		0.06	0.06	0.00	152.08	152.08	0.01	0.00	152.36
Total	0.17	1.23	0.92	0.00	0.20	0.06	0.26	0.11	0.06	0.17	0.00	152.08	152.08	0.01	0.00	152.36

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	0.00	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
Vendor	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
Worker	0.00	0.00	0.03	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	4.87	4.87	0.00	0.00	4.88
Total	0.00	0.00	0.03	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	4.87	4.87	0.00	0.00	4.88

3.2 Mass Grading - 2016

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					0.07	0.00	0.07	0.04	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.17	1.23	0.92	0.00		0.06	0.06		0.06	0.06	0.00	152.08	152.08	0.01	0.00	152.36
Total	0.17	1.23	0.92	0.00	0.07	0.06	0.13	0.04	0.06	0.10	0.00	152.08	152.08	0.01	0.00	152.36

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	0.00	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
Vendor	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
Worker	0.00	0.00	0.03	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	4.87	4.87	0.00	0.00	4.88
Total	0.00	0.00	0.03	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	4.87	4.87	0.00	0.00	4.88

3.3 Fine 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					0.12	0.00	0.12	0.07	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.10	0.75	0.56	0.00		0.04	0.04		0.04	0.04	0.00	92.67	92.67	0.01	0.00	92.85
Total	0.10	0.75	0.56	0.00	0.12	0.04	0.16	0.07	0.04	0.11	0.00	92.67	92.67	0.01	0.00	92.85

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	0.00	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
Vendor	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
Worker	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.97	2.97	0.00	0.00	2.97
Total	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.97	2.97	0.00	0.00	2.97

3.3 Fine Grading - 2016

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					0.05	0.00	0.05	0.02	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.10	0.75	0.56	0.00		0.04	0.04		0.04	0.04	0.00	92.67	92.67	0.01	0.00	92.85
Total	0.10	0.75	0.56	0.00	0.05	0.04	0.09	0.02	0.04	0.06	0.00	92.67	92.67	0.01	0.00	92.85

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	0.00	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
Vendor	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
Worker	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.97	2.97	0.00	0.00	2.97
Total	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.97	2.97	0.00	0.00	2.97

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	0.02	0.14	0.10	0.00		0.01	0.01		0.01	0.01	0.00	13.23	13.23	0.00	0.00	13.27
Paving	0.00					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.02	0.14	0.10	0.00		0.01	0.01		0.01	0.01	0.00	13.23	13.23	0.00	0.00	13.27

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	0.00	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
Vendor	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
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.76	0.76	0.00	0.00	0.76
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.76	0.76	0.00	0.00	0.76

3.4 Paving - 2016

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	0.02	0.14	0.10	0.00		0.01	0.01		0.01	0.01	0.00	13.23	13.23	0.00	0.00	13.27
Paving	0.00					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.02	0.14	0.10	0.00		0.01	0.01		0.01	0.01	0.00	13.23	13.23	0.00	0.00	13.27

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	0.00	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
Vendor	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
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.76	0.76	0.00	0.00	0.76
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.76	0.76	0.00	0.00	0.76

3.5 Building - 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	0.17	1.15	0.99	0.00		0.07	0.07		0.07	0.07	0.00	159.41	159.41	0.01	0.00	159.70
Total	0.17	1.15	0.99	0.00		0.07	0.07		0.07	0.07	0.00	159.41	159.41	0.01	0.00	159.70

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	0.00	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
Vendor	0.01	0.06	0.04	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	12.00	12.00	0.00	0.00	12.01
Worker	0.02	0.02	0.18	0.00	0.05	0.00	0.05	0.00	0.00	0.00	0.00	33.55	33.55	0.00	0.00	33.59
Total	0.03	0.08	0.22	0.00	0.05	0.00	0.06	0.00	0.00	0.00	0.00	45.55	45.55	0.00	0.00	45.60

3.5 Building - 2016

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	0.17	1.15	0.99	0.00		0.07	0.07		0.07	0.07	0.00	159.41	159.41	0.01	0.00	159.70
Total	0.17	1.15	0.99	0.00		0.07	0.07		0.07	0.07	0.00	159.41	159.41	0.01	0.00	159.70

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	0.00	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
Vendor	0.01	0.06	0.04	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	12.00	12.00	0.00	0.00	12.01
Worker	0.02	0.02	0.18	0.00	0.03	0.00	0.04	0.00	0.00	0.00	0.00	33.55	33.55	0.00	0.00	33.59
Total	0.03	0.08	0.22	0.00	0.03	0.00	0.05	0.00	0.00	0.00	0.00	45.55	45.55	0.00	0.00	45.60

3.5 Building - 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	0.15	1.00	0.94	0.00		0.06	0.06		0.06	0.06	0.00	152.08	152.08	0.01	0.00	152.34
Total	0.15	1.00	0.94	0.00		0.06	0.06		0.06	0.06	0.00	152.08	152.08	0.01	0.00	152.34

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	0.00	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
Vendor	0.00	0.05	0.03	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	11.47	11.47	0.00	0.00	11.47
Worker	0.01	0.01	0.16	0.00	0.04	0.00	0.05	0.00	0.00	0.00	0.00	31.33	31.33	0.00	0.00	31.36
Total	0.01	0.06	0.19	0.00	0.04	0.00	0.06	0.00	0.00	0.00	0.00	42.80	42.80	0.00	0.00	42.83

3.5 Building - 2017

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	0.15	1.00	0.94	0.00		0.06	0.06		0.06	0.06	0.00	152.08	152.08	0.01	0.00	152.34
Total	0.15	1.00	0.94	0.00		0.06	0.06		0.06	0.06	0.00	152.08	152.08	0.01	0.00	152.34

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	0.00	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
Vendor	0.00	0.05	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.47	11.47	0.00	0.00	11.47
Worker	0.01	0.01	0.16	0.00	0.03	0.00	0.03	0.00	0.00	0.00	0.00	31.33	31.33	0.00	0.00	31.36
Total	0.01	0.06	0.19	0.00	0.03	0.00	0.03	0.00	0.00	0.00	0.00	42.80	42.80	0.00	0.00	42.83

3.6 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	0.41					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.02	0.12	0.10	0.00		0.01	0.01		0.01	0.01	0.00	13.52	13.52	0.00	0.00	13.55
Total	0.43	0.12	0.10	0.00		0.01	0.01		0.01	0.01	0.00	13.52	13.52	0.00	0.00	13.55

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	0.00	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
Vendor	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
Worker	0.00	0.00	0.04	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	7.90	7.90	0.00	0.00	7.91
Total	0.00	0.00	0.04	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	7.90	7.90	0.00	0.00	7.91

3.6 Architectural Coating - 2017

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	0.41					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.02	0.12	0.10	0.00		0.01	0.01		0.01	0.01	0.00	13.52	13.52	0.00	0.00	13.55
Total	0.43	0.12	0.10	0.00		0.01	0.01		0.01	0.01	0.00	13.52	13.52	0.00	0.00	13.55

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	0.00	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
Vendor	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
Worker	0.00	0.00	0.04	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	7.90	7.90	0.00	0.00	7.91
Total	0.00	0.00	0.04	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	7.90	7.90	0.00	0.00	7.91

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

- Increase Density
- Improve Walkability Design
- Improve Pedestrian Network
- Implement Trip Reduction Program
- Provide Riade Sharing Program

	ROG	NOx	CO	SO2	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	0.48	1.16	4.35	0.01	1.09	0.06	1.15	0.02	0.06	0.07	0.00	845.26	845.26	0.03	0.00	845.96
Unmitigated	0.53	1.29	4.90	0.01	1.27	0.07	1.33	0.02	0.07	0.09	0.00	979.47	979.47	0.04	0.00	980.28
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Condo/Townhouse	698.54	758.96	643.42	2,329,061	2,000,604
Total	698.54	758.96	643.42	2,329,061	2,000,604

4.3 Trip Type Information

Land Use	Miles			Trip %		
	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
Condo/Townhouse	12.70	7.00	9.50	40.20	19.20	40.60

5.0 Energy Detail

5.1 Mitigation Measures Energy

Exceed Title 24

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						0.00	0.00		0.00	0.00	0.00	119.05	119.05	0.01	0.00	119.79
Electricity Unmitigated						0.00	0.00		0.00	0.00	0.00	133.95	133.95	0.01	0.00	134.79
NaturalGas Mitigated	0.01	0.10	0.04	0.00		0.00	0.01		0.00	0.01	0.00	115.34	115.34	0.00	0.00	116.04
NaturalGas Unmitigated	0.01	0.12	0.05	0.00		0.00	0.01		0.00	0.01	0.00	139.38	139.38	0.00	0.00	140.22
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	tons/yr										MT/yr					
Condo/Townhouse	2.6118e+006	0.01	0.12	0.05	0.00		0.00	0.01		0.00	0.01	0.00	139.38	139.38	0.00	0.00	140.22
Total		0.01	0.12	0.05	0.00		0.00	0.01		0.00	0.01	0.00	139.38	139.38	0.00	0.00	140.22

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	tons/yr										MT/yr					
Condo/Townhouse	2.16139e+006	0.01	0.10	0.04	0.00		0.00	0.01		0.00	0.01	0.00	115.34	115.34	0.00	0.00	116.04
Total		0.01	0.10	0.04	0.00		0.00	0.01		0.00	0.01	0.00	115.34	115.34	0.00	0.00	116.04

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
Condo/Townhouse	460525					133.95	0.01	0.00	134.79
Total						133.95	0.01	0.00	134.79

Mitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
Condo/Townhouse	409273					119.05	0.01	0.00	119.79
Total						119.05	0.01	0.00	119.79

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

Use only Natural Gas Hearths

No Hearths Installed

	ROG	NOx	CO	SO2	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	0.47	0.02	1.62	0.00		0.00	0.01		0.00	0.01	0.00	2.64	2.64	0.00	0.00	2.69
Unmitigated	0.83	0.03	2.29	0.00		0.00	0.11		0.00	0.11	11.26	67.55	78.80	0.04	0.00	80.06
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	0.04					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.38					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.35	0.01	0.67	0.00		0.00	0.10		0.00	0.10	11.26	64.91	76.17	0.03	0.00	77.37	
Landscaping	0.05	0.02	1.62	0.00		0.00	0.01		0.00	0.01	0.00	2.64	2.64	0.00	0.00	2.69	
Total	0.82	0.03	2.29	0.00		0.00	0.11		0.00	0.11	11.26	67.55	78.81	0.03	0.00	80.06	

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	0.04					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.38					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	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
Landscaping	0.05	0.02	1.62	0.00		0.00	0.01		0.00	0.01	0.00	2.64	2.64	0.00	0.00	2.69
Total	0.47	0.02	1.62	0.00		0.00	0.01		0.00	0.01	0.00	2.64	2.64	0.00	0.00	2.69

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

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr				MT/yr			
Mitigated					34.20	0.17	0.00	39.25
Unmitigated					40.30	0.21	0.01	46.60
Total	NA	NA	NA	NA	NA	NA	NA	NA

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
Condo/Townhouse	6.90633 / 4.35399					40.30	0.21	0.01	46.60
Total						40.30	0.21	0.01	46.60

Mitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
Condo/Townhouse	5.52506 / 4.0884					34.20	0.17	0.00	39.25
Total						34.20	0.17	0.00	39.25

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
	tons/yr				MT/yr			
Mitigated					9.90	0.58	0.00	22.18
Unmitigated					9.90	0.58	0.00	22.18
Total	NA	NA	NA	NA	NA	NA	NA	NA

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
Condo/Townhouse	48.76					9.90	0.58	0.00	22.18
Total						9.90	0.58	0.00	22.18

8.2 Waste by Land Use

Mitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
Condo/Townhouse	48.76					9.90	0.58	0.00	22.18
Total						9.90	0.58	0.00	22.18

9.0 Vegetation

Serrano Summit Construction Phase 4
South Coast AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Condo/Townhouse	106	Dwelling Unit

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Utility Company	Southern California Edison
Climate Zone	9	Precipitation Freq (Days)	31		

1.3 User Entered Comments

- Project Characteristics -
- Land Use -
- Construction Phase - construction schedule based on information provided by applicant
- Off-road Equipment -
- Trips and VMT -
- Demolition -
- Grading - Total acreage=9.85

Vehicle Trips -

Woodstoves - Wood stoves are not proposed, fireplaces would be gas

Energy Use -

Land Use Change -

Sequestration -

Construction Off-road Equipment Mitigation - Construction mitigation per SCAQMD

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

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					
2016	5.31	38.52	29.63	0.06	6.52	2.36	8.53	3.31	2.36	5.32	0.00	5,418.81	0.00	0.48	0.00	5,428.84
2017	12.35	27.96	30.18	0.06	1.50	1.65	3.15	0.02	1.64	1.66	0.00	5,689.18	0.00	0.41	0.00	5,697.82
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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					
2016	5.31	38.52	29.63	0.06	2.50	2.36	4.51	1.23	2.36	3.23	0.00	5,418.81	0.00	0.48	0.00	5,428.84
2017	12.35	27.96	30.18	0.06	1.13	1.65	2.77	0.02	1.64	1.66	0.00	5,689.18	0.00	0.41	0.00	5,697.82
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	13.88	0.62	43.96	0.09		0.00	5.65		0.00	5.65	748.01	1,923.94		2.98	0.05	2,748.65
Energy	0.08	0.66	0.28	0.00		0.00	0.05		0.00	0.05		841.84		0.02	0.02	846.96
Mobile	3.27	7.66	29.93	0.08	8.37	0.41	8.78	0.12	0.40	0.51		6,766.74		0.25		6,772.00
Total	17.23	8.94	74.17	0.17	8.37	0.41	14.48	0.12	0.40	6.21	748.01	9,532.52		3.25	0.07	10,367.61

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.60	0.10	8.88	0.00		0.00	0.05		0.00	0.05	0.00	15.94		0.02	0.00	16.26
Energy	0.06	0.55	0.23	0.00		0.00	0.04		0.00	0.04		696.66		0.01	0.01	700.90
Mobile	2.96	6.88	26.34	0.07	7.19	0.36	7.55	0.10	0.34	0.44		5,838.86		0.22		5,843.43
Total	5.62	7.53	35.45	0.07	7.19	0.36	7.64	0.10	0.34	0.53	0.00	6,551.46		0.25	0.01	6,560.59

3.0 Construction Detail

3.1 Mitigation Measures Construction

- Use DPF for Construction Equipment
- Replace Ground Cover
- Water Exposed Area
- Water Unpaved Roads
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

3.2 Mass 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	lb/day										lb/day					
Fugitive Dust					6.19	0.00	6.19	3.31	0.00	3.31						0.00
Off-Road	5.23	38.45	28.75	0.05		2.00	2.00		2.00	2.00		5,240.06		0.47		5,249.91
Total	5.23	38.45	28.75	0.05	6.19	2.00	8.19	3.31	2.00	5.31		5,240.06		0.47		5,249.91

3.2 Mass 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	lb/day										lb/day					
Hauling	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
Vendor	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
Worker	0.08	0.07	0.88	0.00	0.23	0.01	0.24	0.00	0.01	0.01		178.74		0.01		178.93
Total	0.08	0.07	0.88	0.00	0.23	0.01	0.24	0.00	0.01	0.01		178.74		0.01		178.93

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					2.29	0.00	2.29	1.23	0.00	1.23						0.00
Off-Road	5.23	38.45	28.75	0.05		2.00	2.00		2.00	2.00	0.00	5,240.06		0.47		5,249.91
Total	5.23	38.45	28.75	0.05	2.29	2.00	4.29	1.23	2.00	3.23	0.00	5,240.06		0.47		5,249.91

3.2 Mass 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	lb/day										lb/day					
Hauling	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
Vendor	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
Worker	0.08	0.07	0.88	0.00	0.17	0.01	0.18	0.00	0.01	0.01		178.74		0.01		178.93
Total	0.08	0.07	0.88	0.00	0.17	0.01	0.18	0.00	0.01	0.01		178.74		0.01		178.93

3.3 Fine 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	lb/day										lb/day					
Fugitive Dust					6.29	0.00	6.29	3.31	0.00	3.31						0.00
Off-Road	5.23	38.45	28.75	0.05		2.00	2.00		2.00	2.00		5,240.06		0.47		5,249.91
Total	5.23	38.45	28.75	0.05	6.29	2.00	8.29	3.31	2.00	5.31		5,240.06		0.47		5,249.91

3.3 Fine 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	lb/day										lb/day					
Hauling	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
Vendor	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
Worker	0.08	0.07	0.88	0.00	0.23	0.01	0.24	0.00	0.01	0.01		178.74		0.01		178.93
Total	0.08	0.07	0.88	0.00	0.23	0.01	0.24	0.00	0.01	0.01		178.74		0.01		178.93

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					2.33	0.00	2.33	1.23	0.00	1.23						0.00
Off-Road	5.23	38.45	28.75	0.05		2.00	2.00		2.00	2.00	0.00	5,240.06		0.47		5,249.91
Total	5.23	38.45	28.75	0.05	2.33	2.00	4.33	1.23	2.00	3.23	0.00	5,240.06		0.47		5,249.91

3.3 Fine 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	lb/day										lb/day					
Hauling	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
Vendor	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
Worker	0.08	0.07	0.88	0.00	0.17	0.01	0.18	0.00	0.01	0.01		178.74		0.01		178.93
Total	0.08	0.07	0.88	0.00	0.17	0.01	0.18	0.00	0.01	0.01		178.74		0.01		178.93

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	lb/day										lb/day					
Off-Road	4.58	28.21	20.38	0.03		2.35	2.35		2.35	2.35		2,917.64		0.41		2,926.29
Paving	0.00					0.00	0.00		0.00	0.00						0.00
Total	4.58	28.21	20.38	0.03		2.35	2.35		2.35	2.35		2,917.64		0.41		2,926.29

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	lb/day										lb/day					
Hauling	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
Vendor	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
Worker	0.08	0.07	0.88	0.00	0.23	0.01	0.24	0.00	0.01	0.01		178.74		0.01		178.93
Total	0.08	0.07	0.88	0.00	0.23	0.01	0.24	0.00	0.01	0.01		178.74		0.01		178.93

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	4.58	28.21	20.38	0.03		2.35	2.35		2.35	2.35	0.00	2,917.64		0.41		2,926.29
Paving	0.00					0.00	0.00		0.00	0.00						0.00
Total	4.58	28.21	20.38	0.03		2.35	2.35		2.35	2.35	0.00	2,917.64		0.41		2,926.29

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	lb/day										lb/day					
Hauling	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
Vendor	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
Worker	0.08	0.07	0.88	0.00	0.17	0.01	0.18	0.00	0.01	0.01		178.74		0.01		178.93
Total	0.08	0.07	0.88	0.00	0.17	0.01	0.18	0.00	0.01	0.01		178.74		0.01		178.93

3.5 Building - 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	lb/day										lb/day					
Off-Road	3.99	26.52	22.80	0.04		1.58	1.58		1.58	1.58		4,040.61		0.36		4,048.10
Total	3.99	26.52	22.80	0.04		1.58	1.58		1.58	1.58		4,040.61		0.36		4,048.10

3.5 Building - 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	lb/day										lb/day					
Hauling	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
Vendor	0.12	1.39	0.81	0.00	0.10	0.05	0.15	0.00	0.04	0.04		305.25		0.01		305.38
Worker	0.39	0.37	4.46	0.01	1.17	0.04	1.21	0.02	0.04	0.05		905.64		0.05		906.59
Total	0.51	1.76	5.27	0.01	1.27	0.09	1.36	0.02	0.08	0.09		1,210.89		0.06		1,211.97

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	3.99	26.52	22.80	0.04		1.58	1.58		1.58	1.58	0.00	4,040.61		0.36		4,048.10
Total	3.99	26.52	22.80	0.04		1.58	1.58		1.58	1.58	0.00	4,040.61		0.36		4,048.10

3.5 Building - 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	lb/day										lb/day					
Hauling	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
Vendor	0.12	1.39	0.81	0.00	0.08	0.05	0.12	0.00	0.04	0.04		305.25		0.01		305.38
Worker	0.39	0.37	4.46	0.01	0.87	0.04	0.92	0.02	0.04	0.05		905.64		0.05		906.59
Total	0.51	1.76	5.27	0.01	0.95	0.09	1.04	0.02	0.08	0.09		1,210.89		0.06		1,211.97

3.5 Building - 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	3.66	24.08	22.64	0.04		1.39	1.39		1.39	1.39		4,040.61		0.33		4,047.45
Total	3.66	24.08	22.64	0.04		1.39	1.39		1.39	1.39		4,040.61		0.33		4,047.45

3.5 Building - 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.11	1.29	0.75	0.00	0.10	0.04	0.14	0.00	0.04	0.04		305.71		0.01		305.82
Worker	0.36	0.34	4.11	0.01	1.17	0.04	1.21	0.02	0.04	0.05		886.66		0.04		887.55
Total	0.47	1.63	4.86	0.01	1.27	0.08	1.35	0.02	0.08	0.09		1,192.37		0.05		1,193.37

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	3.66	24.08	22.64	0.04		1.39	1.39		1.39	1.39	0.00	4,040.61		0.33		4,047.45
Total	3.66	24.08	22.64	0.04		1.39	1.39		1.39	1.39	0.00	4,040.61		0.33		4,047.45

3.5 Building - 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.11	1.29	0.75	0.00	0.08	0.04	0.12	0.00	0.04	0.04		305.71		0.01		305.82
Worker	0.36	0.34	4.11	0.01	0.87	0.04	0.92	0.02	0.04	0.05		886.66		0.04		887.55
Total	0.47	1.63	4.86	0.01	0.95	0.08	1.04	0.02	0.08	0.09		1,192.37		0.05		1,193.37

3.6 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	lb/day										lb/day					
Archit. Coating	7.81					0.00	0.00		0.00	0.00						0.00
Off-Road	0.33	2.18	1.87	0.00		0.17	0.17		0.17	0.17		281.19		0.03		281.81
Total	8.14	2.18	1.87	0.00		0.17	0.17		0.17	0.17		281.19		0.03		281.81

3.6 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	lb/day										lb/day					
Hauling	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
Vendor	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
Worker	0.07	0.07	0.81	0.00	0.23	0.01	0.24	0.00	0.01	0.01		175.00		0.01		175.18
Total	0.07	0.07	0.81	0.00	0.23	0.01	0.24	0.00	0.01	0.01		175.00		0.01		175.18

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	7.81					0.00	0.00		0.00	0.00						0.00
Off-Road	0.33	2.18	1.87	0.00		0.17	0.17		0.17	0.17	0.00	281.19		0.03		281.81
Total	8.14	2.18	1.87	0.00		0.17	0.17		0.17	0.17	0.00	281.19		0.03		281.81

3.6 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	lb/day										lb/day					
Hauling	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
Vendor	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
Worker	0.07	0.07	0.81	0.00	0.17	0.01	0.18	0.00	0.01	0.01		175.00		0.01		175.18
Total	0.07	0.07	0.81	0.00	0.17	0.01	0.18	0.00	0.01	0.01		175.00		0.01		175.18

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

- Increase Density
- Improve Walkability Design
- Improve Pedestrian Network
- Implement Trip Reduction Program
- Provide Riade Sharing Program

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.96	6.88	26.34	0.07	7.19	0.36	7.55	0.10	0.34	0.44		5,838.86		0.22		5,843.43
Unmitigated	3.27	7.66	29.93	0.08	8.37	0.41	8.78	0.12	0.40	0.51		6,766.74		0.25		6,772.00
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Condo/Townhouse	698.54	758.96	643.42	2,329,061	2,000,604
Total	698.54	758.96	643.42	2,329,061	2,000,604

4.3 Trip Type Information

Land Use	Miles			Trip %		
	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
Condo/Townhouse	12.70	7.00	9.50	40.20	19.20	40.60

5.0 Energy Detail

5.1 Mitigation Measures Energy

Exceed Title 24

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	lb/day										lb/day					
NaturalGas Mitigated	0.06	0.55	0.23	0.00		0.00	0.04		0.00	0.04		696.66		0.01	0.01	700.90
NaturalGas Unmitigated	0.08	0.66	0.28	0.00		0.00	0.05		0.00	0.05		841.84		0.02	0.02	846.96
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	lb/day										lb/day					
Condo/Townhouse	7155.61	0.08	0.66	0.28	0.00		0.00	0.05		0.00	0.05		841.84		0.02	0.02	846.96
Total		0.08	0.66	0.28	0.00		0.00	0.05		0.00	0.05		841.84		0.02	0.02	846.96

5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	lb/day										lb/day					
Condo/Townhouse	5.92161	0.06	0.55	0.23	0.00		0.00	0.04		0.00	0.04		696.66		0.01	0.01	700.90
Total		0.06	0.55	0.23	0.00		0.00	0.04		0.00	0.04		696.66		0.01	0.01	700.90

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

Use only Natural Gas Hearths

No Hearths Installed

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.60	0.10	8.88	0.00		0.00	0.05		0.00	0.05	0.00	15.94		0.02	0.00	16.26
Unmitigated	13.88	0.62	43.96	0.09		0.00	5.65		0.00	5.65	748.01	1,923.94		2.98	0.05	2,748.65
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	0.23					0.00	0.00		0.00	0.00						0.00
Consumer Products	2.10					0.00	0.00		0.00	0.00						0.00
Hearth	11.28	0.52	35.09	0.08		0.00	5.61		0.00	5.60	748.01	1,908.00		2.96	0.05	2,732.39
Landscaping	0.27	0.10	8.88	0.00		0.00	0.05		0.00	0.05		15.94		0.02		16.26
Total	13.88	0.62	43.97	0.08		0.00	5.66		0.00	5.65	748.01	1,923.94		2.98	0.05	2,748.65

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	0.23					0.00	0.00		0.00	0.00							0.00
Consumer Products	2.10					0.00	0.00		0.00	0.00							0.00
Hearth	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
Landscaping	0.27	0.10	8.88	0.00		0.00	0.05		0.00	0.05		15.94		0.02			16.26
Total	2.60	0.10	8.88	0.00		0.00	0.05		0.00	0.05	0.00	15.94		0.02	0.00		16.26

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

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

Serrano Summit Construction Phase 4
South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Condo/Townhouse	106	Dwelling Unit

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Utility Company	Southern California Edison
Climate Zone	9	Precipitation Freq (Days)	31		

1.3 User Entered Comments

- Project Characteristics -
- Land Use -
- Construction Phase - construction schedule based on information provided by applicant
- Off-road Equipment -
- Trips and VMT -
- Demolition -
- Grading - Total acreage=9.85

Vehicle Trips -

Woodstoves - Wood stoves are not proposed, fireplaces would be gas

Energy Use -

Land Use Change -

Sequestration -

Construction Off-road Equipment Mitigation - Construction mitigation per SCAQMD

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

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					
2016	5.31	38.53	29.56	0.05	6.52	2.36	8.53	3.31	2.36	5.32	0.00	5,403.25	0.00	0.48	0.00	5,413.26
2017	12.38	28.06	29.88	0.06	1.50	1.65	3.15	0.02	1.64	1.66	0.00	5,593.89	0.00	0.41	0.00	5,602.47
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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					
2016	5.31	38.53	29.56	0.05	2.50	2.36	4.51	1.23	2.36	3.23	0.00	5,403.25	0.00	0.48	0.00	5,413.26
2017	12.38	28.06	29.88	0.06	1.13	1.65	2.77	0.02	1.64	1.66	0.00	5,593.89	0.00	0.41	0.00	5,602.47
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	13.88	0.62	43.96	0.09		0.00	5.65		0.00	5.65	748.01	1,923.94		2.98	0.05	2,748.65
Energy	0.08	0.66	0.28	0.00		0.00	0.05		0.00	0.05		841.84		0.02	0.02	846.96
Mobile	3.37	8.12	28.81	0.07	8.37	0.41	8.78	0.12	0.40	0.52		6,298.14		0.25		6,303.49
Total	17.33	9.40	73.05	0.16	8.37	0.41	14.48	0.12	0.40	6.22	748.01	9,063.92		3.25	0.07	9,899.10

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.60	0.10	8.88	0.00		0.00	0.05		0.00	0.05	0.00	15.94		0.02	0.00	16.26
Energy	0.06	0.55	0.23	0.00		0.00	0.04		0.00	0.04		696.66		0.01	0.01	700.90
Mobile	3.04	7.26	25.62	0.06	7.19	0.36	7.55	0.10	0.34	0.45		5,434.78		0.22		5,439.46
Total	5.70	7.91	34.73	0.06	7.19	0.36	7.64	0.10	0.34	0.54	0.00	6,147.38		0.25	0.01	6,156.62

3.0 Construction Detail

3.1 Mitigation Measures Construction

- Use DPF for Construction Equipment
- Replace Ground Cover
- Water Exposed Area
- Water Unpaved Roads
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

3.2 Mass 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	lb/day										lb/day					
Fugitive Dust					6.19	0.00	6.19	3.31	0.00	3.31						0.00
Off-Road	5.23	38.45	28.75	0.05		2.00	2.00		2.00	2.00		5,240.06		0.47		5,249.91
Total	5.23	38.45	28.75	0.05	6.19	2.00	8.19	3.31	2.00	5.31		5,240.06		0.47		5,249.91

3.2 Mass 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	lb/day										lb/day					
Hauling	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
Vendor	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
Worker	0.08	0.08	0.81	0.00	0.23	0.01	0.24	0.00	0.01	0.01		163.18		0.01		163.36
Total	0.08	0.08	0.81	0.00	0.23	0.01	0.24	0.00	0.01	0.01		163.18		0.01		163.36

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					2.29	0.00	2.29	1.23	0.00	1.23						0.00
Off-Road	5.23	38.45	28.75	0.05		2.00	2.00		2.00	2.00	0.00	5,240.06		0.47		5,249.91
Total	5.23	38.45	28.75	0.05	2.29	2.00	4.29	1.23	2.00	3.23	0.00	5,240.06		0.47		5,249.91

3.2 Mass 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	lb/day										lb/day					
Hauling	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
Vendor	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
Worker	0.08	0.08	0.81	0.00	0.17	0.01	0.18	0.00	0.01	0.01		163.18		0.01		163.36
Total	0.08	0.08	0.81	0.00	0.17	0.01	0.18	0.00	0.01	0.01		163.18		0.01		163.36

3.3 Fine 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	lb/day										lb/day					
Fugitive Dust					6.29	0.00	6.29	3.31	0.00	3.31						0.00
Off-Road	5.23	38.45	28.75	0.05		2.00	2.00		2.00	2.00		5,240.06		0.47		5,249.91
Total	5.23	38.45	28.75	0.05	6.29	2.00	8.29	3.31	2.00	5.31		5,240.06		0.47		5,249.91

3.3 Fine 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	lb/day										lb/day					
Hauling	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
Vendor	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
Worker	0.08	0.08	0.81	0.00	0.23	0.01	0.24	0.00	0.01	0.01		163.18		0.01		163.36
Total	0.08	0.08	0.81	0.00	0.23	0.01	0.24	0.00	0.01	0.01		163.18		0.01		163.36

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					2.33	0.00	2.33	1.23	0.00	1.23						0.00
Off-Road	5.23	38.45	28.75	0.05		2.00	2.00		2.00	2.00	0.00	5,240.06		0.47		5,249.91
Total	5.23	38.45	28.75	0.05	2.33	2.00	4.33	1.23	2.00	3.23	0.00	5,240.06		0.47		5,249.91

3.3 Fine 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	lb/day										lb/day					
Hauling	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
Vendor	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
Worker	0.08	0.08	0.81	0.00	0.17	0.01	0.18	0.00	0.01	0.01		163.18		0.01		163.36
Total	0.08	0.08	0.81	0.00	0.17	0.01	0.18	0.00	0.01	0.01		163.18		0.01		163.36

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	lb/day										lb/day					
Off-Road	4.58	28.21	20.38	0.03		2.35	2.35		2.35	2.35		2,917.64		0.41		2,926.29
Paving	0.00					0.00	0.00		0.00	0.00						0.00
Total	4.58	28.21	20.38	0.03		2.35	2.35		2.35	2.35		2,917.64		0.41		2,926.29

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	lb/day										lb/day					
Hauling	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
Vendor	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
Worker	0.08	0.08	0.81	0.00	0.23	0.01	0.24	0.00	0.01	0.01		163.18		0.01		163.36
Total	0.08	0.08	0.81	0.00	0.23	0.01	0.24	0.00	0.01	0.01		163.18		0.01		163.36

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	4.58	28.21	20.38	0.03		2.35	2.35		2.35	2.35	0.00	2,917.64		0.41		2,926.29
Paving	0.00					0.00	0.00		0.00	0.00						0.00
Total	4.58	28.21	20.38	0.03		2.35	2.35		2.35	2.35	0.00	2,917.64		0.41		2,926.29

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	lb/day										lb/day					
Hauling	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
Vendor	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
Worker	0.08	0.08	0.81	0.00	0.17	0.01	0.18	0.00	0.01	0.01		163.18		0.01		163.36
Total	0.08	0.08	0.81	0.00	0.17	0.01	0.18	0.00	0.01	0.01		163.18		0.01		163.36

3.5 Building - 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	lb/day										lb/day					
Off-Road	3.99	26.52	22.80	0.04		1.58	1.58		1.58	1.58		4,040.61		0.36		4,048.10
Total	3.99	26.52	22.80	0.04		1.58	1.58		1.58	1.58		4,040.61		0.36		4,048.10

3.5 Building - 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	lb/day										lb/day					
Hauling	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
Vendor	0.13	1.44	0.94	0.00	0.10	0.05	0.15	0.00	0.04	0.05		302.72		0.01		302.85
Worker	0.41	0.42	4.08	0.01	1.17	0.04	1.21	0.02	0.04	0.05		826.78		0.04		827.68
Total	0.54	1.86	5.02	0.01	1.27	0.09	1.36	0.02	0.08	0.10		1,129.50		0.05		1,130.53

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	3.99	26.52	22.80	0.04		1.58	1.58		1.58	1.58	0.00	4,040.61		0.36		4,048.10
Total	3.99	26.52	22.80	0.04		1.58	1.58		1.58	1.58	0.00	4,040.61		0.36		4,048.10

3.5 Building - 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	lb/day										lb/day					
Hauling	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
Vendor	0.13	1.44	0.94	0.00	0.08	0.05	0.12	0.00	0.04	0.05		302.72		0.01		302.85
Worker	0.41	0.42	4.08	0.01	0.87	0.04	0.92	0.02	0.04	0.05		826.78		0.04		827.68
Total	0.54	1.86	5.02	0.01	0.95	0.09	1.04	0.02	0.08	0.10		1,129.50		0.05		1,130.53

3.5 Building - 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	3.66	24.08	22.64	0.04		1.39	1.39		1.39	1.39		4,040.61		0.33		4,047.45
Total	3.66	24.08	22.64	0.04		1.39	1.39		1.39	1.39		4,040.61		0.33		4,047.45

3.5 Building - 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.12	1.32	0.88	0.00	0.10	0.04	0.14	0.00	0.04	0.04		303.12		0.01		303.25
Worker	0.38	0.39	3.76	0.01	1.17	0.04	1.21	0.02	0.04	0.05		809.24		0.04		810.07
Total	0.50	1.71	4.64	0.01	1.27	0.08	1.35	0.02	0.08	0.09		1,112.36		0.05		1,113.32

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	3.66	24.08	22.64	0.04		1.39	1.39		1.39	1.39	0.00	4,040.61		0.33		4,047.45
Total	3.66	24.08	22.64	0.04		1.39	1.39		1.39	1.39	0.00	4,040.61		0.33		4,047.45

3.5 Building - 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.12	1.32	0.88	0.00	0.08	0.04	0.12	0.00	0.04	0.04		303.12		0.01		303.25
Worker	0.38	0.39	3.76	0.01	0.87	0.04	0.92	0.02	0.04	0.05		809.24		0.04		810.07
Total	0.50	1.71	4.64	0.01	0.95	0.08	1.04	0.02	0.08	0.09		1,112.36		0.05		1,113.32

3.6 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	lb/day										lb/day					
Archit. Coating	7.81					0.00	0.00		0.00	0.00						0.00
Off-Road	0.33	2.18	1.87	0.00		0.17	0.17		0.17	0.17		281.19		0.03		281.81
Total	8.14	2.18	1.87	0.00		0.17	0.17		0.17	0.17		281.19		0.03		281.81

3.6 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	lb/day										lb/day					
Hauling	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
Vendor	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
Worker	0.08	0.08	0.74	0.00	0.23	0.01	0.24	0.00	0.01	0.01		159.72		0.01		159.88
Total	0.08	0.08	0.74	0.00	0.23	0.01	0.24	0.00	0.01	0.01		159.72		0.01		159.88

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	7.81					0.00	0.00		0.00	0.00						0.00
Off-Road	0.33	2.18	1.87	0.00		0.17	0.17		0.17	0.17	0.00	281.19		0.03		281.81
Total	8.14	2.18	1.87	0.00		0.17	0.17		0.17	0.17	0.00	281.19		0.03		281.81

3.6 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	lb/day										lb/day					
Hauling	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
Vendor	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
Worker	0.08	0.08	0.74	0.00	0.17	0.01	0.18	0.00	0.01	0.01		159.72		0.01		159.88
Total	0.08	0.08	0.74	0.00	0.17	0.01	0.18	0.00	0.01	0.01		159.72		0.01		159.88

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

- Increase Density
- Improve Walkability Design
- Improve Pedestrian Network
- Implement Trip Reduction Program
- Provide Riade Sharing Program

	ROG	NOx	CO	SO2	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	3.04	7.26	25.62	0.06	7.19	0.36	7.55	0.10	0.34	0.45		5,434.78		0.22		5,439.46
Unmitigated	3.37	8.12	28.81	0.07	8.37	0.41	8.78	0.12	0.40	0.52		6,298.14		0.25		6,303.49
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Condo/Townhouse	698.54	758.96	643.42	2,329,061	2,000,604
Total	698.54	758.96	643.42	2,329,061	2,000,604

4.3 Trip Type Information

Land Use	Miles			Trip %		
	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
Condo/Townhouse	12.70	7.00	9.50	40.20	19.20	40.60

5.0 Energy Detail

5.1 Mitigation Measures Energy

Exceed Title 24

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	lb/day										lb/day					
NaturalGas Mitigated	0.06	0.55	0.23	0.00		0.00	0.04		0.00	0.04		696.66		0.01	0.01	700.90
NaturalGas Unmitigated	0.08	0.66	0.28	0.00		0.00	0.05		0.00	0.05		841.84		0.02	0.02	846.96
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	lb/day										lb/day					
Condo/Townhouse	7155.61	0.08	0.66	0.28	0.00		0.00	0.05		0.00	0.05		841.84		0.02	0.02	846.96
Total		0.08	0.66	0.28	0.00		0.00	0.05		0.00	0.05		841.84		0.02	0.02	846.96

5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	lb/day										lb/day					
Condo/Townhouse	5.92161	0.06	0.55	0.23	0.00		0.00	0.04		0.00	0.04		696.66		0.01	0.01	700.90
Total		0.06	0.55	0.23	0.00		0.00	0.04		0.00	0.04		696.66		0.01	0.01	700.90

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

Use only Natural Gas Hearths

No Hearths Installed

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.60	0.10	8.88	0.00		0.00	0.05		0.00	0.05	0.00	15.94		0.02	0.00	16.26
Unmitigated	13.88	0.62	43.96	0.09		0.00	5.65		0.00	5.65	748.01	1,923.94		2.98	0.05	2,748.65
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	0.23					0.00	0.00		0.00	0.00						0.00
Consumer Products	2.10					0.00	0.00		0.00	0.00						0.00
Hearth	11.28	0.52	35.09	0.08		0.00	5.61		0.00	5.60	748.01	1,908.00		2.96	0.05	2,732.39
Landscaping	0.27	0.10	8.88	0.00		0.00	0.05		0.00	0.05		15.94		0.02		16.26
Total	13.88	0.62	43.97	0.08		0.00	5.66		0.00	5.65	748.01	1,923.94		2.98	0.05	2,748.65

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	0.23					0.00	0.00		0.00	0.00						0.00
Consumer Products	2.10					0.00	0.00		0.00	0.00						0.00
Hearth	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
Landscaping	0.27	0.10	8.88	0.00		0.00	0.05		0.00	0.05		15.94		0.02		16.26
Total	2.60	0.10	8.88	0.00		0.00	0.05		0.00	0.05	0.00	15.94		0.02	0.00	16.26

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

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

Serrano Summit Construction Phase 5
South Coast AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Condo/Townhouse	23	Dwelling Unit

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Utility Company	Southern California Edison
Climate Zone	9	Precipitation Freq (Days)	31		

1.3 User Entered Comments

- Project Characteristics -
- Land Use -
- Construction Phase - construction schedule based on information provided by applicant
- Off-road Equipment -
- Trips and VMT -
- Demolition -
- Grading - Total acreage=9.85

Vehicle Trips -

Woodstoves - Wood stoves are not proposed, fireplaces would be gas

Energy Use -

Land Use Change -

Sequestration -

Construction Off-road Equipment Mitigation - Construction mitigation per SCAQMD

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

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					
2017	0.29	1.83	1.46	0.00	0.25	0.10	0.35	0.13	0.10	0.23	0.00	247.47	247.47	0.02	0.00	247.95
2018	0.23	0.79	0.77	0.00	0.01	0.05	0.06	0.00	0.05	0.05	0.00	121.70	121.70	0.01	0.00	121.93
Total	0.52	2.62	2.23	0.00	0.26	0.15	0.41	0.13	0.15	0.28	0.00	369.17	369.17	0.03	0.00	369.88

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					
2017	0.29	1.83	1.46	0.00	0.10	0.10	0.20	0.05	0.10	0.15	0.00	247.47	247.47	0.02	0.00	247.95
2018	0.23	0.79	0.77	0.00	0.01	0.05	0.06	0.00	0.05	0.05	0.00	121.70	121.70	0.01	0.00	121.93
Total	0.52	2.62	2.23	0.00	0.11	0.15	0.26	0.05	0.15	0.20	0.00	369.17	369.17	0.03	0.00	369.88

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	0.18	0.01	0.50	0.00		0.00	0.02		0.00	0.02	2.44	14.66	17.10	0.01	0.00	17.37
Energy	0.00	0.03	0.01	0.00		0.00	0.00		0.00	0.00	0.00	59.31	59.31	0.00	0.00	59.67
Mobile	0.11	0.28	1.06	0.00	0.27	0.01	0.29	0.00	0.01	0.02	0.00	212.53	212.53	0.01	0.00	212.70
Waste						0.00	0.00		0.00	0.00	2.15	0.00	2.15	0.13	0.00	4.81
Water						0.00	0.00		0.00	0.00	0.00	8.75	8.75	0.05	0.00	10.11
Total	0.29	0.32	1.57	0.00	0.27	0.01	0.31	0.00	0.01	0.04	4.59	295.25	299.84	0.20	0.00	304.66

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	0.10	0.00	0.35	0.00		0.00	0.00		0.00	0.00	0.00	0.57	0.57	0.00	0.00	0.58
Energy	0.00	0.02	0.01	0.00		0.00	0.00		0.00	0.00	0.00	50.86	50.86	0.00	0.00	51.17
Mobile	0.10	0.25	0.94	0.00	0.24	0.01	0.25	0.00	0.01	0.02	0.00	183.40	183.40	0.01	0.00	183.56
Waste						0.00	0.00		0.00	0.00	2.15	0.00	2.15	0.13	0.00	4.81
Water						0.00	0.00		0.00	0.00	0.00	7.42	7.42	0.04	0.00	8.52
Total	0.20	0.27	1.30	0.00	0.24	0.01	0.25	0.00	0.01	0.02	2.15	242.25	244.40	0.18	0.00	248.64

3.0 Construction Detail

3.1 Mitigation Measures Construction

- Use DPF for Construction Equipment
- Replace Ground Cover
- Water Exposed Area
- Water Unpaved Roads
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

3.2 Mass 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	tons/yr										MT/yr					
Fugitive Dust					0.15	0.00	0.15	0.08	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.08	0.62	0.43	0.00		0.03	0.03		0.03	0.03	0.00	78.07	78.07	0.01	0.00	78.21
Total	0.08	0.62	0.43	0.00	0.15	0.03	0.18	0.08	0.03	0.11	0.00	78.07	78.07	0.01	0.00	78.21

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	0.00	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
Vendor	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
Worker	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.54	2.54	0.00	0.00	2.55
Total	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.54	2.54	0.00	0.00	2.55

3.2 Mass Grading - 2017

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					0.05	0.00	0.05	0.03	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.08	0.62	0.43	0.00		0.03	0.03		0.03	0.03	0.00	78.07	78.07	0.01	0.00	78.21
Total	0.08	0.62	0.43	0.00	0.05	0.03	0.08	0.03	0.03	0.06	0.00	78.07	78.07	0.01	0.00	78.21

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	0.00	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
Vendor	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
Worker	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.54	2.54	0.00	0.00	2.55
Total	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.54	2.54	0.00	0.00	2.55

3.3 Fine 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	tons/yr										MT/yr					
Fugitive Dust					0.09	0.00	0.09	0.05	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.05	0.38	0.26	0.00		0.02	0.02		0.02	0.02	0.00	47.57	47.57	0.00	0.00	47.66
Total	0.05	0.38	0.26	0.00	0.09	0.02	0.11	0.05	0.02	0.07	0.00	47.57	47.57	0.00	0.00	47.66

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	0.00	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
Vendor	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
Worker	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.00	0.00	1.55
Total	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.00	0.00	1.55

3.3 Fine Grading - 2017

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					0.03	0.00	0.03	0.02	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.05	0.38	0.26	0.00		0.02	0.02		0.02	0.02	0.00	47.57	47.57	0.00	0.00	47.66
Total	0.05	0.38	0.26	0.00	0.03	0.02	0.05	0.02	0.02	0.04	0.00	47.57	47.57	0.00	0.00	47.66

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	0.00	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
Vendor	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
Worker	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.00	0.00	1.55
Total	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.00	0.00	1.55

3.4 Paving - 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	0.01	0.07	0.06	0.00		0.01	0.01		0.01	0.01	0.00	7.77	7.77	0.00	0.00	7.79
Paving	0.00					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.01	0.07	0.06	0.00		0.01	0.01		0.01	0.01	0.00	7.77	7.77	0.00	0.00	7.79

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	0.00	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
Vendor	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
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.65	0.65	0.00	0.00	0.65
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.65	0.65	0.00	0.00	0.65

3.4 Paving - 2017

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	0.01	0.07	0.06	0.00		0.01	0.01		0.01	0.01	0.00	7.77	7.77	0.00	0.00	7.79
Paving	0.00					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.01	0.07	0.06	0.00		0.01	0.01		0.01	0.01	0.00	7.77	7.77	0.00	0.00	7.79

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	0.00	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
Vendor	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
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.65	0.65	0.00	0.00	0.65
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.65	0.65	0.00	0.00	0.65

3.5 Building - 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	0.13	0.74	0.65	0.00		0.04	0.04		0.04	0.04	0.00	99.90	99.90	0.01	0.00	100.12
Total	0.13	0.74	0.65	0.00		0.04	0.04		0.04	0.04	0.00	99.90	99.90	0.01	0.00	100.12

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	0.00	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
Vendor	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.16	2.16	0.00	0.00	2.16
Worker	0.00	0.00	0.04	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	7.26	7.26	0.00	0.00	7.27
Total	0.00	0.01	0.05	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	9.42	9.42	0.00	0.00	9.43

3.5 Building - 2017

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	0.13	0.74	0.65	0.00		0.04	0.04		0.04	0.04	0.00	99.90	99.90	0.01	0.00	100.12
Total	0.13	0.74	0.65	0.00		0.04	0.04		0.04	0.04	0.00	99.90	99.90	0.01	0.00	100.12

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	0.00	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
Vendor	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.16	2.16	0.00	0.00	2.16
Worker	0.00	0.00	0.04	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	7.26	7.26	0.00	0.00	7.27
Total	0.00	0.01	0.05	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	9.42	9.42	0.00	0.00	9.43

3.5 Building - 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	tons/yr										MT/yr					
Off-Road	0.12	0.67	0.62	0.00		0.04	0.04		0.04	0.04	0.00	97.57	97.57	0.01	0.00	97.77
Total	0.12	0.67	0.62	0.00		0.04	0.04		0.04	0.04	0.00	97.57	97.57	0.01	0.00	97.77

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	0.00	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
Vendor	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.11	2.11	0.00	0.00	2.11
Worker	0.00	0.00	0.03	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	6.95	6.95	0.00	0.00	6.95
Total	0.00	0.01	0.04	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	9.06	9.06	0.00	0.00	9.06

3.5 Building - 2018

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	0.12	0.67	0.62	0.00		0.04	0.04		0.04	0.04	0.00	97.57	97.57	0.01	0.00	97.77
Total	0.12	0.67	0.62	0.00		0.04	0.04		0.04	0.04	0.00	97.57	97.57	0.01	0.00	97.77

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	0.00	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
Vendor	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.11	2.11	0.00	0.00	2.11
Worker	0.00	0.00	0.03	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	6.95	6.95	0.00	0.00	6.95
Total	0.00	0.01	0.04	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	9.06	9.06	0.00	0.00	9.06

3.6 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	tons/yr										MT/yr					
Archit. Coating	0.09					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.02	0.11	0.10	0.00		0.01	0.01		0.01	0.01	0.00	13.52	13.52	0.00	0.00	13.54
Total	0.11	0.11	0.10	0.00		0.01	0.01		0.01	0.01	0.00	13.52	13.52	0.00	0.00	13.54

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	0.00	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
Vendor	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
Worker	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.00	0.00	1.55
Total	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.00	0.00	1.55

3.6 Architectural Coating - 2018

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	0.09					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.02	0.11	0.10	0.00		0.01	0.01		0.01	0.01	0.00	13.52	13.52	0.00	0.00	13.54
Total	0.11	0.11	0.10	0.00		0.01	0.01		0.01	0.01	0.00	13.52	13.52	0.00	0.00	13.54

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	0.00	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
Vendor	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
Worker	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.00	0.00	1.55
Total	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.55	1.55	0.00	0.00	1.55

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

- Increase Density
- Improve Walkability Design
- Improve Pedestrian Network
- Implement Trip Reduction Program
- Provide Riade Sharing Program

	ROG	NOx	CO	SO2	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	0.10	0.25	0.94	0.00	0.24	0.01	0.25	0.00	0.01	0.02	0.00	183.40	183.40	0.01	0.00	183.56
Unmitigated	0.11	0.28	1.06	0.00	0.27	0.01	0.29	0.00	0.01	0.02	0.00	212.53	212.53	0.01	0.00	212.70
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Condo/Townhouse	151.57	164.68	139.61	505,362	434,093
Total	151.57	164.68	139.61	505,362	434,093

4.3 Trip Type Information

Land Use	Miles			Trip %		
	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
Condo/Townhouse	12.70	7.00	9.50	40.20	19.20	40.60

5.0 Energy Detail

5.1 Mitigation Measures Energy

Exceed Title 24

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						0.00	0.00		0.00	0.00	0.00	25.83	25.83	0.00	0.00	25.99
Electricity Unmitigated						0.00	0.00		0.00	0.00	0.00	29.07	29.07	0.00	0.00	29.25
NaturalGas Mitigated	0.00	0.02	0.01	0.00		0.00	0.00		0.00	0.00	0.00	25.03	25.03	0.00	0.00	25.18
NaturalGas Unmitigated	0.00	0.03	0.01	0.00		0.00	0.00		0.00	0.00	0.00	30.24	30.24	0.00	0.00	30.43
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	tons/yr										MT/yr					
Condo/Townhouse	566711	0.00	0.03	0.01	0.00		0.00	0.00		0.00	0.00	0.00	30.24	30.24	0.00	0.00	30.43
Total		0.00	0.03	0.01	0.00		0.00	0.00		0.00	0.00	0.00	30.24	30.24	0.00	0.00	30.43

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	tons/yr										MT/yr					
Condo/Townhouse	468980	0.00	0.02	0.01	0.00		0.00	0.00		0.00	0.00	0.00	25.03	25.03	0.00	0.00	25.18
Total		0.00	0.02	0.01	0.00		0.00	0.00		0.00	0.00	0.00	25.03	25.03	0.00	0.00	25.18

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
Condo/Townhouse	99925.3					29.07	0.00	0.00	29.25
Total						29.07	0.00	0.00	29.25

Mitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
Condo/Townhouse	88804.6					25.83	0.00	0.00	25.99
Total						25.83	0.00	0.00	25.99

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

Use only Natural Gas Hearths

No Hearths Installed

	ROG	NOx	CO	SO2	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	0.10	0.00	0.35	0.00		0.00	0.00		0.00	0.00	0.00	0.57	0.57	0.00	0.00	0.58
Unmitigated	0.18	0.01	0.50	0.00		0.00	0.02		0.00	0.02	2.44	14.66	17.10	0.01	0.00	17.37
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	0.01					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.08					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.08	0.00	0.14	0.00		0.00	0.02		0.00	0.02	2.44	14.08	16.53	0.01	0.00	16.79	
Landscaping	0.01	0.00	0.35	0.00		0.00	0.00		0.00	0.00	0.00	0.57	0.57	0.00	0.00	0.58	
Total	0.18	0.00	0.49	0.00		0.00	0.02		0.00	0.02	2.44	14.65	17.10	0.01	0.00	17.37	

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	0.01					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.08					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	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
Landscaping	0.01	0.00	0.35	0.00		0.00	0.00		0.00	0.00	0.00	0.57	0.57	0.00	0.00	0.58
Total	0.10	0.00	0.35	0.00		0.00	0.00		0.00	0.00	0.00	0.57	0.57	0.00	0.00	0.58

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

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr				MT/yr			
Mitigated					7.42	0.04	0.00	8.52
Unmitigated					8.75	0.05	0.00	10.11
Total	NA	NA	NA	NA	NA	NA	NA	NA

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
Condo/Townhouse	1.49854 / 0.944733					8.75	0.05	0.00	10.11
Total						8.75	0.05	0.00	10.11

Mitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
Condo/Townhouse	1.19883 / 0.887105					7.42	0.04	0.00	8.52
Total						7.42	0.04	0.00	8.52

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
	tons/yr				MT/yr			
Mitigated					2.15	0.13	0.00	4.81
Unmitigated					2.15	0.13	0.00	4.81
Total	NA	NA	NA	NA	NA	NA	NA	NA

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
Condo/Townhouse	10.58					2.15	0.13	0.00	4.81
Total						2.15	0.13	0.00	4.81

8.2 Waste by Land Use

Mitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
Condo/Townhouse	10.58					2.15	0.13	0.00	4.81
Total						2.15	0.13	0.00	4.81

9.0 Vegetation

Serrano Summit Construction Phase 5
South Coast AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Condo/Townhouse	23	Dwelling Unit

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Utility Company	Southern California Edison
Climate Zone	9	Precipitation Freq (Days)	31		

1.3 User Entered Comments

- Project Characteristics -
- Land Use -
- Construction Phase - construction schedule based on information provided by applicant
- Off-road Equipment -
- Trips and VMT -
- Demolition -
- Grading - Total acreage=9.85

Vehicle Trips -

Woodstoves - Wood stoves are not proposed, fireplaces would be gas

Energy Use -

Land Use Change -

Sequestration -

Construction Off-road Equipment Mitigation - Construction mitigation per SCAQMD

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

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					
2017	3.21	19.45	16.15	0.03	4.68	1.13	5.60	2.48	1.13	3.40	0.00	2,815.49	0.00	0.29	0.00	2,821.52
2018	2.89	16.27	15.84	0.03	0.28	0.93	1.21	0.00	0.93	0.93	0.00	2,811.52	0.00	0.26	0.00	2,816.97
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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					
2017	3.21	19.45	16.15	0.03	1.78	1.13	2.70	0.92	1.13	1.84	0.00	2,815.49	0.00	0.29	0.00	2,821.52
2018	2.89	16.27	15.84	0.03	0.21	0.93	1.14	0.00	0.93	0.93	0.00	2,811.52	0.00	0.26	0.00	2,816.97
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	3.01	0.13	9.54	0.02		0.00	1.23		0.00	1.23	162.30	417.46		0.65	0.01	596.41
Energy	0.02	0.14	0.06	0.00		0.00	0.01		0.00	0.01		182.66		0.00	0.00	183.77
Mobile	0.71	1.66	6.50	0.02	1.82	0.09	1.91	0.03	0.09	0.11		1,468.26		0.05		1,469.40
Total	3.74	1.93	16.10	0.04	1.82	0.09	3.15	0.03	0.09	1.35	162.30	2,068.38		0.70	0.01	2,249.58

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	0.56	0.02	1.93	0.00		0.00	0.01		0.00	0.01	0.00	3.46		0.00	0.00	3.53
Energy	0.01	0.12	0.05	0.00		0.00	0.01		0.00	0.01		151.16		0.00	0.00	152.08
Mobile	0.64	1.49	5.72	0.01	1.56	0.08	1.64	0.02	0.07	0.10		1,266.92		0.05		1,267.91
Total	1.21	1.63	7.70	0.01	1.56	0.08	1.66	0.02	0.07	0.12	0.00	1,421.54		0.05	0.00	1,423.52

3.0 Construction Detail

3.1 Mitigation Measures Construction

- Use DPF for Construction Equipment
- Replace Ground Cover
- Water Exposed Area
- Water Unpaved Roads
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

3.2 Mass 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					4.54	0.00	4.54	2.48	0.00	2.48						0.00
Off-Road	2.60	19.42	13.35	0.03		0.91	0.91		0.91	0.91		2,689.97		0.23		2,694.85
Total	2.60	19.42	13.35	0.03	4.54	0.91	5.45	2.48	0.91	3.39		2,689.97		0.23		2,694.85

3.2 Mass 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.04	0.04	0.43	0.00	0.12	0.00	0.13	0.00	0.00	0.01		93.33		0.00		93.43
Total	0.04	0.04	0.43	0.00	0.12	0.00	0.13	0.00	0.00	0.01		93.33		0.00		93.43

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					1.68	0.00	1.68	0.92	0.00	0.92						0.00
Off-Road	2.60	19.42	13.35	0.03		0.91	0.91		0.91	0.91	0.00	2,689.97		0.23		2,694.85
Total	2.60	19.42	13.35	0.03	1.68	0.91	2.59	0.92	0.91	1.83	0.00	2,689.97		0.23		2,694.85

3.2 Mass 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.04	0.04	0.43	0.00	0.09	0.00	0.10	0.00	0.00	0.01		93.33		0.00		93.43
Total	0.04	0.04	0.43	0.00	0.09	0.00	0.10	0.00	0.00	0.01		93.33		0.00		93.43

3.3 Fine 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					4.56	0.00	4.56	2.48	0.00	2.48						0.00
Off-Road	2.60	19.42	13.35	0.03		0.91	0.91		0.91	0.91		2,689.97		0.23		2,694.85
Total	2.60	19.42	13.35	0.03	4.56	0.91	5.47	2.48	0.91	3.39		2,689.97		0.23		2,694.85

3.3 Fine 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.04	0.04	0.43	0.00	0.12	0.00	0.13	0.00	0.00	0.01		93.33		0.00		93.43
Total	0.04	0.04	0.43	0.00	0.12	0.00	0.13	0.00	0.00	0.01		93.33		0.00		93.43

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					1.69	0.00	1.69	0.92	0.00	0.92						0.00
Off-Road	2.60	19.42	13.35	0.03		0.91	0.91		0.91	0.91	0.00	2,689.97		0.23		2,694.85
Total	2.60	19.42	13.35	0.03	1.69	0.91	2.60	0.92	0.91	1.83	0.00	2,689.97		0.23		2,694.85

3.3 Fine 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.04	0.04	0.43	0.00	0.09	0.00	0.10	0.00	0.00	0.01		93.33		0.00		93.43
Total	0.04	0.04	0.43	0.00	0.09	0.00	0.10	0.00	0.00	0.01		93.33		0.00		93.43

3.4 Paving - 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	2.28	14.26	11.73	0.02		1.12	1.12		1.12	1.12		1,712.73		0.20		1,717.03
Paving	0.00					0.00	0.00		0.00	0.00						0.00
Total	2.28	14.26	11.73	0.02		1.12	1.12		1.12	1.12		1,712.73		0.20		1,717.03

3.4 Paving - 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.06	0.06	0.70	0.00	0.20	0.01	0.21	0.00	0.01	0.01		151.67		0.01		151.82
Total	0.06	0.06	0.70	0.00	0.20	0.01	0.21	0.00	0.01	0.01		151.67		0.01		151.82

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	2.28	14.26	11.73	0.02		1.12	1.12		1.12	1.12	0.00	1,712.73		0.20		1,717.03
Paving	0.00					0.00	0.00		0.00	0.00						0.00
Total	2.28	14.26	11.73	0.02		1.12	1.12		1.12	1.12	0.00	1,712.73		0.20		1,717.03

3.4 Paving - 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.06	0.06	0.70	0.00	0.15	0.01	0.16	0.00	0.01	0.01		151.67		0.01		151.82
Total	0.06	0.06	0.70	0.00	0.15	0.01	0.16	0.00	0.01	0.01		151.67		0.01		151.82

3.5 Building - 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	3.10	17.29	15.09	0.03		1.04	1.04		1.04	1.04		2,561.58		0.28		2,567.39
Total	3.10	17.29	15.09	0.03		1.04	1.04		1.04	1.04		2,561.58		0.28		2,567.39

3.5 Building - 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.02	0.23	0.14	0.00	0.02	0.01	0.03	0.00	0.01	0.01		55.58		0.00		55.60
Worker	0.08	0.08	0.92	0.00	0.26	0.01	0.27	0.00	0.01	0.01		198.33		0.01		198.53
Total	0.10	0.31	1.06	0.00	0.28	0.02	0.30	0.00	0.02	0.02		253.91		0.01		254.13

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	3.10	17.29	15.09	0.03		1.04	1.04		1.04	1.04	0.00	2,561.58		0.28		2,567.39
Total	3.10	17.29	15.09	0.03		1.04	1.04		1.04	1.04	0.00	2,561.58		0.28		2,567.39

3.5 Building - 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.02	0.23	0.14	0.00	0.01	0.01	0.02	0.00	0.01	0.01		55.58		0.00		55.60
Worker	0.08	0.08	0.92	0.00	0.20	0.01	0.20	0.00	0.01	0.01		198.33		0.01		198.53
Total	0.10	0.31	1.06	0.00	0.21	0.02	0.22	0.00	0.02	0.02		253.91		0.01		254.13

3.5 Building - 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	2.79	15.98	14.86	0.03		0.91	0.91		0.91	0.91		2,561.58		0.25		2,566.82
Total	2.79	15.98	14.86	0.03		0.91	0.91		0.91	0.91		2,561.58		0.25		2,566.82

3.5 Building - 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.02	0.22	0.13	0.00	0.02	0.01	0.03	0.00	0.01	0.01		55.66		0.00		55.68
Worker	0.08	0.07	0.85	0.00	0.26	0.01	0.27	0.00	0.01	0.01		194.28		0.01		194.47
Total	0.10	0.29	0.98	0.00	0.28	0.02	0.30	0.00	0.02	0.02		249.94		0.01		250.15

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	2.79	15.98	14.86	0.03		0.91	0.91		0.91	0.91	0.00	2,561.58		0.25		2,566.82
Total	2.79	15.98	14.86	0.03		0.91	0.91		0.91	0.91	0.00	2,561.58		0.25		2,566.82

3.5 Building - 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.02	0.22	0.13	0.00	0.01	0.01	0.02	0.00	0.01	0.01		55.66		0.00		55.68
Worker	0.08	0.07	0.85	0.00	0.20	0.01	0.20	0.00	0.01	0.01		194.28		0.01		194.47
Total	0.10	0.29	0.98	0.00	0.21	0.02	0.22	0.00	0.02	0.02		249.94		0.01		250.15

3.6 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	1.70					0.00	0.00		0.00	0.00						0.00
Off-Road	0.30	2.00	1.85	0.00		0.15	0.15		0.15	0.15		281.19		0.03		281.75
Total	2.00	2.00	1.85	0.00		0.15	0.15		0.15	0.15		281.19		0.03		281.75

3.6 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.01	0.01	0.15	0.00	0.05	0.00	0.05	0.00	0.00	0.00		34.29		0.00		34.32
Total	0.01	0.01	0.15	0.00	0.05	0.00	0.05	0.00	0.00	0.00		34.29		0.00		34.32

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	1.70					0.00	0.00		0.00	0.00						0.00
Off-Road	0.30	2.00	1.85	0.00		0.15	0.15		0.15	0.15	0.00	281.19		0.03		281.75
Total	2.00	2.00	1.85	0.00		0.15	0.15		0.15	0.15	0.00	281.19		0.03		281.75

3.6 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.01	0.01	0.15	0.00	0.03	0.00	0.04	0.00	0.00	0.00		34.29		0.00		34.32
Total	0.01	0.01	0.15	0.00	0.03	0.00	0.04	0.00	0.00	0.00		34.29		0.00		34.32

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

- Increase Density
- Improve Walkability Design
- Improve Pedestrian Network
- Implement Trip Reduction Program
- Provide Riade Sharing Program

	ROG	NOx	CO	SO2	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	0.64	1.49	5.72	0.01	1.56	0.08	1.64	0.02	0.07	0.10		1,266.92		0.05		1,267.91
Unmitigated	0.71	1.66	6.50	0.02	1.82	0.09	1.91	0.03	0.09	0.11		1,468.26		0.05		1,469.40
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Condo/Townhouse	151.57	164.68	139.61	505,362	434,093
Total	151.57	164.68	139.61	505,362	434,093

4.3 Trip Type Information

Land Use	Miles			Trip %		
	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
Condo/Townhouse	12.70	7.00	9.50	40.20	19.20	40.60

5.0 Energy Detail

5.1 Mitigation Measures Energy

Exceed Title 24

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	lb/day										lb/day					
NaturalGas Mitigated	0.01	0.12	0.05	0.00		0.00	0.01		0.00	0.01		151.16		0.00	0.00	152.08
NaturalGas Unmitigated	0.02	0.14	0.06	0.00		0.00	0.01		0.00	0.01		182.66		0.00	0.00	183.77
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	lb/day										lb/day					
Condo/Townhouse	1552.63	0.02	0.14	0.06	0.00		0.00	0.01		0.00	0.01		182.66		0.00	0.00	183.77
Total		0.02	0.14	0.06	0.00		0.00	0.01		0.00	0.01		182.66		0.00	0.00	183.77

5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	lb/day										lb/day					
Condo/Townhouse	1.28488	0.01	0.12	0.05	0.00		0.00	0.01		0.00	0.01		151.16		0.00	0.00	152.08
Total		0.01	0.12	0.05	0.00		0.00	0.01		0.00	0.01		151.16		0.00	0.00	152.08

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

Use only Natural Gas Hearths

No Hearths Installed

	ROG	NOx	CO	SO2	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	0.56	0.02	1.93	0.00		0.00	0.01		0.00	0.01	0.00	3.46		0.00	0.00	3.53
Unmitigated	3.01	0.13	9.54	0.02		0.00	1.23		0.00	1.23	162.30	417.46		0.65	0.01	596.41
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	0.05					0.00	0.00		0.00	0.00						0.00
Consumer Products	0.46					0.00	0.00		0.00	0.00						0.00
Hearth	2.45	0.11	7.61	0.02		0.00	1.22		0.00	1.22	162.30	414.00		0.64	0.01	592.88
Landscaping	0.06	0.02	1.93	0.00		0.00	0.01		0.00	0.01		3.46		0.00		3.53
Total	3.02	0.13	9.54	0.02		0.00	1.23		0.00	1.23	162.30	417.46		0.64	0.01	596.41

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	0.05					0.00	0.00		0.00	0.00						0.00
Consumer Products	0.46					0.00	0.00		0.00	0.00						0.00
Hearth	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
Landscaping	0.06	0.02	1.93	0.00		0.00	0.01		0.00	0.01		3.46		0.00		3.53
Total	0.57	0.02	1.93	0.00		0.00	0.01		0.00	0.01	0.00	3.46		0.00	0.00	3.53

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

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

Serrano Summit Construction Phase 5
South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Condo/Townhouse	23	Dwelling Unit

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Utility Company	Southern California Edison
Climate Zone	9	Precipitation Freq (Days)	31		

1.3 User Entered Comments

- Project Characteristics -
- Land Use -
- Construction Phase - construction schedule based on information provided by applicant
- Off-road Equipment -
- Trips and VMT -
- Demolition -
- Grading - Total acreage=9.85

Vehicle Trips -

Woodstoves - Wood stoves are not proposed, fireplaces would be gas

Energy Use -

Land Use Change -

Sequestration -

Construction Off-road Equipment Mitigation - Construction mitigation per SCAQMD

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

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					
2017	3.21	19.46	16.09	0.03	4.68	1.13	5.60	2.48	1.13	3.40	0.00	2,797.70	0.00	0.29	0.00	2,803.73
2018	2.89	16.29	15.79	0.03	0.28	0.93	1.21	0.00	0.93	0.93	0.00	2,794.03	0.00	0.26	0.00	2,799.47
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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					
2017	3.21	19.46	16.09	0.03	1.78	1.13	2.70	0.92	1.13	1.84	0.00	2,797.70	0.00	0.29	0.00	2,803.73
2018	2.89	16.29	15.79	0.03	0.21	0.93	1.14	0.00	0.93	0.93	0.00	2,794.03	0.00	0.26	0.00	2,799.47
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	3.01	0.13	9.54	0.02		0.00	1.23		0.00	1.23	162.30	417.46		0.65	0.01	596.41
Energy	0.02	0.14	0.06	0.00		0.00	0.01		0.00	0.01		182.66		0.00	0.00	183.77
Mobile	0.73	1.76	6.25	0.02	1.82	0.09	1.91	0.03	0.09	0.11		1,366.58		0.06		1,367.74
Total	3.76	2.03	15.85	0.04	1.82	0.09	3.15	0.03	0.09	1.35	162.30	1,966.70		0.71	0.01	2,147.92

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	0.56	0.02	1.93	0.00		0.00	0.01		0.00	0.01	0.00	3.46		0.00	0.00	3.53
Energy	0.01	0.12	0.05	0.00		0.00	0.01		0.00	0.01		151.16		0.00	0.00	152.08
Mobile	0.66	1.58	5.56	0.01	1.56	0.08	1.64	0.02	0.07	0.10		1,179.25		0.05		1,180.26
Total	1.23	1.72	7.54	0.01	1.56	0.08	1.66	0.02	0.07	0.12	0.00	1,333.87		0.05	0.00	1,335.87

3.0 Construction Detail

3.1 Mitigation Measures Construction

- Use DPF for Construction Equipment
- Replace Ground Cover
- Water Exposed Area
- Water Unpaved Roads
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

3.2 Mass 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					4.54	0.00	4.54	2.48	0.00	2.48						0.00
Off-Road	2.60	19.42	13.35	0.03		0.91	0.91		0.91	0.91		2,689.97		0.23		2,694.85
Total	2.60	19.42	13.35	0.03	4.54	0.91	5.45	2.48	0.91	3.39		2,689.97		0.23		2,694.85

3.2 Mass 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.04	0.04	0.40	0.00	0.12	0.00	0.13	0.00	0.00	0.01		85.18		0.00		85.27
Total	0.04	0.04	0.40	0.00	0.12	0.00	0.13	0.00	0.00	0.01		85.18		0.00		85.27

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					1.68	0.00	1.68	0.92	0.00	0.92						0.00
Off-Road	2.60	19.42	13.35	0.03		0.91	0.91		0.91	0.91	0.00	2,689.97		0.23		2,694.85
Total	2.60	19.42	13.35	0.03	1.68	0.91	2.59	0.92	0.91	1.83	0.00	2,689.97		0.23		2,694.85

3.2 Mass 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.04	0.04	0.40	0.00	0.09	0.00	0.10	0.00	0.00	0.01		85.18		0.00		85.27
Total	0.04	0.04	0.40	0.00	0.09	0.00	0.10	0.00	0.00	0.01		85.18		0.00		85.27

3.3 Fine 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					4.56	0.00	4.56	2.48	0.00	2.48						0.00
Off-Road	2.60	19.42	13.35	0.03		0.91	0.91		0.91	0.91		2,689.97		0.23		2,694.85
Total	2.60	19.42	13.35	0.03	4.56	0.91	5.47	2.48	0.91	3.39		2,689.97		0.23		2,694.85

3.3 Fine 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.04	0.04	0.40	0.00	0.12	0.00	0.13	0.00	0.00	0.01		85.18		0.00		85.27
Total	0.04	0.04	0.40	0.00	0.12	0.00	0.13	0.00	0.00	0.01		85.18		0.00		85.27

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					1.69	0.00	1.69	0.92	0.00	0.92						0.00
Off-Road	2.60	19.42	13.35	0.03		0.91	0.91		0.91	0.91	0.00	2,689.97		0.23		2,694.85
Total	2.60	19.42	13.35	0.03	1.69	0.91	2.60	0.92	0.91	1.83	0.00	2,689.97		0.23		2,694.85

3.3 Fine 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.04	0.04	0.40	0.00	0.09	0.00	0.10	0.00	0.00	0.01		85.18		0.00		85.27
Total	0.04	0.04	0.40	0.00	0.09	0.00	0.10	0.00	0.00	0.01		85.18		0.00		85.27

3.4 Paving - 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	2.28	14.26	11.73	0.02		1.12	1.12		1.12	1.12		1,712.73		0.20		1,717.03
Paving	0.00					0.00	0.00		0.00	0.00						0.00
Total	2.28	14.26	11.73	0.02		1.12	1.12		1.12	1.12		1,712.73		0.20		1,717.03

3.4 Paving - 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.07	0.07	0.64	0.00	0.20	0.01	0.21	0.00	0.01	0.01		138.42		0.01		138.57
Total	0.07	0.07	0.64	0.00	0.20	0.01	0.21	0.00	0.01	0.01		138.42		0.01		138.57

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	2.28	14.26	11.73	0.02		1.12	1.12		1.12	1.12	0.00	1,712.73		0.20		1,717.03
Paving	0.00					0.00	0.00		0.00	0.00						0.00
Total	2.28	14.26	11.73	0.02		1.12	1.12		1.12	1.12	0.00	1,712.73		0.20		1,717.03

3.4 Paving - 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.07	0.07	0.64	0.00	0.15	0.01	0.16	0.00	0.01	0.01		138.42		0.01		138.57
Total	0.07	0.07	0.64	0.00	0.15	0.01	0.16	0.00	0.01	0.01		138.42		0.01		138.57

3.5 Building - 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	3.10	17.29	15.09	0.03		1.04	1.04		1.04	1.04		2,561.58		0.28		2,567.39
Total	3.10	17.29	15.09	0.03		1.04	1.04		1.04	1.04		2,561.58		0.28		2,567.39

3.5 Building - 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.02	0.24	0.16	0.00	0.02	0.01	0.03	0.00	0.01	0.01		55.11		0.00		55.14
Worker	0.09	0.09	0.84	0.00	0.26	0.01	0.27	0.00	0.01	0.01		181.01		0.01		181.20
Total	0.11	0.33	1.00	0.00	0.28	0.02	0.30	0.00	0.02	0.02		236.12		0.01		236.34

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	3.10	17.29	15.09	0.03		1.04	1.04		1.04	1.04	0.00	2,561.58		0.28		2,567.39
Total	3.10	17.29	15.09	0.03		1.04	1.04		1.04	1.04	0.00	2,561.58		0.28		2,567.39

3.5 Building - 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.02	0.24	0.16	0.00	0.01	0.01	0.02	0.00	0.01	0.01		55.11		0.00		55.14
Worker	0.09	0.09	0.84	0.00	0.20	0.01	0.20	0.00	0.01	0.01		181.01		0.01		181.20
Total	0.11	0.33	1.00	0.00	0.21	0.02	0.22	0.00	0.02	0.02		236.12		0.01		236.34

3.5 Building - 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	2.79	15.98	14.86	0.03		0.91	0.91		0.91	0.91		2,561.58		0.25		2,566.82
Total	2.79	15.98	14.86	0.03		0.91	0.91		0.91	0.91		2,561.58		0.25		2,566.82

3.5 Building - 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.02	0.22	0.15	0.00	0.02	0.01	0.03	0.00	0.01	0.01		55.18		0.00		55.20
Worker	0.08	0.08	0.77	0.00	0.26	0.01	0.27	0.00	0.01	0.01		177.27		0.01		177.44
Total	0.10	0.30	0.92	0.00	0.28	0.02	0.30	0.00	0.02	0.02		232.45		0.01		232.64

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	2.79	15.98	14.86	0.03		0.91	0.91		0.91	0.91	0.00	2,561.58		0.25		2,566.82
Total	2.79	15.98	14.86	0.03		0.91	0.91		0.91	0.91	0.00	2,561.58		0.25		2,566.82

3.5 Building - 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.02	0.22	0.15	0.00	0.01	0.01	0.02	0.00	0.01	0.01		55.18		0.00		55.20
Worker	0.08	0.08	0.77	0.00	0.20	0.01	0.20	0.00	0.01	0.01		177.27		0.01		177.44
Total	0.10	0.30	0.92	0.00	0.21	0.02	0.22	0.00	0.02	0.02		232.45		0.01		232.64

3.6 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	1.70					0.00	0.00		0.00	0.00						0.00
Off-Road	0.30	2.00	1.85	0.00		0.15	0.15		0.15	0.15		281.19		0.03		281.75
Total	2.00	2.00	1.85	0.00		0.15	0.15		0.15	0.15		281.19		0.03		281.75

3.6 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.01	0.01	0.14	0.00	0.05	0.00	0.05	0.00	0.00	0.00		31.28		0.00		31.31
Total	0.01	0.01	0.14	0.00	0.05	0.00	0.05	0.00	0.00	0.00		31.28		0.00		31.31

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	1.70					0.00	0.00		0.00	0.00						0.00
Off-Road	0.30	2.00	1.85	0.00		0.15	0.15		0.15	0.15	0.00	281.19		0.03		281.75
Total	2.00	2.00	1.85	0.00		0.15	0.15		0.15	0.15	0.00	281.19		0.03		281.75

3.6 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.01	0.01	0.14	0.00	0.03	0.00	0.04	0.00	0.00	0.00		31.28		0.00		31.31
Total	0.01	0.01	0.14	0.00	0.03	0.00	0.04	0.00	0.00	0.00		31.28		0.00		31.31

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

- Increase Density
- Improve Walkability Design
- Improve Pedestrian Network
- Implement Trip Reduction Program
- Provide Riade Sharing Program

	ROG	NOx	CO	SO2	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	0.66	1.58	5.56	0.01	1.56	0.08	1.64	0.02	0.07	0.10		1,179.25		0.05		1,180.26
Unmitigated	0.73	1.76	6.25	0.02	1.82	0.09	1.91	0.03	0.09	0.11		1,366.58		0.06		1,367.74
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Condo/Townhouse	151.57	164.68	139.61	505,362	434,093
Total	151.57	164.68	139.61	505,362	434,093

4.3 Trip Type Information

Land Use	Miles			Trip %		
	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
Condo/Townhouse	12.70	7.00	9.50	40.20	19.20	40.60

5.0 Energy Detail

5.1 Mitigation Measures Energy

Exceed Title 24

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	lb/day										lb/day					
NaturalGas Mitigated	0.01	0.12	0.05	0.00		0.00	0.01		0.00	0.01		151.16		0.00	0.00	152.08
NaturalGas Unmitigated	0.02	0.14	0.06	0.00		0.00	0.01		0.00	0.01		182.66		0.00	0.00	183.77
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	lb/day										lb/day					
Condo/Townhouse	1552.63	0.02	0.14	0.06	0.00		0.00	0.01		0.00	0.01		182.66		0.00	0.00	183.77
Total		0.02	0.14	0.06	0.00		0.00	0.01		0.00	0.01		182.66		0.00	0.00	183.77

5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	lb/day										lb/day					
Condo/Townhouse	1.28488	0.01	0.12	0.05	0.00		0.00	0.01		0.00	0.01		151.16		0.00	0.00	152.08
Total		0.01	0.12	0.05	0.00		0.00	0.01		0.00	0.01		151.16		0.00	0.00	152.08

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

Use only Natural Gas Hearths

No Hearths Installed

	ROG	NOx	CO	SO2	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	0.56	0.02	1.93	0.00		0.00	0.01		0.00	0.01	0.00	3.46		0.00	0.00	3.53
Unmitigated	3.01	0.13	9.54	0.02		0.00	1.23		0.00	1.23	162.30	417.46		0.65	0.01	596.41
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	0.05					0.00	0.00		0.00	0.00						0.00
Consumer Products	0.46					0.00	0.00		0.00	0.00						0.00
Hearth	2.45	0.11	7.61	0.02		0.00	1.22		0.00	1.22	162.30	414.00		0.64	0.01	592.88
Landscaping	0.06	0.02	1.93	0.00		0.00	0.01		0.00	0.01		3.46		0.00		3.53
Total	3.02	0.13	9.54	0.02		0.00	1.23		0.00	1.23	162.30	417.46		0.64	0.01	596.41

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	0.05					0.00	0.00		0.00	0.00							0.00
Consumer Products	0.46					0.00	0.00		0.00	0.00							0.00
Hearth	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
Landscaping	0.06	0.02	1.93	0.00		0.00	0.01		0.00	0.01		3.46		0.00			3.53
Total	0.57	0.02	1.93	0.00		0.00	0.01		0.00	0.01	0.00	3.46		0.00	0.00		3.53

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

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

Serrano Summit Construction Phase 6
South Coast AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Government Office Building	94	1000sqft

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Utility Company	Southern California Edison
Climate Zone	9	Precipitation Freq (Days)	31		

1.3 User Entered Comments

- Project Characteristics -
- Land Use -
- Construction Phase - construction schedule based on information provided by applicant
- Off-road Equipment -
- Trips and VMT -
- Demolition -
- Grading - Total acreage=9.85

Vehicle Trips -

Woodstoves - Wood stoves are not proposed, fireplaces would be gas

Energy Use -

Land Use Change -

Sequestration -

Construction Off-road Equipment Mitigation - Construction mitigation per SCAQMD

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

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					
2018	0.35	2.29	1.96	0.00	0.34	0.12	0.46	0.17	0.12	0.29	0.00	350.23	350.23	0.03	0.00	350.82
2019	1.24	0.90	0.96	0.00	0.03	0.05	0.08	0.00	0.05	0.05	0.00	167.59	167.59	0.01	0.00	167.84
Total	1.59	3.19	2.92	0.00	0.37	0.17	0.54	0.17	0.17	0.34	0.00	517.82	517.82	0.04	0.00	518.66

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					
2018	0.35	2.29	1.96	0.00	0.14	0.12	0.26	0.06	0.12	0.18	0.00	350.23	350.23	0.03	0.00	350.82
2019	1.24	0.90	0.96	0.00	0.02	0.05	0.07	0.00	0.05	0.05	0.00	167.59	167.59	0.01	0.00	167.84
Total	1.59	3.19	2.92	0.00	0.16	0.17	0.33	0.06	0.17	0.23	0.00	517.82	517.82	0.04	0.00	518.66

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	0.45	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
Energy	0.01	0.05	0.04	0.00		0.00	0.00		0.00	0.00	0.00	452.10	452.10	0.02	0.01	454.93
Mobile	2.87	6.95	25.69	0.06	6.20	0.34	6.55	0.10	0.33	0.43	0.00	4,847.22	4,847.22	0.19	0.00	4,851.30
Waste						0.00	0.00		0.00	0.00	17.75	0.00	17.75	1.05	0.00	39.77
Water						0.00	0.00		0.00	0.00	0.00	107.92	107.92	0.57	0.02	124.95
Total	3.33	7.00	25.73	0.06	6.20	0.34	6.55	0.10	0.33	0.43	17.75	5,407.24	5,424.99	1.83	0.03	5,470.95

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	0.45	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
Energy	0.00	0.04	0.03	0.00		0.00	0.00		0.00	0.00	0.00	363.88	363.88	0.02	0.01	366.15
Mobile	2.40	5.77	20.76	0.05	4.61	0.26	4.87	0.07	0.25	0.32	0.00	3,649.39	3,649.39	0.15	0.00	3,652.54
Waste						0.00	0.00		0.00	0.00	17.75	0.00	17.75	1.05	0.00	39.77
Water						0.00	0.00		0.00	0.00	0.00	91.48	91.48	0.46	0.01	105.13
Total	2.85	5.81	20.79	0.05	4.61	0.26	4.87	0.07	0.25	0.32	17.75	4,104.75	4,122.50	1.68	0.02	4,163.59

3.0 Construction Detail

3.1 Mitigation Measures Construction

- Use DPF for Construction Equipment
- Replace Ground Cover
- Water Exposed Area
- Water Unpaved Roads
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

3.2 Mass Grading - 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	tons/yr										MT/yr					
Fugitive Dust					0.19	0.00	0.19	0.11	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.11	0.81	0.60	0.00		0.04	0.04		0.04	0.04	0.00	111.08	111.08	0.01	0.00	111.27
Total	0.11	0.81	0.60	0.00	0.19	0.04	0.23	0.11	0.04	0.15	0.00	111.08	111.08	0.01	0.00	111.27

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	0.00	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
Vendor	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
Worker	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.11	3.11	0.00	0.00	3.12
Total	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.11	3.11	0.00	0.00	3.12

3.2 Mass Grading - 2018

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					0.07	0.00	0.07	0.04	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.11	0.81	0.60	0.00		0.04	0.04		0.04	0.04	0.00	111.08	111.08	0.01	0.00	111.27
Total	0.11	0.81	0.60	0.00	0.07	0.04	0.11	0.04	0.04	0.08	0.00	111.08	111.08	0.01	0.00	111.27

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	0.00	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
Vendor	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
Worker	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.11	3.11	0.00	0.00	3.12
Total	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.11	3.11	0.00	0.00	3.12

3.3 Fine Grading - 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	tons/yr										MT/yr					
Fugitive Dust					0.12	0.00	0.12	0.06	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.07	0.49	0.37	0.00		0.02	0.02		0.02	0.02	0.00	67.69	67.69	0.01	0.00	67.81
Total	0.07	0.49	0.37	0.00	0.12	0.02	0.14	0.06	0.02	0.08	0.00	67.69	67.69	0.01	0.00	67.81

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	0.00	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
Vendor	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
Worker	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.90	1.90	0.00	0.00	1.90
Total	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.90	1.90	0.00	0.00	1.90

3.3 Fine Grading - 2018

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					0.04	0.00	0.04	0.02	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.07	0.49	0.37	0.00		0.02	0.02		0.02	0.02	0.00	67.69	67.69	0.01	0.00	67.81
Total	0.07	0.49	0.37	0.00	0.04	0.02	0.06	0.02	0.02	0.04	0.00	67.69	67.69	0.01	0.00	67.81

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	0.00	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
Vendor	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
Worker	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.90	1.90	0.00	0.00	1.90
Total	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.90	1.90	0.00	0.00	1.90

3.4 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	tons/yr										MT/yr					
Off-Road	0.01	0.09	0.08	0.00		0.01	0.01		0.01	0.01	0.00	10.85	10.85	0.00	0.00	10.88
Paving	0.00					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.01	0.09	0.08	0.00		0.01	0.01		0.01	0.01	0.00	10.85	10.85	0.00	0.00	10.88

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	0.00	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
Vendor	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
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73	0.73	0.00	0.00	0.73
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73	0.73	0.00	0.00	0.73

3.4 Paving - 2018

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	0.01	0.09	0.08	0.00		0.01	0.01		0.01	0.01	0.00	10.85	10.85	0.00	0.00	10.88
Paving	0.00					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.01	0.09	0.08	0.00		0.01	0.01		0.01	0.01	0.00	10.85	10.85	0.00	0.00	10.88

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	0.00	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
Vendor	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
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73	0.73	0.00	0.00	0.73
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73	0.73	0.00	0.00	0.73

3.5 Building - 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	tons/yr										MT/yr					
Off-Road	0.14	0.82	0.77	0.00		0.05	0.05		0.05	0.05	0.00	126.09	126.09	0.01	0.00	126.32
Total	0.14	0.82	0.77	0.00		0.05	0.05		0.05	0.05	0.00	126.09	126.09	0.01	0.00	126.32

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	0.00	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
Vendor	0.01	0.07	0.05	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	16.23	16.23	0.00	0.00	16.23
Worker	0.01	0.01	0.06	0.00	0.02	0.00	0.02	0.00	0.00	0.00	0.00	12.55	12.55	0.00	0.00	12.56
Total	0.02	0.08	0.11	0.00	0.03	0.00	0.03	0.00	0.00	0.00	0.00	28.78	28.78	0.00	0.00	28.79

3.5 Building - 2018

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	0.14	0.82	0.77	0.00		0.05	0.05		0.05	0.05	0.00	126.09	126.09	0.01	0.00	126.32
Total	0.14	0.82	0.77	0.00		0.05	0.05		0.05	0.05	0.00	126.09	126.09	0.01	0.00	126.32

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	0.00	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
Vendor	0.01	0.07	0.05	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	16.23	16.23	0.00	0.00	16.23
Worker	0.01	0.01	0.06	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	12.55	12.55	0.00	0.00	12.56
Total	0.02	0.08	0.11	0.00	0.01	0.00	0.02	0.00	0.00	0.00	0.00	28.78	28.78	0.00	0.00	28.79

3.5 Building - 2019

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	0.12	0.73	0.75	0.00		0.04	0.04		0.04	0.04	0.00	123.15	123.15	0.01	0.00	123.36
Total	0.12	0.73	0.75	0.00		0.04	0.04		0.04	0.04	0.00	123.15	123.15	0.01	0.00	123.36

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	0.00	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
Vendor	0.01	0.06	0.04	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	15.87	15.87	0.00	0.00	15.87
Worker	0.01	0.00	0.06	0.00	0.02	0.00	0.02	0.00	0.00	0.00	0.00	12.02	12.02	0.00	0.00	12.03
Total	0.02	0.06	0.10	0.00	0.03	0.00	0.03	0.00	0.00	0.00	0.00	27.89	27.89	0.00	0.00	27.90

3.5 Building - 2019

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	0.12	0.73	0.75	0.00		0.04	0.04		0.04	0.04	0.00	123.15	123.15	0.01	0.00	123.36
Total	0.12	0.73	0.75	0.00		0.04	0.04		0.04	0.04	0.00	123.15	123.15	0.01	0.00	123.36

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	0.00	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
Vendor	0.01	0.06	0.04	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	15.87	15.87	0.00	0.00	15.87
Worker	0.01	0.00	0.06	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	12.02	12.02	0.00	0.00	12.03
Total	0.02	0.06	0.10	0.00	0.01	0.00	0.02	0.00	0.00	0.00	0.00	27.89	27.89	0.00	0.00	27.90

3.6 Architectural Coating - 2019

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	1.09					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.01	0.10	0.10	0.00		0.01	0.01		0.01	0.01	0.00	13.52	13.52	0.00	0.00	13.54
Total	1.10	0.10	0.10	0.00		0.01	0.01		0.01	0.01	0.00	13.52	13.52	0.00	0.00	13.54

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	0.00	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
Vendor	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
Worker	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.03	3.03	0.00	0.00	3.04
Total	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.03	3.03	0.00	0.00	3.04

3.6 Architectural Coating - 2019

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	1.09					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.01	0.10	0.10	0.00		0.01	0.01		0.01	0.01	0.00	13.52	13.52	0.00	0.00	13.54
Total	1.10	0.10	0.10	0.00		0.01	0.01		0.01	0.01	0.00	13.52	13.52	0.00	0.00	13.54

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	0.00	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
Vendor	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
Worker	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.03	3.03	0.00	0.00	3.04
Total	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.03	3.03	0.00	0.00	3.04

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

- Increase Density
- Improve Walkability Design
- Improve Pedestrian Network
- Implement Trip Reduction Program
- Provide Riade Sharing Program

	ROG	NOx	CO	SO2	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	2.40	5.77	20.76	0.05	4.61	0.26	4.87	0.07	0.25	0.32	0.00	3,649.39	3,649.39	0.15	0.00	3,652.54
Unmitigated	2.87	6.95	25.69	0.06	6.20	0.34	6.55	0.10	0.33	0.43	0.00	4,847.22	4,847.22	0.19	0.00	4,851.30
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Government Office Building	6,479.42	0.00	0.00	11,412,664	8,481,241
Total	6,479.42	0.00	0.00	11,412,664	8,481,241

4.3 Trip Type Information

Land Use	Miles			Trip %		
	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
Government Office Building	8.90	13.30	7.40	33.00	62.00	5.00

5.0 Energy Detail

5.1 Mitigation Measures Energy

Exceed Title 24

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						0.00	0.00		0.00	0.00	0.00	319.63	319.63	0.01	0.01	321.63
Electricity Unmitigated						0.00	0.00		0.00	0.00	0.00	397.28	397.28	0.02	0.01	399.77
NaturalGas Mitigated	0.00	0.04	0.03	0.00		0.00	0.00		0.00	0.00	0.00	44.25	44.25	0.00	0.00	44.52
NaturalGas Unmitigated	0.01	0.05	0.04	0.00		0.00	0.00		0.00	0.00	0.00	54.83	54.83	0.00	0.00	55.16
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	tons/yr										MT/yr					
Government Office Building	1.02742e+006	0.01	0.05	0.04	0.00		0.00	0.00		0.00	0.00	0.00	54.83	54.83	0.00	0.00	55.16
Total		0.01	0.05	0.04	0.00		0.00	0.00		0.00	0.00	0.00	54.83	54.83	0.00	0.00	55.16

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	tons/yr										MT/yr					
Government Office Building	829268	0.00	0.04	0.03	0.00		0.00	0.00		0.00	0.00	0.00	44.25	44.25	0.00	0.00	44.52
Total		0.00	0.04	0.03	0.00		0.00	0.00		0.00	0.00	0.00	44.25	44.25	0.00	0.00	44.52

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
Government Office Building	1.36582e+006					397.28	0.02	0.01	399.77
Total						397.28	0.02	0.01	399.77

Mitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
Government Office Building	1.09886e+006					319.63	0.01	0.01	321.63
Total						319.63	0.01	0.01	321.63

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

Use only Natural Gas Hearths

No Hearths Installed

	ROG	NOx	CO	SO2	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	0.45	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
Unmitigated	0.45	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
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	0.11					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.34					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	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
Total	0.45	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

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	0.11					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.34					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	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
Total	0.45	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

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

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr				MT/yr			
Mitigated					91.48	0.46	0.01	105.13
Unmitigated					107.92	0.57	0.02	124.95
Total	NA	NA	NA	NA	NA	NA	NA	NA

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
Government Office Building	18.674 / 11.4454					107.92	0.57	0.02	124.95
Total						107.92	0.57	0.02	124.95

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
Government Office Building	14.9392 / 10.7472					91.48	0.46	0.01	105.13
Total						91.48	0.46	0.01	105.13

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
	tons/yr				MT/yr			
Mitigated					17.75	1.05	0.00	39.77
Unmitigated					17.75	1.05	0.00	39.77
Total	NA	NA	NA	NA	NA	NA	NA	NA

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
Government Office Building	87.42					17.75	1.05	0.00	39.77
Total						17.75	1.05	0.00	39.77

Mitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
Government Office Building	87.42					17.75	1.05	0.00	39.77
Total						17.75	1.05	0.00	39.77

9.0 Vegetation

Serrano Summit Construction Phase 6
South Coast AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Government Office Building	94	1000sqft

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Utility Company	Southern California Edison
Climate Zone	9	Precipitation Freq (Days)	31		

1.3 User Entered Comments

- Project Characteristics -
- Land Use -
- Construction Phase - construction schedule based on information provided by applicant
- Off-road Equipment -
- Trips and VMT -
- Demolition -
- Grading - Total acreage=9.85

Vehicle Trips -

Woodstoves - Wood stoves are not proposed, fireplaces would be gas

Energy Use -

Land Use Change -

Sequestration -

Construction Off-road Equipment Mitigation - Construction mitigation per SCAQMD

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

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					
2018	3.54	25.29	20.47	0.04	6.26	1.44	7.45	3.31	1.43	4.50	0.00	3,993.43	0.00	0.31	0.00	4,000.01
2019	20.83	19.14	20.08	0.04	0.60	0.98	1.58	0.01	0.97	0.98	0.00	3,987.30	0.00	0.28	0.00	3,993.29
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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					
2018	3.54	25.29	20.47	0.04	2.38	1.44	3.57	1.23	1.43	2.42	0.00	3,993.43	0.00	0.31	0.00	4,000.01
2019	20.83	19.14	20.08	0.04	0.45	0.98	1.43	0.01	0.97	0.98	0.00	3,987.30	0.00	0.28	0.00	3,993.29
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.46	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Energy	0.03	0.28	0.23	0.00		0.00	0.02		0.00	0.02		331.16		0.01	0.01	333.17
Mobile	23.05	53.20	199.09	0.50	52.91	2.63	55.55	0.75	2.53	3.29		43,186.56		1.63		43,220.74
Total	25.54	53.48	199.32	0.50	52.91	2.63	55.57	0.75	2.53	3.31		43,517.72		1.64	0.01	43,553.91

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.46	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Energy	0.02	0.22	0.19	0.00		0.00	0.02		0.00	0.02		267.29		0.01	0.00	268.92
Mobile	19.48	44.25	157.73	0.38	39.32	2.00	41.32	0.56	1.92	2.48		32,504.21		1.26		32,530.59
Total	21.96	44.47	157.92	0.38	39.32	2.00	41.34	0.56	1.92	2.50		32,771.50		1.27	0.00	32,799.51

3.0 Construction Detail

3.1 Mitigation Measures Construction

- Use DPF for Construction Equipment
- Replace Ground Cover
- Water Exposed Area
- Water Unpaved Roads
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

3.2 Mass Grading - 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					
Fugitive Dust					6.07	0.00	6.07	3.31	0.00	3.31						0.00
Off-Road	3.47	25.24	18.86	0.04		1.19	1.19		1.19	1.19		3,827.58		0.31		3,834.06
Total	3.47	25.24	18.86	0.04	6.07	1.19	7.26	3.31	1.19	4.50		3,827.58		0.31		3,834.06

3.2 Mass Grading - 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.04	0.04	0.50	0.00	0.15	0.01	0.16	0.00	0.01	0.01		114.29		0.01		114.39
Total	0.04	0.04	0.50	0.00	0.15	0.01	0.16	0.00	0.01	0.01		114.29		0.01		114.39

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					2.25	0.00	2.25	1.23	0.00	1.23						0.00
Off-Road	3.47	25.24	18.86	0.04		1.19	1.19		1.19	1.19	0.00	3,827.58		0.31		3,834.06
Total	3.47	25.24	18.86	0.04	2.25	1.19	3.44	1.23	1.19	2.42	0.00	3,827.58		0.31		3,834.06

3.2 Mass Grading - 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.04	0.04	0.50	0.00	0.12	0.01	0.12	0.00	0.01	0.01		114.29		0.01		114.39
Total	0.04	0.04	0.50	0.00	0.12	0.01	0.12	0.00	0.01	0.01		114.29		0.01		114.39

3.3 Fine Grading - 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					
Fugitive Dust					6.10	0.00	6.10	3.31	0.00	3.31						0.00
Off-Road	3.47	25.24	18.86	0.04		1.19	1.19		1.19	1.19		3,827.58		0.31		3,834.06
Total	3.47	25.24	18.86	0.04	6.10	1.19	7.29	3.31	1.19	4.50		3,827.58		0.31		3,834.06

3.3 Fine Grading - 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.04	0.04	0.50	0.00	0.15	0.01	0.16	0.00	0.01	0.01		114.29		0.01		114.39
Total	0.04	0.04	0.50	0.00	0.15	0.01	0.16	0.00	0.01	0.01		114.29		0.01		114.39

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					2.26	0.00	2.26	1.23	0.00	1.23						0.00
Off-Road	3.47	25.24	18.86	0.04		1.19	1.19		1.19	1.19	0.00	3,827.58		0.31		3,834.06
Total	3.47	25.24	18.86	0.04	2.26	1.19	3.45	1.23	1.19	2.42	0.00	3,827.58		0.31		3,834.06

3.3 Fine Grading - 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.04	0.04	0.50	0.00	0.12	0.01	0.12	0.00	0.01	0.01		114.29		0.01		114.39
Total	0.04	0.04	0.50	0.00	0.12	0.01	0.12	0.00	0.01	0.01		114.29		0.01		114.39

3.4 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	2.96	18.60	16.23	0.03		1.43	1.43		1.43	1.43		2,393.42		0.27		2,399.00
Paving	0.00					0.00	0.00		0.00	0.00						0.00
Total	2.96	18.60	16.23	0.03		1.43	1.43		1.43	1.43		2,393.42		0.27		2,399.00

3.4 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.07	0.06	0.75	0.00	0.23	0.01	0.24	0.00	0.01	0.01		171.43		0.01		171.59
Total	0.07	0.06	0.75	0.00	0.23	0.01	0.24	0.00	0.01	0.01		171.43		0.01		171.59

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	2.96	18.60	16.23	0.03		1.43	1.43		1.43	1.43	0.00	2,393.42		0.27		2,399.00
Paving	0.00					0.00	0.00		0.00	0.00						0.00
Total	2.96	18.60	16.23	0.03		1.43	1.43		1.43	1.43	0.00	2,393.42		0.27		2,399.00

3.4 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.07	0.06	0.75	0.00	0.17	0.01	0.18	0.00	0.01	0.01		171.43		0.01		171.59
Total	0.07	0.06	0.75	0.00	0.17	0.01	0.18	0.00	0.01	0.01		171.43		0.01		171.59

3.5 Building - 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	3.26	19.06	18.02	0.04		1.05	1.05		1.05	1.05		3,233.11		0.29		3,239.22
Total	3.26	19.06	18.02	0.04		1.05	1.05		1.05	1.05		3,233.11		0.29		3,239.22

3.5 Building - 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.14	1.63	0.95	0.00	0.14	0.05	0.19	0.00	0.05	0.05		417.46		0.01		417.61
Worker	0.13	0.12	1.50	0.00	0.46	0.02	0.48	0.01	0.02	0.02		342.86		0.02		343.18
Total	0.27	1.75	2.45	0.00	0.60	0.07	0.67	0.01	0.07	0.07		760.32		0.03		760.79

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	3.26	19.06	18.02	0.04		1.05	1.05		1.05	1.05	0.00	3,233.11		0.29		3,239.22
Total	3.26	19.06	18.02	0.04		1.05	1.05		1.05	1.05	0.00	3,233.11		0.29		3,239.22

3.5 Building - 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.14	1.63	0.95	0.00	0.11	0.05	0.16	0.00	0.05	0.05		417.46		0.01		417.61
Worker	0.13	0.12	1.50	0.00	0.35	0.02	0.36	0.01	0.02	0.02		342.86		0.02		343.18
Total	0.27	1.75	2.45	0.00	0.46	0.07	0.52	0.01	0.07	0.07		760.32		0.03		760.79

3.5 Building - 2019

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	2.94	17.50	17.79	0.04		0.91	0.91		0.91	0.91		3,233.11		0.26		3,238.65
Total	2.94	17.50	17.79	0.04		0.91	0.91		0.91	0.91		3,233.11		0.26		3,238.65

3.5 Building - 2019

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.13	1.53	0.89	0.00	0.14	0.05	0.19	0.00	0.04	0.05		418.02		0.01		418.15
Worker	0.13	0.11	1.40	0.00	0.46	0.02	0.48	0.01	0.02	0.02		336.18		0.01		336.48
Total	0.26	1.64	2.29	0.00	0.60	0.07	0.67	0.01	0.06	0.07		754.20		0.02		754.63

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	2.94	17.50	17.79	0.04		0.91	0.91		0.91	0.91	0.00	3,233.11		0.26		3,238.65
Total	2.94	17.50	17.79	0.04		0.91	0.91		0.91	0.91	0.00	3,233.11		0.26		3,238.65

3.5 Building - 2019

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.13	1.53	0.89	0.00	0.11	0.05	0.15	0.00	0.04	0.05		418.02		0.01		418.15
Worker	0.13	0.11	1.40	0.00	0.35	0.02	0.36	0.01	0.02	0.02		336.18		0.01		336.48
Total	0.26	1.64	2.29	0.00	0.46	0.07	0.51	0.01	0.06	0.07		754.20		0.02		754.63

3.6 Architectural Coating - 2019

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	20.53					0.00	0.00		0.00	0.00						0.00
Off-Road	0.27	1.83	1.84	0.00		0.13	0.13		0.13	0.13		281.19		0.02		281.69
Total	20.80	1.83	1.84	0.00		0.13	0.13		0.13	0.13		281.19		0.02		281.69

3.6 Architectural Coating - 2019

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.03	0.02	0.28	0.00	0.09	0.00	0.10	0.00	0.00	0.00		67.24		0.00		67.30
Total	0.03	0.02	0.28	0.00	0.09	0.00	0.10	0.00	0.00	0.00		67.24		0.00		67.30

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	20.53					0.00	0.00		0.00	0.00						0.00
Off-Road	0.27	1.83	1.84	0.00		0.13	0.13		0.13	0.13	0.00	281.19		0.02		281.69
Total	20.80	1.83	1.84	0.00		0.13	0.13		0.13	0.13	0.00	281.19		0.02		281.69

3.6 Architectural Coating - 2019

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.03	0.02	0.28	0.00	0.07	0.00	0.07	0.00	0.00	0.00		67.24		0.00		67.30
Total	0.03	0.02	0.28	0.00	0.07	0.00	0.07	0.00	0.00	0.00		67.24		0.00		67.30

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

- Increase Density
- Improve Walkability Design
- Improve Pedestrian Network
- Implement Trip Reduction Program
- Provide Riade Sharing Program

	ROG	NOx	CO	SO2	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	19.48	44.25	157.73	0.38	39.32	2.00	41.32	0.56	1.92	2.48		32,504.21		1.26		32,530.59
Unmitigated	23.05	53.20	199.09	0.50	52.91	2.63	55.55	0.75	2.53	3.29		43,186.56		1.63		43,220.74
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Government Office Building	6,479.42	0.00	0.00	11,412,664	8,481,241
Total	6,479.42	0.00	0.00	11,412,664	8,481,241

4.3 Trip Type Information

Land Use	Miles			Trip %		
	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
Government Office Building	8.90	13.30	7.40	33.00	62.00	5.00

5.0 Energy Detail

5.1 Mitigation Measures Energy

Exceed Title 24

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	lb/day										lb/day					
NaturalGas Mitigated	0.02	0.22	0.19	0.00		0.00	0.02		0.00	0.02		267.29		0.01	0.00	268.92
NaturalGas Unmitigated	0.03	0.28	0.23	0.00		0.00	0.02		0.00	0.02		331.16		0.01	0.01	333.17
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	lb/day										lb/day					
Government Office Building	2814.85	0.03	0.28	0.23	0.00		0.00	0.02		0.00	0.02		331.16		0.01	0.01	333.17
Total		0.03	0.28	0.23	0.00		0.00	0.02		0.00	0.02		331.16		0.01	0.01	333.17

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	lb/day										lb/day					
Government Office Building	2.27197	0.02	0.22	0.19	0.00		0.00	0.02		0.00	0.02		267.29		0.01	0.00	268.92
Total		0.02	0.22	0.19	0.00		0.00	0.02		0.00	0.02		267.29		0.01	0.00	268.92

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
- Use only Natural Gas Hearths
- No Hearths Installed

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.46	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Unmitigated	2.46	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	0.60					0.00	0.00		0.00	0.00						0.00
Consumer Products	1.86					0.00	0.00		0.00	0.00						0.00
Landscaping	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Total	2.46	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00

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	0.60					0.00	0.00		0.00	0.00							0.00
Consumer Products	1.86					0.00	0.00		0.00	0.00							0.00
Landscaping	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00			0.00
Total	2.46	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00			0.00

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

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

Serrano Summit Construction Phase 6
South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Government Office Building	94	1000sqft

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Utility Company	Southern California Edison
Climate Zone	9	Precipitation Freq (Days)	31		

1.3 User Entered Comments

- Project Characteristics -
- Land Use -
- Construction Phase - construction schedule based on information provided by applicant
- Off-road Equipment -
- Trips and VMT -
- Demolition -
- Grading - Total acreage=9.85

Vehicle Trips -

Woodstoves - Wood stoves are not proposed, fireplaces would be gas

Energy Use -

Land Use Change -

Sequestration -

Construction Off-road Equipment Mitigation - Construction mitigation per SCAQMD

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

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					
2018	3.55	25.29	20.51	0.04	6.26	1.44	7.45	3.31	1.43	4.50	0.00	3,959.81	0.00	0.31	0.00	3,966.38
2019	20.83	19.19	20.13	0.04	0.60	0.98	1.58	0.01	0.97	0.98	0.00	3,954.11	0.00	0.28	0.00	3,960.08
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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					
2018	3.55	25.29	20.51	0.04	2.38	1.44	3.57	1.23	1.43	2.42	0.00	3,959.81	0.00	0.31	0.00	3,966.38
2019	20.83	19.19	20.13	0.04	0.45	0.98	1.43	0.01	0.97	0.98	0.00	3,954.11	0.00	0.28	0.00	3,960.08
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.46	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Energy	0.03	0.28	0.23	0.00		0.00	0.02		0.00	0.02		331.16		0.01	0.01	333.17
Mobile	23.50	55.84	195.78	0.47	52.91	2.66	55.57	0.75	2.56	3.31		40,200.18		1.67		40,235.22
Total	25.99	56.12	196.01	0.47	52.91	2.66	55.59	0.75	2.56	3.33		40,531.34		1.68	0.01	40,568.39

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.46	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Energy	0.02	0.22	0.19	0.00		0.00	0.02		0.00	0.02		267.29		0.01	0.00	268.92
Mobile	19.63	45.99	159.04	0.35	39.32	2.02	41.34	0.56	1.94	2.50		30,260.80		1.30		30,288.03
Total	22.11	46.21	159.23	0.35	39.32	2.02	41.36	0.56	1.94	2.52		30,528.09		1.31	0.00	30,556.95

3.0 Construction Detail

3.1 Mitigation Measures Construction

- Use DPF for Construction Equipment
- Replace Ground Cover
- Water Exposed Area
- Water Unpaved Roads
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

3.2 Mass Grading - 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					
Fugitive Dust					6.07	0.00	6.07	3.31	0.00	3.31						0.00
Off-Road	3.47	25.24	18.86	0.04		1.19	1.19		1.19	1.19		3,827.58		0.31		3,834.06
Total	3.47	25.24	18.86	0.04	6.07	1.19	7.26	3.31	1.19	4.50		3,827.58		0.31		3,834.06

3.2 Mass Grading - 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.05	0.05	0.46	0.00	0.15	0.01	0.16	0.00	0.01	0.01		104.27		0.00		104.38
Total	0.05	0.05	0.46	0.00	0.15	0.01	0.16	0.00	0.01	0.01		104.27		0.00		104.38

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					2.25	0.00	2.25	1.23	0.00	1.23						0.00
Off-Road	3.47	25.24	18.86	0.04		1.19	1.19		1.19	1.19	0.00	3,827.58		0.31		3,834.06
Total	3.47	25.24	18.86	0.04	2.25	1.19	3.44	1.23	1.19	2.42	0.00	3,827.58		0.31		3,834.06

3.2 Mass Grading - 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.05	0.05	0.46	0.00	0.12	0.01	0.12	0.00	0.01	0.01		104.27		0.00		104.38
Total	0.05	0.05	0.46	0.00	0.12	0.01	0.12	0.00	0.01	0.01		104.27		0.00		104.38

3.3 Fine Grading - 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					
Fugitive Dust					6.10	0.00	6.10	3.31	0.00	3.31						0.00
Off-Road	3.47	25.24	18.86	0.04		1.19	1.19		1.19	1.19		3,827.58		0.31		3,834.06
Total	3.47	25.24	18.86	0.04	6.10	1.19	7.29	3.31	1.19	4.50		3,827.58		0.31		3,834.06

3.3 Fine Grading - 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.05	0.05	0.46	0.00	0.15	0.01	0.16	0.00	0.01	0.01		104.27		0.00		104.38
Total	0.05	0.05	0.46	0.00	0.15	0.01	0.16	0.00	0.01	0.01		104.27		0.00		104.38

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					2.26	0.00	2.26	1.23	0.00	1.23						0.00
Off-Road	3.47	25.24	18.86	0.04		1.19	1.19		1.19	1.19	0.00	3,827.58		0.31		3,834.06
Total	3.47	25.24	18.86	0.04	2.26	1.19	3.45	1.23	1.19	2.42	0.00	3,827.58		0.31		3,834.06

3.3 Fine Grading - 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.05	0.05	0.46	0.00	0.12	0.01	0.12	0.00	0.01	0.01		104.27		0.00		104.38
Total	0.05	0.05	0.46	0.00	0.12	0.01	0.12	0.00	0.01	0.01		104.27		0.00		104.38

3.4 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	2.96	18.60	16.23	0.03		1.43	1.43		1.43	1.43		2,393.42		0.27		2,399.00
Paving	0.00					0.00	0.00		0.00	0.00						0.00
Total	2.96	18.60	16.23	0.03		1.43	1.43		1.43	1.43		2,393.42		0.27		2,399.00

3.4 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.07	0.07	0.68	0.00	0.23	0.01	0.24	0.00	0.01	0.01		156.41		0.01		156.57
Total	0.07	0.07	0.68	0.00	0.23	0.01	0.24	0.00	0.01	0.01		156.41		0.01		156.57

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	2.96	18.60	16.23	0.03		1.43	1.43		1.43	1.43	0.00	2,393.42		0.27		2,399.00
Paving	0.00					0.00	0.00		0.00	0.00						0.00
Total	2.96	18.60	16.23	0.03		1.43	1.43		1.43	1.43	0.00	2,393.42		0.27		2,399.00

3.4 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.07	0.07	0.68	0.00	0.17	0.01	0.18	0.00	0.01	0.01		156.41		0.01		156.57
Total	0.07	0.07	0.68	0.00	0.17	0.01	0.18	0.00	0.01	0.01		156.41		0.01		156.57

3.5 Building - 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	3.26	19.06	18.02	0.04		1.05	1.05		1.05	1.05		3,233.11		0.29		3,239.22
Total	3.26	19.06	18.02	0.04		1.05	1.05		1.05	1.05		3,233.11		0.29		3,239.22

3.5 Building - 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.15	1.67	1.12	0.00	0.14	0.05	0.19	0.00	0.05	0.05		413.87		0.01		414.03
Worker	0.14	0.14	1.37	0.00	0.46	0.02	0.48	0.01	0.02	0.02		312.82		0.01		313.13
Total	0.29	1.81	2.49	0.00	0.60	0.07	0.67	0.01	0.07	0.07		726.69		0.02		727.16

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	3.26	19.06	18.02	0.04		1.05	1.05		1.05	1.05	0.00	3,233.11		0.29		3,239.22
Total	3.26	19.06	18.02	0.04		1.05	1.05		1.05	1.05	0.00	3,233.11		0.29		3,239.22

3.5 Building - 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.15	1.67	1.12	0.00	0.11	0.05	0.16	0.00	0.05	0.05		413.87		0.01		414.03
Worker	0.14	0.14	1.37	0.00	0.35	0.02	0.36	0.01	0.02	0.02		312.82		0.01		313.13
Total	0.29	1.81	2.49	0.00	0.46	0.07	0.52	0.01	0.07	0.07		726.69		0.02		727.16

3.5 Building - 2019

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	2.94	17.50	17.79	0.04		0.91	0.91		0.91	0.91		3,233.11		0.26		3,238.65
Total	2.94	17.50	17.79	0.04		0.91	0.91		0.91	0.91		3,233.11		0.26		3,238.65

3.5 Building - 2019

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.14	1.56	1.06	0.00	0.14	0.05	0.19	0.00	0.04	0.05		414.36		0.01		414.51
Worker	0.14	0.13	1.27	0.00	0.46	0.02	0.48	0.01	0.02	0.02		306.64		0.01		306.93
Total	0.28	1.69	2.33	0.00	0.60	0.07	0.67	0.01	0.06	0.07		721.00		0.02		721.44

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	2.94	17.50	17.79	0.04		0.91	0.91		0.91	0.91	0.00	3,233.11		0.26		3,238.65
Total	2.94	17.50	17.79	0.04		0.91	0.91		0.91	0.91	0.00	3,233.11		0.26		3,238.65

3.5 Building - 2019

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.14	1.56	1.06	0.00	0.11	0.05	0.15	0.00	0.04	0.05		414.36		0.01		414.51
Worker	0.14	0.13	1.27	0.00	0.35	0.02	0.36	0.01	0.02	0.02		306.64		0.01		306.93
Total	0.28	1.69	2.33	0.00	0.46	0.07	0.51	0.01	0.06	0.07		721.00		0.02		721.44

3.6 Architectural Coating - 2019

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	20.53					0.00	0.00		0.00	0.00						0.00
Off-Road	0.27	1.83	1.84	0.00		0.13	0.13		0.13	0.13		281.19		0.02		281.69
Total	20.80	1.83	1.84	0.00		0.13	0.13		0.13	0.13		281.19		0.02		281.69

3.6 Architectural Coating - 2019

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.03	0.03	0.25	0.00	0.09	0.00	0.10	0.00	0.00	0.00		61.33		0.00		61.39
Total	0.03	0.03	0.25	0.00	0.09	0.00	0.10	0.00	0.00	0.00		61.33		0.00		61.39

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	20.53					0.00	0.00		0.00	0.00						0.00
Off-Road	0.27	1.83	1.84	0.00		0.13	0.13		0.13	0.13	0.00	281.19		0.02		281.69
Total	20.80	1.83	1.84	0.00		0.13	0.13		0.13	0.13	0.00	281.19		0.02		281.69

3.6 Architectural Coating - 2019

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	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
Worker	0.03	0.03	0.25	0.00	0.07	0.00	0.07	0.00	0.00	0.00		61.33		0.00		61.39
Total	0.03	0.03	0.25	0.00	0.07	0.00	0.07	0.00	0.00	0.00		61.33		0.00		61.39

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

- Increase Density
- Improve Walkability Design
- Improve Pedestrian Network
- Implement Trip Reduction Program
- Provide Riade Sharing Program

	ROG	NOx	CO	SO2	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	19.63	45.99	159.04	0.35	39.32	2.02	41.34	0.56	1.94	2.50		30,260.80		1.30		30,288.03
Unmitigated	23.50	55.84	195.78	0.47	52.91	2.66	55.57	0.75	2.56	3.31		40,200.18		1.67		40,235.22
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Government Office Building	6,479.42	0.00	0.00	11,412,664	8,481,241
Total	6,479.42	0.00	0.00	11,412,664	8,481,241

4.3 Trip Type Information

Land Use	Miles			Trip %		
	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
Government Office Building	8.90	13.30	7.40	33.00	62.00	5.00

5.0 Energy Detail

5.1 Mitigation Measures Energy

Exceed Title 24

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	lb/day										lb/day					
NaturalGas Mitigated	0.02	0.22	0.19	0.00		0.00	0.02		0.00	0.02		267.29		0.01	0.00	268.92
NaturalGas Unmitigated	0.03	0.28	0.23	0.00		0.00	0.02		0.00	0.02		331.16		0.01	0.01	333.17
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	lb/day										lb/day					
Government Office Building	2814.85	0.03	0.28	0.23	0.00		0.00	0.02		0.00	0.02		331.16		0.01	0.01	333.17
Total		0.03	0.28	0.23	0.00		0.00	0.02		0.00	0.02		331.16		0.01	0.01	333.17

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	lb/day										lb/day					
Government Office Building	2.27197	0.02	0.22	0.19	0.00		0.00	0.02		0.00	0.02		267.29		0.01	0.00	268.92
Total		0.02	0.22	0.19	0.00		0.00	0.02		0.00	0.02		267.29		0.01	0.00	268.92

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
- Use only Natural Gas Hearths
- No Hearths Installed

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.46	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Unmitigated	2.46	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	0.60					0.00	0.00		0.00	0.00						0.00
Consumer Products	1.86					0.00	0.00		0.00	0.00						0.00
Landscaping	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Total	2.46	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00

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	0.60					0.00	0.00		0.00	0.00						0.00
Consumer Products	1.86					0.00	0.00		0.00	0.00						0.00
Landscaping	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Total	2.46	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00

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

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

Serrano Summit Operations
South Coast AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Government Office Building	115.5	1000sqft
Condo/Townhouse	458	Dwelling Unit
Single Family Housing	150	Dwelling Unit

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Utility Company	Southern California Edison
Climate Zone	9	Precipitation Freq (Days)	31		

1.3 User Entered Comments

- Project Characteristics -
- Land Use - Commercial uses include community center and police center
- Construction Phase - Construction is modeled separately
- Off-road Equipment -
- Trips and VMT -

Demolition -

Grading -

Vehicle Trips - Pass-by trip reduction from Traffic Study

Woodstoves - Wood stoves are not proposed, fireplaces would be gas

Land Use Change -

Sequestration -

Construction Off-road Equipment Mitigation - Construction mitigation per SCAQMD

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

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					
2011	1.39	7.83	9.11	0.01	0.85	0.47	1.32	0.01	0.46	0.47	0.00	1,360.46	1,360.46	0.11	0.00	1,362.85
2012	1.28	7.27	8.59	0.02	0.85	0.43	1.28	0.01	0.42	0.44	0.00	1,353.52	1,353.52	0.11	0.00	1,355.74
2013	1.18	6.70	8.08	0.02	0.85	0.39	1.24	0.01	0.38	0.40	0.00	1,341.70	1,341.70	0.10	0.00	1,343.74
2014	1.08	6.16	7.64	0.02	0.85	0.35	1.20	0.01	0.34	0.36	0.00	1,331.71	1,331.71	0.09	0.00	1,333.59
2015	0.99	5.60	7.23	0.02	0.85	0.31	1.17	0.01	0.31	0.32	0.00	1,319.67	1,319.67	0.08	0.00	1,321.40
2016	0.87	4.82	6.50	0.01	0.80	0.27	1.07	0.01	0.26	0.27	0.00	1,235.46	1,235.46	0.07	0.00	1,236.97
Total	6.79	38.38	47.15	0.10	5.05	2.22	7.28	0.06	2.17	2.26	0.00	7,942.52	7,942.52	0.56	0.00	7,954.29

2.1 Overall Construction

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					
2011	1.39	7.83	9.11	0.01	0.64	0.47	1.11	0.01	0.46	0.47	0.00	1,360.46	1,360.46	0.11	0.00	1,362.85
2012	1.28	7.27	8.59	0.02	0.64	0.43	1.07	0.01	0.42	0.44	0.00	1,353.52	1,353.52	0.11	0.00	1,355.74
2013	1.18	6.70	8.08	0.02	0.64	0.39	1.03	0.01	0.38	0.40	0.00	1,341.70	1,341.70	0.10	0.00	1,343.74
2014	1.08	6.16	7.64	0.02	0.64	0.35	0.99	0.01	0.34	0.36	0.00	1,331.71	1,331.71	0.09	0.00	1,333.59
2015	0.99	5.60	7.23	0.02	0.64	0.31	0.95	0.01	0.31	0.32	0.00	1,319.67	1,319.67	0.08	0.00	1,321.40
2016	0.87	4.82	6.50	0.01	0.60	0.27	0.87	0.01	0.26	0.27	0.00	1,235.46	1,235.46	0.07	0.00	1,236.97
Total	6.79	38.38	47.15	0.10	3.80	2.22	6.02	0.06	2.17	2.26	0.00	7,942.52	7,942.52	0.56	0.00	7,954.29

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	5.77	0.16	13.11	0.01		0.00	0.65		0.00	0.65	64.58	387.43	452.01	0.21	0.01	459.24
Energy	0.10	0.87	0.40	0.01		0.00	0.07		0.00	0.07	0.00	2,364.01	2,364.01	0.08	0.04	2,378.65
Mobile	5.35	13.03	49.02	0.12	12.42	0.68	13.10	0.20	0.65	0.85	0.00	9,640.30	9,640.30	0.38	0.00	9,648.28
Waste						0.00	0.00		0.00	0.00	100.28	0.00	100.28	5.93	0.00	224.72
Water						0.00	0.00		0.00	0.00	0.00	363.79	363.79	1.93	0.05	420.85
Total	11.22	14.06	62.53	0.14	12.42	0.68	13.82	0.20	0.65	1.57	164.86	12,755.53	12,920.39	8.53	0.10	13,131.74

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	3.75	0.11	9.28	0.00		0.00	0.05		0.00	0.05	0.00	15.12	15.12	0.01	0.00	15.43
Energy	0.09	0.76	0.34	0.00		0.00	0.06		0.00	0.06	0.00	2,054.73	2,054.73	0.07	0.04	2,067.45
Mobile	4.09	9.85	35.72	0.08	8.13	0.46	8.58	0.13	0.44	0.57	0.00	6,408.99	6,408.99	0.26	0.00	6,414.49
Waste						0.00	0.00		0.00	0.00	50.14	0.00	50.14	2.96	0.00	112.36
Water						0.00	0.00		0.00	0.00	0.00	298.74	298.74	1.54	0.04	344.44
Total	7.93	10.72	45.34	0.08	8.13	0.46	8.69	0.13	0.44	0.68	50.14	8,777.58	8,827.72	4.84	0.08	8,954.17

3.0 Construction Detail

3.1 Mitigation Measures Construction

- Use DPF for Construction Equipment
- Replace Ground Cover
- Water Exposed Area
- Water Unpaved Roads
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

3.2 Building Construction - 2011

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	0.79	5.23	3.12	0.01		0.36	0.36		0.36	0.36	0.00	476.40	476.40	0.06	0.00	477.75
Total	0.79	5.23	3.12	0.01		0.36	0.36		0.36	0.36	0.00	476.40	476.40	0.06	0.00	477.75

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	0.00	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
Vendor	0.20	2.16	1.37	0.00	0.09	0.08	0.17	0.00	0.07	0.07	0.00	271.15	271.15	0.01	0.00	271.34
Worker	0.40	0.44	4.62	0.01	0.76	0.03	0.78	0.01	0.02	0.04	0.00	612.91	612.91	0.04	0.00	613.76
Total	0.60	2.60	5.99	0.01	0.85	0.11	0.95	0.01	0.09	0.11	0.00	884.06	884.06	0.05	0.00	885.10

3.2 Building Construction - 2011

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	0.79	5.23	3.12	0.01		0.36	0.36		0.36	0.36	0.00	476.40	476.40	0.06	0.00	477.75
Total	0.79	5.23	3.12	0.01		0.36	0.36		0.36	0.36	0.00	476.40	476.40	0.06	0.00	477.75

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	0.00	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
Vendor	0.20	2.16	1.37	0.00	0.07	0.08	0.15	0.00	0.07	0.07	0.00	271.15	271.15	0.01	0.00	271.34
Worker	0.40	0.44	4.62	0.01	0.57	0.03	0.60	0.01	0.02	0.04	0.00	612.91	612.91	0.04	0.00	613.76
Total	0.60	2.60	5.99	0.01	0.64	0.11	0.75	0.01	0.09	0.11	0.00	884.06	884.06	0.05	0.00	885.10

3.2 Building Construction - 2012

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	0.73	4.87	3.10	0.01		0.33	0.33		0.33	0.33	0.00	478.23	478.23	0.06	0.00	479.48
Total	0.73	4.87	3.10	0.01		0.33	0.33		0.33	0.33	0.00	478.23	478.23	0.06	0.00	479.48

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	0.00	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
Vendor	0.18	1.99	1.25	0.00	0.09	0.07	0.16	0.00	0.06	0.07	0.00	272.77	272.77	0.01	0.00	272.94
Worker	0.37	0.40	4.25	0.01	0.76	0.03	0.79	0.01	0.03	0.04	0.00	602.52	602.52	0.04	0.00	603.32
Total	0.55	2.39	5.50	0.01	0.85	0.10	0.95	0.01	0.09	0.11	0.00	875.29	875.29	0.05	0.00	876.26

3.2 Building Construction - 2012

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	0.73	4.87	3.10	0.01		0.33	0.33		0.33	0.33	0.00	478.23	478.23	0.06	0.00	479.48
Total	0.73	4.87	3.10	0.01		0.33	0.33		0.33	0.33	0.00	478.23	478.23	0.06	0.00	479.48

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	0.00	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
Vendor	0.18	1.99	1.25	0.00	0.07	0.07	0.14	0.00	0.06	0.07	0.00	272.77	272.77	0.01	0.00	272.94
Worker	0.37	0.40	4.25	0.01	0.57	0.03	0.60	0.01	0.03	0.04	0.00	602.52	602.52	0.04	0.00	603.32
Total	0.55	2.39	5.50	0.01	0.64	0.10	0.74	0.01	0.09	0.11	0.00	875.29	875.29	0.05	0.00	876.26

3.2 Building Construction - 2013

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	0.67	4.52	3.06	0.01		0.30	0.30		0.30	0.30	0.00	478.23	478.23	0.05	0.00	479.38
Total	0.67	4.52	3.06	0.01		0.30	0.30		0.30	0.30	0.00	478.23	478.23	0.05	0.00	479.38

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	0.00	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
Vendor	0.16	1.81	1.13	0.00	0.09	0.06	0.16	0.00	0.06	0.06	0.00	273.35	273.35	0.01	0.00	273.51
Worker	0.34	0.37	3.89	0.01	0.76	0.03	0.79	0.01	0.03	0.04	0.00	590.12	590.12	0.03	0.00	590.85
Total	0.50	2.18	5.02	0.01	0.85	0.09	0.95	0.01	0.09	0.10	0.00	863.47	863.47	0.04	0.00	864.36

3.2 Building Construction - 2013

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	0.67	4.52	3.06	0.01		0.30	0.30		0.30	0.30	0.00	478.23	478.23	0.05	0.00	479.38
Total	0.67	4.52	3.06	0.01		0.30	0.30		0.30	0.30	0.00	478.23	478.23	0.05	0.00	479.38

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	0.00	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
Vendor	0.16	1.81	1.13	0.00	0.07	0.06	0.13	0.00	0.06	0.06	0.00	273.35	273.35	0.01	0.00	273.51
Worker	0.34	0.37	3.89	0.01	0.57	0.03	0.60	0.01	0.03	0.04	0.00	590.12	590.12	0.03	0.00	590.85
Total	0.50	2.18	5.02	0.01	0.64	0.09	0.73	0.01	0.09	0.10	0.00	863.47	863.47	0.04	0.00	864.36

3.2 Building Construction - 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	0.62	4.18	3.03	0.01		0.26	0.26		0.26	0.26	0.00	478.23	478.23	0.05	0.00	479.28
Total	0.62	4.18	3.03	0.01		0.26	0.26		0.26	0.26	0.00	478.23	478.23	0.05	0.00	479.28

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	0.00	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
Vendor	0.15	1.64	1.04	0.00	0.09	0.06	0.15	0.00	0.05	0.05	0.00	273.85	273.85	0.01	0.00	273.99
Worker	0.31	0.33	3.57	0.01	0.76	0.03	0.79	0.01	0.03	0.04	0.00	579.63	579.63	0.03	0.00	580.31
Total	0.46	1.97	4.61	0.01	0.85	0.09	0.94	0.01	0.08	0.09	0.00	853.48	853.48	0.04	0.00	854.30

3.2 Building Construction - 2014

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	0.62	4.18	3.03	0.01		0.26	0.26		0.26	0.26	0.00	478.23	478.23	0.05	0.00	479.28
Total	0.62	4.18	3.03	0.01		0.26	0.26		0.26	0.26	0.00	478.23	478.23	0.05	0.00	479.28

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	0.00	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
Vendor	0.15	1.64	1.04	0.00	0.07	0.06	0.13	0.00	0.05	0.05	0.00	273.85	273.85	0.01	0.00	273.99
Worker	0.31	0.33	3.57	0.01	0.57	0.03	0.60	0.01	0.03	0.04	0.00	579.63	579.63	0.03	0.00	580.31
Total	0.46	1.97	4.61	0.01	0.64	0.09	0.73	0.01	0.08	0.09	0.00	853.48	853.48	0.04	0.00	854.30

3.2 Building Construction - 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	0.57	3.80	3.00	0.01		0.23	0.23		0.23	0.23	0.00	478.23	478.23	0.05	0.00	479.20
Total	0.57	3.80	3.00	0.01		0.23	0.23		0.23	0.23	0.00	478.23	478.23	0.05	0.00	479.20

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	0.00	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
Vendor	0.14	1.50	0.95	0.00	0.09	0.05	0.14	0.00	0.05	0.05	0.00	274.33	274.33	0.01	0.00	274.46
Worker	0.29	0.30	3.28	0.01	0.76	0.03	0.79	0.01	0.03	0.04	0.00	567.11	567.11	0.03	0.00	567.75
Total	0.43	1.80	4.23	0.01	0.85	0.08	0.93	0.01	0.08	0.09	0.00	841.44	841.44	0.04	0.00	842.21

3.2 Building Construction - 2015

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	0.57	3.80	3.00	0.01		0.23	0.23		0.23	0.23	0.00	478.23	478.23	0.05	0.00	479.20
Total	0.57	3.80	3.00	0.01		0.23	0.23		0.23	0.23	0.00	478.23	478.23	0.05	0.00	479.20

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	0.00	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
Vendor	0.14	1.50	0.95	0.00	0.07	0.05	0.12	0.00	0.05	0.05	0.00	274.33	274.33	0.01	0.00	274.46
Worker	0.29	0.30	3.28	0.01	0.57	0.03	0.60	0.01	0.03	0.04	0.00	567.11	567.11	0.03	0.00	567.75
Total	0.43	1.80	4.23	0.01	0.64	0.08	0.72	0.01	0.08	0.09	0.00	841.44	841.44	0.04	0.00	842.21

3.2 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	0.49	3.26	2.80	0.01		0.19	0.19		0.19	0.19	0.00	450.74	450.74	0.04	0.00	451.58
Total	0.49	3.26	2.80	0.01		0.19	0.19		0.19	0.19	0.00	450.74	450.74	0.04	0.00	451.58

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	0.00	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
Vendor	0.12	1.30	0.83	0.00	0.09	0.04	0.13	0.00	0.04	0.04	0.00	259.20	259.20	0.01	0.00	259.31
Worker	0.26	0.26	2.86	0.01	0.72	0.03	0.74	0.01	0.03	0.04	0.00	525.51	525.51	0.03	0.00	526.08
Total	0.38	1.56	3.69	0.01	0.81	0.07	0.87	0.01	0.07	0.08	0.00	784.71	784.71	0.04	0.00	785.39

3.2 Building Construction - 2016

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	0.49	3.26	2.80	0.01		0.19	0.19		0.19	0.19	0.00	450.74	450.74	0.04	0.00	451.58
Total	0.49	3.26	2.80	0.01		0.19	0.19		0.19	0.19	0.00	450.74	450.74	0.04	0.00	451.58

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	0.00	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
Vendor	0.12	1.30	0.83	0.00	0.07	0.04	0.11	0.00	0.04	0.04	0.00	259.20	259.20	0.01	0.00	259.31
Worker	0.26	0.26	2.86	0.01	0.54	0.03	0.57	0.01	0.03	0.04	0.00	525.51	525.51	0.03	0.00	526.08
Total	0.38	1.56	3.69	0.01	0.61	0.07	0.68	0.01	0.07	0.08	0.00	784.71	784.71	0.04	0.00	785.39

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

- Increase Density
- Improve Walkability Design
- Improve Destination Accessibility
- Increase Transit Accessibility
- Improve Pedestrian Network
- Implement Trip Reduction Program
- Market Commute Trip Reduction Option
- Employee Vanpool/Shuttle
- Provide Riade Sharing Program

	ROG	NOx	CO	SO2	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	4.09	9.85	35.72	0.08	8.13	0.46	8.58	0.13	0.44	0.57	0.00	6,408.99	6,408.99	0.26	0.00	6,414.49
Unmitigated	5.35	13.03	49.02	0.12	12.42	0.68	13.10	0.20	0.65	0.85	0.00	9,640.30	9,640.30	0.38	0.00	9,648.28
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Condo/Townhouse	3,732.70	3,279.28	2780.06	11,763,037	7,939,326

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Government Office Building	3,597.83	0.00	0.00	6,337,106	3,800,365
Single Family Housing	1,435.50	1,512.00	1315.50	4,760,343	3,212,938
Total	8,766.03	4,791.28	4,095.56	22,860,486	14,952,629

4.3 Trip Type Information

Land Use	Miles			Trip %		
	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
Condo/Townhouse	12.70	7.00	9.50	40.20	19.20	40.60
Government Office Building	8.90	13.30	7.40	33.00	62.00	5.00
Single Family Housing	12.70	7.00	9.50	40.20	19.20	40.60

5.0 Energy Detail

5.1 Mitigation Measures Energy

Exceed Title 24

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						0.00	0.00		0.00	0.00	0.00	1,183.97	1,183.97	0.05	0.02	1,191.39
Electricity Unmitigated						0.00	0.00		0.00	0.00	0.00	1,363.03	1,363.03	0.06	0.02	1,371.58
NaturalGas Mitigated	0.09	0.76	0.34	0.00		0.00	0.06		0.00	0.06	0.00	870.76	870.76	0.02	0.02	876.06
NaturalGas Unmitigated	0.10	0.87	0.40	0.01		0.00	0.07		0.00	0.07	0.00	1,000.98	1,000.98	0.02	0.02	1,007.07
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	tons/yr										MT/yr					
Condo/Townhouse	1.12849e+007	0.06	0.52	0.22	0.00		0.00	0.04		0.00	0.04	0.00	602.21	602.21	0.01	0.01	605.87
Government Office Building	1.26242e+006	0.01	0.06	0.05	0.00		0.00	0.00		0.00	0.00	0.00	67.37	67.37	0.00	0.00	67.78
Single Family Housing	6.2103e+006	0.03	0.29	0.12	0.00		0.00	0.02		0.00	0.02	0.00	331.41	331.41	0.01	0.01	333.42
Total		0.10	0.87	0.39	0.00		0.00	0.06		0.00	0.06	0.00	1,000.99	1,000.99	0.02	0.02	1,007.07

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	tons/yr										MT/yr					
Condo/Townhouse	9.82535e+006	0.05	0.45	0.19	0.00		0.00	0.04		0.00	0.04	0.00	524.32	524.32	0.01	0.01	527.51
Government Office Building	1.07981e+006	0.01	0.05	0.04	0.00		0.00	0.00		0.00	0.00	0.00	57.62	57.62	0.00	0.00	57.97
Single Family Housing	5.41233e+006	0.03	0.25	0.11	0.00		0.00	0.02		0.00	0.02	0.00	288.82	288.82	0.01	0.01	290.58
Total		0.09	0.75	0.34	0.00		0.00	0.06		0.00	0.06	0.00	870.76	870.76	0.02	0.02	876.06

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
Condo/Townhouse	1.98982e+006					578.78	0.03	0.01	582.41
Government Office Building	1.67822e+006					488.14	0.02	0.01	491.20
Single Family Housing	1.01801e+006					296.11	0.01	0.01	297.97
Total						1,363.03	0.06	0.03	1,371.58

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
Condo/Townhouse	1.7772e+006					516.93	0.02	0.01	520.17
Government Office Building	1.38265e+006					402.17	0.02	0.01	404.69
Single Family Housing	910583					264.86	0.01	0.00	266.52
Total						1,183.96	0.05	0.02	1,191.38

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
- Use only Natural Gas Hearths
- No Hearths Installed

	ROG	NOx	CO	SO2	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	3.75	0.11	9.28	0.00		0.00	0.05		0.00	0.05	0.00	15.12	15.12	0.01	0.00	15.43
Unmitigated	5.77	0.16	13.11	0.01		0.00	0.65		0.00	0.65	64.58	387.43	452.01	0.21	0.01	459.24
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	0.42					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	3.05					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	2.02	0.05	3.82	0.01		0.00	0.60		0.00	0.60	64.58	372.31	436.89	0.20	0.01	443.80
Landscaping	0.28	0.11	9.28	0.00		0.00	0.05		0.00	0.05	0.00	15.12	15.12	0.01	0.00	15.43
Total	5.77	0.16	13.10	0.01		0.00	0.65		0.00	0.65	64.58	387.43	452.01	0.21	0.01	459.23

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	0.42					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	3.05					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	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
Landscaping	0.28	0.11	9.28	0.00		0.00	0.05		0.00	0.05	0.00	15.12	15.12	0.01	0.00	15.43
Total	3.75	0.11	9.28	0.00		0.00	0.05		0.00	0.05	0.00	15.12	15.12	0.01	0.00	15.43

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
- Turf Reduction
- Use Water Efficient Irrigation System

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr				MT/yr			
Mitigated					298.74	1.54	0.04	344.44
Unmitigated					363.79	1.93	0.05	420.85
Total	NA	NA	NA	NA	NA	NA	NA	NA

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
Condo/Townhouse	29.8405 / 18.8125					174.15	0.92	0.03	201.37
Government Office Building	22.9452 / 14.0632					132.61	0.71	0.02	153.53
Single Family Housing	9.7731 / 6.1613					57.04	0.30	0.01	65.95
Total						363.80	1.93	0.06	420.85

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
Condo/Townhouse	23.8724 / 16.6516					144.49	0.74	0.02	166.30
Government Office Building	18.3562 / 12.192					109.13	0.57	0.02	125.88
Single Family Housing	7.81848 / 4.77215					45.12	0.24	0.01	52.25
Total						298.74	1.55	0.05	344.43

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
	tons/yr				MT/yr			
Mitigated					50.14	2.96	0.00	112.36
Unmitigated					100.28	5.93	0.00	224.72
Total	NA	NA	NA	NA	NA	NA	NA	NA

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
Condo/Townhouse	210.68					42.77	2.53	0.00	95.84
Government Office Building	107.42					21.81	1.29	0.00	48.87
Single Family Housing	175.89					35.70	2.11	0.00	80.02
Total						100.28	5.93	0.00	224.73

8.2 Waste by Land Use

Mitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
Condo/Townhouse	105.34					21.38	1.26	0.00	47.92
Government Office Building	53.71					10.90	0.64	0.00	24.43
Single Family Housing	87.945					17.85	1.06	0.00	40.01
Total						50.13	2.96	0.00	112.36

9.0 Vegetation

Serrano Summit Operations
South Coast AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Government Office Building	115.5	1000sqft
Condo/Townhouse	458	Dwelling Unit
Single Family Housing	150	Dwelling Unit

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Utility Company	Southern California Edison
Climate Zone	9	Precipitation Freq (Days)	31		

1.3 User Entered Comments

- Project Characteristics -
- Land Use - Commercial uses include community center and police center
- Construction Phase - Construction is modeled separately
- Off-road Equipment -
- Trips and VMT -

Demolition -

Grading -

Vehicle Trips - Pass-by trip reduction from Traffic Study

Woodstoves - Wood stoves are not proposed, fireplaces would be gas

Land Use Change -

Sequestration -

Construction Off-road Equipment Mitigation - Construction mitigation per SCAQMD

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

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					
2011	10.70	60.15	71.13	0.12	7.24	3.59	10.84	0.11	3.53	3.64	0.00	11,878.36	0.00	0.97	0.00	11,898.83
2012	9.84	55.60	66.80	0.12	7.24	3.28	10.53	0.11	3.23	3.33	0.00	11,769.74	0.00	0.90	0.00	11,788.66
2013	9.04	51.29	62.80	0.12	7.25	2.97	10.22	0.11	2.92	3.03	0.00	11,664.34	0.00	0.83	0.00	11,681.73
2014	8.30	47.17	59.40	0.12	7.25	2.67	9.92	0.11	2.62	2.73	0.00	11,575.29	0.00	0.76	0.00	11,591.33
2015	7.63	42.90	56.21	0.12	7.25	2.40	9.64	0.11	2.35	2.46	0.00	11,467.91	0.00	0.71	0.00	11,482.75
2016	7.06	39.20	53.64	0.12	7.25	2.15	9.40	0.11	2.11	2.22	0.00	11,388.37	0.00	0.65	0.00	11,402.09
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2.1 Overall Construction (Maximum Daily Emission)

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					
2011	10.70	60.15	71.13	0.12	5.44	3.59	9.03	0.11	3.53	3.64	0.00	11,878.36	0.00	0.97	0.00	11,898.83
2012	9.84	55.60	66.80	0.12	5.44	3.28	8.72	0.11	3.23	3.33	0.00	11,769.74	0.00	0.90	0.00	11,788.66
2013	9.04	51.29	62.80	0.12	5.44	2.97	8.41	0.11	2.92	3.03	0.00	11,664.34	0.00	0.83	0.00	11,681.73
2014	8.30	47.17	59.40	0.12	5.44	2.67	8.11	0.11	2.62	2.73	0.00	11,575.29	0.00	0.76	0.00	11,591.33
2015	7.63	42.90	56.21	0.12	5.44	2.40	7.84	0.11	2.35	2.46	0.00	11,467.91	0.00	0.71	0.00	11,482.75
2016	7.06	39.20	53.64	0.12	5.44	2.15	7.59	0.11	2.11	2.22	0.00	11,388.37	0.00	0.65	0.00	11,402.09
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	85.26	3.56	252.18	0.49		0.00	32.43		0.00	32.42	4,290.49	11,035.42		17.07	0.26	15,765.85
Energy	0.55	4.76	2.16	0.03		0.00	0.38		0.00	0.38		6,045.98		0.12	0.11	6,082.78
Mobile	35.40	82.49	317.41	0.82	87.23	4.30	91.53	1.24	4.14	5.38		70,740.93		2.63		70,796.22
Total	121.21	90.81	571.75	1.34	87.23	4.30	124.34	1.24	4.14	38.18	4,290.49	87,822.33		19.82	0.37	92,644.85

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	20.54	0.59	50.92	0.00		0.00	0.28		0.00	0.28	0.00	91.42		0.09	0.00	93.29
Energy	0.48	4.14	1.88	0.03		0.00	0.33		0.00	0.33		5,259.47		0.10	0.10	5,291.47
Mobile	27.38	62.36	224.39	0.54	56.66	2.87	59.53	0.81	2.76	3.56		46,717.16		1.80		46,754.88
Total	48.40	67.09	277.19	0.57	56.66	2.87	60.14	0.81	2.76	4.17	0.00	52,068.05		1.99	0.10	52,139.64

3.0 Construction Detail

3.1 Mitigation Measures Construction

- Use DPF for Construction Equipment
- Replace Ground Cover
- Water Exposed Area
- Water Unpaved Roads
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

3.2 Building Construction - 2011

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	6.11	40.22	24.03	0.04		2.80	2.80		2.80	2.80		4,040.62		0.55		4,052.11
Total	6.11	40.22	24.03	0.04		2.80	2.80		2.80	2.80		4,040.62		0.55		4,052.11

3.2 Building Construction - 2011

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	1.48	16.69	9.84	0.02	0.78	0.59	1.37	0.02	0.54	0.56		2,306.29		0.07		2,307.82
Worker	3.12	3.24	37.26	0.05	6.46	0.20	6.67	0.09	0.19	0.28		5,531.46		0.35		5,538.89
Total	4.60	19.93	47.10	0.07	7.24	0.79	8.04	0.11	0.73	0.84		7,837.75		0.42		7,846.71

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	6.11	40.22	24.03	0.04		2.80	2.80		2.80	2.80	0.00	4,040.62		0.55		4,052.11
Total	6.11	40.22	24.03	0.04		2.80	2.80		2.80	2.80	0.00	4,040.62		0.55		4,052.11

3.2 Building Construction - 2011

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	1.48	16.69	9.84	0.02	0.60	0.59	1.18	0.02	0.54	0.56		2,306.29		0.07		2,307.82
Worker	3.12	3.24	37.26	0.05	4.84	0.20	5.05	0.09	0.19	0.28		5,531.46		0.35		5,538.89
Total	4.60	19.93	47.10	0.07	5.44	0.79	6.23	0.11	0.73	0.84		7,837.75		0.42		7,846.71

3.2 Building Construction - 2012

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	5.63	37.37	23.73	0.04		2.54	2.54		2.54	2.54		4,040.62		0.51		4,051.23
Total	5.63	37.37	23.73	0.04		2.54	2.54		2.54	2.54		4,040.62		0.51		4,051.23

3.2 Building Construction - 2012

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	1.35	15.28	8.90	0.02	0.78	0.53	1.32	0.02	0.49	0.51		2,311.35		0.07		2,312.75
Worker	2.87	2.95	34.17	0.05	6.46	0.21	6.67	0.09	0.19	0.28		5,417.78		0.33		5,424.68
Total	4.22	18.23	43.07	0.07	7.24	0.74	7.99	0.11	0.68	0.79		7,729.13		0.40		7,737.43

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	5.63	37.37	23.73	0.04		2.54	2.54		2.54	2.54	0.00	4,040.62		0.51		4,051.23
Total	5.63	37.37	23.73	0.04		2.54	2.54		2.54	2.54	0.00	4,040.62		0.51		4,051.23

3.2 Building Construction - 2012

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	1.35	15.28	8.90	0.02	0.60	0.53	1.13	0.02	0.49	0.51		2,311.35		0.07		2,312.75
Worker	2.87	2.95	34.17	0.05	4.84	0.21	5.05	0.09	0.19	0.28		5,417.78		0.33		5,424.68
Total	4.22	18.23	43.07	0.07	5.44	0.74	6.18	0.11	0.68	0.79		7,729.13		0.40		7,737.43

3.2 Building Construction - 2013

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	5.17	34.66	23.45	0.04		2.28	2.28		2.28	2.28		4,040.62		0.46		4,050.31
Total	5.17	34.66	23.45	0.04		2.28	2.28		2.28	2.28		4,040.62		0.46		4,050.31

3.2 Building Construction - 2013

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	1.22	13.95	8.02	0.02	0.78	0.48	1.27	0.02	0.44	0.46		2,316.52		0.06		2,317.79
Worker	2.64	2.68	31.34	0.05	6.46	0.21	6.67	0.09	0.20	0.28		5,307.20		0.31		5,313.62
Total	3.86	16.63	39.36	0.07	7.24	0.69	7.94	0.11	0.64	0.74		7,623.72		0.37		7,631.41

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	5.17	34.66	23.45	0.04		2.28	2.28		2.28	2.28	0.00	4,040.62		0.46		4,050.31
Total	5.17	34.66	23.45	0.04		2.28	2.28		2.28	2.28	0.00	4,040.62		0.46		4,050.31

3.2 Building Construction - 2013

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	1.22	13.95	8.02	0.02	0.60	0.48	1.08	0.02	0.44	0.46		2,316.52		0.06		2,317.79
Worker	2.64	2.68	31.34	0.05	4.84	0.21	5.06	0.09	0.20	0.28		5,307.20		0.31		5,313.62
Total	3.86	16.63	39.36	0.07	5.44	0.69	6.14	0.11	0.64	0.74		7,623.72		0.37		7,631.41

3.2 Building Construction - 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	4.74	32.06	23.20	0.04		2.02	2.02		2.02	2.02		4,040.61		0.42		4,049.51
Total	4.74	32.06	23.20	0.04		2.02	2.02		2.02	2.02		4,040.61		0.42		4,049.51

3.2 Building Construction - 2014

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	1.11	12.66	7.31	0.02	0.78	0.43	1.21	0.02	0.40	0.42		2,320.91		0.05		2,322.06
Worker	2.45	2.44	28.89	0.05	6.46	0.22	6.68	0.09	0.20	0.29		5,213.76		0.29		5,219.75
Total	3.56	15.10	36.20	0.07	7.24	0.65	7.89	0.11	0.60	0.71		7,534.67		0.34		7,541.81

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	4.74	32.06	23.20	0.04		2.02	2.02		2.02	2.02	0.00	4,040.61		0.42		4,049.51
Total	4.74	32.06	23.20	0.04		2.02	2.02		2.02	2.02	0.00	4,040.61		0.42		4,049.51

3.2 Building Construction - 2014

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	1.11	12.66	7.31	0.02	0.60	0.43	1.03	0.02	0.40	0.42		2,320.91		0.05		2,322.06
Worker	2.45	2.44	28.89	0.05	4.84	0.22	5.06	0.09	0.20	0.29		5,213.76		0.29		5,219.75
Total	3.56	15.10	36.20	0.07	5.44	0.65	6.09	0.11	0.60	0.71		7,534.67		0.34		7,541.81

3.2 Building Construction - 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	4.34	29.16	22.98	0.04		1.80	1.80		1.80	1.80		4,040.61		0.39		4,048.81
Total	4.34	29.16	22.98	0.04		1.80	1.80		1.80	1.80		4,040.61		0.39		4,048.81

3.2 Building Construction - 2015

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	1.01	11.52	6.67	0.02	0.78	0.38	1.17	0.02	0.35	0.37		2,325.10		0.05		2,326.14
Worker	2.28	2.22	26.56	0.05	6.46	0.22	6.68	0.09	0.20	0.29		5,102.20		0.27		5,107.80
Total	3.29	13.74	33.23	0.07	7.24	0.60	7.85	0.11	0.55	0.66		7,427.30		0.32		7,433.94

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	4.34	29.16	22.98	0.04		1.80	1.80		1.80	1.80	0.00	4,040.61		0.39		4,048.81
Total	4.34	29.16	22.98	0.04		1.80	1.80		1.80	1.80	0.00	4,040.61		0.39		4,048.81

3.2 Building Construction - 2015

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	1.01	11.52	6.67	0.02	0.60	0.38	0.98	0.02	0.35	0.37		2,325.10		0.05		2,326.14
Worker	2.28	2.22	26.56	0.05	4.84	0.22	5.06	0.09	0.20	0.29		5,102.20		0.27		5,107.80
Total	3.29	13.74	33.23	0.07	5.44	0.60	6.04	0.11	0.55	0.66		7,427.30		0.32		7,433.94

3.2 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	lb/day										lb/day					
Off-Road	3.99	26.52	22.80	0.04		1.58	1.58		1.58	1.58		4,040.61		0.36		4,048.10
Total	3.99	26.52	22.80	0.04		1.58	1.58		1.58	1.58		4,040.61		0.36		4,048.10

3.2 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	lb/day										lb/day					
Hauling	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
Vendor	0.92	10.63	6.15	0.02	0.78	0.35	1.13	0.02	0.32	0.34		2,331.01		0.05		2,331.96
Worker	2.15	2.04	24.68	0.05	6.46	0.23	6.69	0.09	0.21	0.30		5,016.75		0.25		5,022.03
Total	3.07	12.67	30.83	0.07	7.24	0.58	7.82	0.11	0.53	0.64		7,347.76		0.30		7,353.99

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	3.99	26.52	22.80	0.04		1.58	1.58		1.58	1.58	0.00	4,040.61		0.36		4,048.10
Total	3.99	26.52	22.80	0.04		1.58	1.58		1.58	1.58	0.00	4,040.61		0.36		4,048.10

3.2 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	lb/day										lb/day					
Hauling	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
Vendor	0.92	10.63	6.15	0.02	0.60	0.35	0.94	0.02	0.32	0.34		2,331.01		0.05		2,331.96
Worker	2.15	2.04	24.68	0.05	4.84	0.23	5.07	0.09	0.21	0.30		5,016.75		0.25		5,022.03
Total	3.07	12.67	30.83	0.07	5.44	0.58	6.01	0.11	0.53	0.64		7,347.76		0.30		7,353.99

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

- Increase Density
- Improve Walkability Design
- Improve Destination Accessibility
- Increase Transit Accessibility
- Improve Pedestrian Network
- Implement Trip Reduction Program
- Market Commute Trip Reduction Option
- Employee Vanpool/Shuttle

Provide Riade Sharing Program

	ROG	NOx	CO	SO2	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	27.38	62.36	224.39	0.54	56.66	2.87	59.53	0.81	2.76	3.56		46,717.16		1.80		46,754.88
Unmitigated	35.40	82.49	317.41	0.82	87.23	4.30	91.53	1.24	4.14	5.38		70,740.93		2.63		70,796.22
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Condo/Townhouse	3,732.70	3,279.28	2780.06	11,763,037	7,939,326
Government Office Building	3,597.83	0.00	0.00	6,337,106	3,800,365
Single Family Housing	1,435.50	1,512.00	1315.50	4,760,343	3,212,938
Total	8,766.03	4,791.28	4,095.56	22,860,486	14,952,629

4.3 Trip Type Information

Land Use	Miles			Trip %		
	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
Condo/Townhouse	12.70	7.00	9.50	40.20	19.20	40.60

Land Use	Miles			Trip %		
	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
Government Office Building	8.90	13.30	7.40	33.00	62.00	5.00
Single Family Housing	12.70	7.00	9.50	40.20	19.20	40.60

5.0 Energy Detail

5.1 Mitigation Measures Energy

Exceed Title 24

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	lb/day										lb/day					
NaturalGas Mitigated	0.48	4.14	1.88	0.03		0.00	0.33		0.00	0.33		5,259.47		0.10	0.10	5,291.47
NaturalGas Unmitigated	0.55	4.76	2.16	0.03		0.00	0.38		0.00	0.38		6,045.98		0.12	0.11	6,082.78
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	lb/day										lb/day					
Condo/Townhouse	30917.6	0.33	2.85	1.21	0.02		0.00	0.23		0.00	0.23		3,637.37		0.07	0.07	3,659.51
Government Office Building	3458.67	0.04	0.34	0.28	0.00		0.00	0.03		0.00	0.03		406.90		0.01	0.01	409.38
Single Family Housing	17014.5	0.18	1.57	0.67	0.01		0.00	0.13		0.00	0.13		2,001.71		0.04	0.04	2,013.89
Total		0.55	4.76	2.16	0.03		0.00	0.39		0.00	0.39		6,045.98		0.12	0.12	6,082.78

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	lb/day										lb/day					
Condo/Townhouse	26.9188	0.29	2.48	1.06	0.02		0.00	0.20		0.00	0.20		3,166.92		0.06	0.06	3,186.19
Government Office Building	2.95838	0.03	0.29	0.24	0.00		0.00	0.02		0.00	0.02		348.04		0.01	0.01	350.16
Single Family Housing	14.8283	0.16	1.37	0.58	0.01		0.00	0.11		0.00	0.11		1,744.51		0.03	0.03	1,755.12
Total		0.48	4.14	1.88	0.03		0.00	0.33		0.00	0.33		5,259.47		0.10	0.10	5,291.47

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
- Use only Natural Gas Hearths
- No Hearths Installed

	ROG	NOx	CO	SO2	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	20.54	0.59	50.92	0.00		0.00	0.28		0.00	0.28	0.00	91.42		0.09	0.00	93.29
Unmitigated	85.26	3.56	252.18	0.49		0.00	32.43		0.00	32.42	4,290.49	11,035.42		17.07	0.26	15,765.85
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	2.29					0.00	0.00		0.00	0.00						0.00
Consumer Products	16.70					0.00	0.00		0.00	0.00						0.00
Hearth	64.71	2.97	201.25	0.49		0.00	32.15		0.00	32.14	4,290.49	10,944.00		16.98	0.26	15,672.56
Landscaping	1.55	0.59	50.92	0.00		0.00	0.28		0.00	0.28		91.42		0.09		93.29
Total	85.25	3.56	252.17	0.49		0.00	32.43		0.00	32.42	4,290.49	11,035.42		17.07	0.26	15,765.85

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	2.29					0.00	0.00		0.00	0.00						0.00
Consumer Products	16.70					0.00	0.00		0.00	0.00						0.00
Hearth	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
Landscaping	1.55	0.59	50.92	0.00		0.00	0.28		0.00	0.28		91.42		0.09		93.29
Total	20.54	0.59	50.92	0.00		0.00	0.28		0.00	0.28	0.00	91.42		0.09	0.00	93.29

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

Turf Reduction

Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Vegetation

Serrano Summit Operations
South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Government Office Building	115.5	1000sqft
Condo/Townhouse	458	Dwelling Unit
Single Family Housing	150	Dwelling Unit

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Utility Company	Southern California Edison
Climate Zone	9	Precipitation Freq (Days)	31		

1.3 User Entered Comments

- Project Characteristics -
- Land Use - Commercial uses include community center and police center
- Construction Phase - Construction is modeled separately
- Off-road Equipment -
- Trips and VMT -

Demolition -

Grading -

Vehicle Trips - Pass-by trip reduction from Traffic Study

Woodstoves - Wood stoves are not proposed, fireplaces would be gas

Land Use Change -

Sequestration -

Construction Off-road Equipment Mitigation - Construction mitigation per SCAQMD

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

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					
2011	10.97	61.47	69.53	0.11	7.24	3.60	10.85	0.11	3.54	3.65	0.00	11,385.08	0.00	0.96	0.00	11,405.29
2012	10.09	56.76	65.34	0.11	7.24	3.30	10.54	0.11	3.24	3.34	0.00	11,284.67	0.00	0.89	0.00	11,303.34
2013	9.26	52.31	61.46	0.11	7.25	2.98	10.23	0.11	2.93	3.03	0.00	11,187.10	0.00	0.82	0.00	11,204.23
2014	8.51	48.04	58.15	0.11	7.25	2.68	9.92	0.11	2.63	2.74	0.00	11,104.68	0.00	0.75	0.00	11,120.47
2015	7.83	43.65	55.05	0.11	7.25	2.41	9.65	0.11	2.36	2.47	0.00	11,005.28	0.00	0.69	0.00	11,019.86
2016	7.24	39.84	52.56	0.11	7.25	2.16	9.41	0.11	2.12	2.22	0.00	10,932.20	0.00	0.64	0.00	10,945.67
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2.1 Overall Construction (Maximum Daily Emission)

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					
2011	10.97	61.47	69.53	0.11	5.44	3.60	9.04	0.11	3.54	3.65	0.00	11,385.08	0.00	0.96	0.00	11,405.29
2012	10.09	56.76	65.34	0.11	5.44	3.30	8.73	0.11	3.24	3.34	0.00	11,284.67	0.00	0.89	0.00	11,303.34
2013	9.26	52.31	61.46	0.11	5.44	2.98	8.42	0.11	2.93	3.03	0.00	11,187.10	0.00	0.82	0.00	11,204.23
2014	8.51	48.04	58.15	0.11	5.44	2.68	8.12	0.11	2.63	2.74	0.00	11,104.68	0.00	0.75	0.00	11,120.47
2015	7.83	43.65	55.05	0.11	5.44	2.41	7.85	0.11	2.36	2.47	0.00	11,005.28	0.00	0.69	0.00	11,019.86
2016	7.24	39.84	52.56	0.11	5.44	2.16	7.60	0.11	2.12	2.22	0.00	10,932.20	0.00	0.64	0.00	10,945.67
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	85.26	3.56	252.18	0.49		0.00	32.43		0.00	32.42	4,290.49	11,035.42		17.07	0.26	15,765.85
Energy	0.55	4.76	2.16	0.03		0.00	0.38		0.00	0.38		6,045.98		0.12	0.11	6,082.78
Mobile	36.36	87.11	307.79	0.77	87.23	4.33	91.56	1.24	4.17	5.41		65,844.44		2.69		65,900.88
Total	122.17	95.43	562.13	1.29	87.23	4.33	124.37	1.24	4.17	38.21	4,290.49	82,925.84		19.88	0.37	87,749.51

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	20.54	0.59	50.92	0.00		0.00	0.28		0.00	0.28	0.00	91.42		0.09	0.00	93.29
Energy	0.48	4.14	1.88	0.03		0.00	0.33		0.00	0.33		5,259.47		0.10	0.10	5,291.47
Mobile	27.64	64.93	225.15	0.50	56.66	2.90	59.56	0.81	2.79	3.60		43,491.53		1.85		43,530.41
Total	48.66	69.66	277.95	0.53	56.66	2.90	60.17	0.81	2.79	4.21	0.00	48,842.42		2.04	0.10	48,915.17

3.0 Construction Detail

3.1 Mitigation Measures Construction

- Use DPF for Construction Equipment
- Replace Ground Cover
- Water Exposed Area
- Water Unpaved Roads
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

3.2 Building Construction - 2011

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	6.11	40.22	24.03	0.04		2.80	2.80		2.80	2.80		4,040.62		0.55		4,052.11
Total	6.11	40.22	24.03	0.04		2.80	2.80		2.80	2.80		4,040.62		0.55		4,052.11

3.2 Building Construction - 2011

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	1.55	17.53	10.87	0.02	0.78	0.60	1.38	0.02	0.55	0.57		2,289.15		0.08		2,290.77
Worker	3.31	3.72	34.63	0.05	6.46	0.20	6.67	0.09	0.19	0.28		5,055.31		0.34		5,062.40
Total	4.86	21.25	45.50	0.07	7.24	0.80	8.05	0.11	0.74	0.85		7,344.46		0.42		7,353.17

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	6.11	40.22	24.03	0.04		2.80	2.80		2.80	2.80	0.00	4,040.62		0.55		4,052.11
Total	6.11	40.22	24.03	0.04		2.80	2.80		2.80	2.80	0.00	4,040.62		0.55		4,052.11

3.2 Building Construction - 2011

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	1.55	17.53	10.87	0.02	0.60	0.60	1.20	0.02	0.55	0.57		2,289.15		0.08		2,290.77
Worker	3.31	3.72	34.63	0.05	4.84	0.20	5.05	0.09	0.19	0.28		5,055.31		0.34		5,062.40
Total	4.86	21.25	45.50	0.07	5.44	0.80	6.25	0.11	0.74	0.85		7,344.46		0.42		7,353.17

3.2 Building Construction - 2012

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	5.63	37.37	23.73	0.04		2.54	2.54		2.54	2.54		4,040.62		0.51		4,051.23
Total	5.63	37.37	23.73	0.04		2.54	2.54		2.54	2.54		4,040.62		0.51		4,051.23

3.2 Building Construction - 2012

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	1.42	16.01	9.93	0.02	0.78	0.55	1.33	0.02	0.50	0.52		2,293.74		0.07		2,295.21
Worker	3.04	3.38	31.68	0.05	6.46	0.21	6.67	0.09	0.19	0.28		4,950.32		0.31		4,956.90
Total	4.46	19.39	41.61	0.07	7.24	0.76	8.00	0.11	0.69	0.80		7,244.06		0.38		7,252.11

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	5.63	37.37	23.73	0.04		2.54	2.54		2.54	2.54	0.00	4,040.62		0.51		4,051.23
Total	5.63	37.37	23.73	0.04		2.54	2.54		2.54	2.54	0.00	4,040.62		0.51		4,051.23

3.2 Building Construction - 2012

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	1.42	16.01	9.93	0.02	0.60	0.55	1.14	0.02	0.50	0.52		2,293.74		0.07		2,295.21
Worker	3.04	3.38	31.68	0.05	4.84	0.21	5.05	0.09	0.19	0.28		4,950.32		0.31		4,956.90
Total	4.46	19.39	41.61	0.07	5.44	0.76	6.19	0.11	0.69	0.80		7,244.06		0.38		7,252.11

3.2 Building Construction - 2013

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	5.17	34.66	23.45	0.04		2.28	2.28		2.28	2.28		4,040.62		0.46		4,050.31
Total	5.17	34.66	23.45	0.04		2.28	2.28		2.28	2.28		4,040.62		0.46		4,050.31

3.2 Building Construction - 2013

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	1.29	14.57	9.04	0.02	0.78	0.49	1.27	0.02	0.45	0.47		2,298.41		0.06		2,299.74
Worker	2.80	3.08	28.97	0.05	6.46	0.21	6.67	0.09	0.20	0.28		4,848.08		0.29		4,854.17
Total	4.09	17.65	38.01	0.07	7.24	0.70	7.94	0.11	0.65	0.75		7,146.49		0.35		7,153.91

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	5.17	34.66	23.45	0.04		2.28	2.28		2.28	2.28	0.00	4,040.62		0.46		4,050.31
Total	5.17	34.66	23.45	0.04		2.28	2.28		2.28	2.28	0.00	4,040.62		0.46		4,050.31

3.2 Building Construction - 2013

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	1.29	14.57	9.04	0.02	0.60	0.49	1.09	0.02	0.45	0.47		2,298.41		0.06		2,299.74
Worker	2.80	3.08	28.97	0.05	4.84	0.21	5.06	0.09	0.20	0.28		4,848.08		0.29		4,854.17
Total	4.09	17.65	38.01	0.07	5.44	0.70	6.15	0.11	0.65	0.75		7,146.49		0.35		7,153.91

3.2 Building Construction - 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	4.74	32.06	23.20	0.04		2.02	2.02		2.02	2.02		4,040.61		0.42		4,049.51
Total	4.74	32.06	23.20	0.04		2.02	2.02		2.02	2.02		4,040.61		0.42		4,049.51

3.2 Building Construction - 2014

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	1.17	13.18	8.33	0.02	0.78	0.44	1.22	0.02	0.40	0.42		2,302.39		0.06		2,303.60
Worker	2.60	2.80	26.62	0.05	6.46	0.22	6.68	0.09	0.20	0.29		4,761.67		0.27		4,767.36
Total	3.77	15.98	34.95	0.07	7.24	0.66	7.90	0.11	0.60	0.71		7,064.06		0.33		7,070.96

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	4.74	32.06	23.20	0.04		2.02	2.02		2.02	2.02	0.00	4,040.61		0.42		4,049.51
Total	4.74	32.06	23.20	0.04		2.02	2.02		2.02	2.02	0.00	4,040.61		0.42		4,049.51

3.2 Building Construction - 2014

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	1.17	13.18	8.33	0.02	0.60	0.44	1.03	0.02	0.40	0.42		2,302.39		0.06		2,303.60
Worker	2.60	2.80	26.62	0.05	4.84	0.22	5.06	0.09	0.20	0.29		4,761.67		0.27		4,767.36
Total	3.77	15.98	34.95	0.07	5.44	0.66	6.09	0.11	0.60	0.71		7,064.06		0.33		7,070.96

3.2 Building Construction - 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	4.34	29.16	22.98	0.04		1.80	1.80		1.80	1.80		4,040.61		0.39		4,048.81
Total	4.34	29.16	22.98	0.04		1.80	1.80		1.80	1.80		4,040.61		0.39		4,048.81

3.2 Building Construction - 2015

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	1.06	11.94	7.67	0.02	0.78	0.39	1.17	0.02	0.36	0.38		2,306.15		0.05		2,307.25
Worker	2.42	2.55	24.40	0.05	6.46	0.22	6.68	0.09	0.20	0.29		4,658.52		0.25		4,663.80
Total	3.48	14.49	32.07	0.07	7.24	0.61	7.85	0.11	0.56	0.67		6,964.67		0.30		6,971.05

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	4.34	29.16	22.98	0.04		1.80	1.80		1.80	1.80	0.00	4,040.61		0.39		4,048.81
Total	4.34	29.16	22.98	0.04		1.80	1.80		1.80	1.80	0.00	4,040.61		0.39		4,048.81

3.2 Building Construction - 2015

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	1.06	11.94	7.67	0.02	0.60	0.39	0.99	0.02	0.36	0.38		2,306.15		0.05		2,307.25
Worker	2.42	2.55	24.40	0.05	4.84	0.22	5.06	0.09	0.20	0.29		4,658.52		0.25		4,663.80
Total	3.48	14.49	32.07	0.07	5.44	0.61	6.05	0.11	0.56	0.67		6,964.67		0.30		6,971.05

3.2 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	lb/day										lb/day					
Off-Road	3.99	26.52	22.80	0.04		1.58	1.58		1.58	1.58		4,040.61		0.36		4,048.10
Total	3.99	26.52	22.80	0.04		1.58	1.58		1.58	1.58		4,040.61		0.36		4,048.10

3.2 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	lb/day										lb/day					
Hauling	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
Vendor	0.98	10.98	7.15	0.02	0.78	0.35	1.14	0.02	0.32	0.34		2,311.65		0.05		2,312.65
Worker	2.28	2.34	22.60	0.05	6.46	0.23	6.69	0.09	0.21	0.30		4,579.93		0.24		4,584.92
Total	3.26	13.32	29.75	0.07	7.24	0.58	7.83	0.11	0.53	0.64		6,891.58		0.29		6,897.57

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	3.99	26.52	22.80	0.04		1.58	1.58		1.58	1.58	0.00	4,040.61		0.36		4,048.10
Total	3.99	26.52	22.80	0.04		1.58	1.58		1.58	1.58	0.00	4,040.61		0.36		4,048.10

3.2 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	lb/day										lb/day					
Hauling	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
Vendor	0.98	10.98	7.15	0.02	0.60	0.35	0.95	0.02	0.32	0.34		2,311.65		0.05		2,312.65
Worker	2.28	2.34	22.60	0.05	4.84	0.23	5.07	0.09	0.21	0.30		4,579.93		0.24		4,584.92
Total	3.26	13.32	29.75	0.07	5.44	0.58	6.02	0.11	0.53	0.64		6,891.58		0.29		6,897.57

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

- Increase Density
- Improve Walkability Design
- Improve Destination Accessibility
- Increase Transit Accessibility
- Improve Pedestrian Network
- Implement Trip Reduction Program
- Market Commute Trip Reduction Option
- Employee Vanpool/Shuttle

Provide Riade Sharing Program

	ROG	NOx	CO	SO2	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	27.64	64.93	225.15	0.50	56.66	2.90	59.56	0.81	2.79	3.60		43,491.53		1.85		43,530.41
Unmitigated	36.36	87.11	307.79	0.77	87.23	4.33	91.56	1.24	4.17	5.41		65,844.44		2.69		65,900.88
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Condo/Townhouse	3,732.70	3,279.28	2780.06	11,763,037	7,939,326
Government Office Building	3,597.83	0.00	0.00	6,337,106	3,800,365
Single Family Housing	1,435.50	1,512.00	1315.50	4,760,343	3,212,938
Total	8,766.03	4,791.28	4,095.56	22,860,486	14,952,629

4.3 Trip Type Information

Land Use	Miles			Trip %		
	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
Condo/Townhouse	12.70	7.00	9.50	40.20	19.20	40.60

Land Use	Miles			Trip %		
	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
Government Office Building	8.90	13.30	7.40	33.00	62.00	5.00
Single Family Housing	12.70	7.00	9.50	40.20	19.20	40.60

5.0 Energy Detail

5.1 Mitigation Measures Energy

Exceed Title 24

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	lb/day										lb/day					
NaturalGas Mitigated	0.48	4.14	1.88	0.03		0.00	0.33		0.00	0.33		5,259.47		0.10	0.10	5,291.47
NaturalGas Unmitigated	0.55	4.76	2.16	0.03		0.00	0.38		0.00	0.38		6,045.98		0.12	0.11	6,082.78
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	lb/day										lb/day					
Condo/Townhouse	30917.6	0.33	2.85	1.21	0.02		0.00	0.23		0.00	0.23		3,637.37		0.07	0.07	3,659.51
Government Office Building	3458.67	0.04	0.34	0.28	0.00		0.00	0.03		0.00	0.03		406.90		0.01	0.01	409.38
Single Family Housing	17014.5	0.18	1.57	0.67	0.01		0.00	0.13		0.00	0.13		2,001.71		0.04	0.04	2,013.89
Total		0.55	4.76	2.16	0.03		0.00	0.39		0.00	0.39		6,045.98		0.12	0.12	6,082.78

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	lb/day										lb/day					
Condo/Townhouse	26.9188	0.29	2.48	1.06	0.02		0.00	0.20		0.00	0.20		3,166.92		0.06	0.06	3,186.19
Government Office Building	2.95838	0.03	0.29	0.24	0.00		0.00	0.02		0.00	0.02		348.04		0.01	0.01	350.16
Single Family Housing	14.8283	0.16	1.37	0.58	0.01		0.00	0.11		0.00	0.11		1,744.51		0.03	0.03	1,755.12
Total		0.48	4.14	1.88	0.03		0.00	0.33		0.00	0.33		5,259.47		0.10	0.10	5,291.47

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

Use only Natural Gas Hearths

No Hearths Installed

	ROG	NOx	CO	SO2	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	20.54	0.59	50.92	0.00		0.00	0.28		0.00	0.28	0.00	91.42		0.09	0.00	93.29
Unmitigated	85.26	3.56	252.18	0.49		0.00	32.43		0.00	32.42	4,290.49	11,035.42		17.07	0.26	15,765.85
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	2.29					0.00	0.00		0.00	0.00						0.00
Consumer Products	16.70					0.00	0.00		0.00	0.00						0.00
Hearth	64.71	2.97	201.25	0.49		0.00	32.15		0.00	32.14	4,290.49	10,944.00		16.98	0.26	15,672.56
Landscaping	1.55	0.59	50.92	0.00		0.00	0.28		0.00	0.28		91.42		0.09		93.29
Total	85.25	3.56	252.17	0.49		0.00	32.43		0.00	32.42	4,290.49	11,035.42		17.07	0.26	15,765.85

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	2.29					0.00	0.00		0.00	0.00						0.00
Consumer Products	16.70					0.00	0.00		0.00	0.00						0.00
Hearth	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
Landscaping	1.55	0.59	50.92	0.00		0.00	0.28		0.00	0.28		91.42		0.09		93.29
Total	20.54	0.59	50.92	0.00		0.00	0.28		0.00	0.28	0.00	91.42		0.09	0.00	93.29

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

Turf Reduction

Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Vegetation

**Serrano Summit Project Alternative Operations
South Coast AQMD Air District, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Recreational Swimming Pool	1.5	1000sqft
Apartments Low Rise	225	Dwelling Unit
Condo/Townhouse	458	Dwelling Unit
Single Family Housing	150	Dwelling Unit

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Utility Company	Southern California Edison
Climate Zone	9	Precipitation Freq (Days)	31		

1.3 User Entered Comments

Project Characteristics -
 Land Use - Recreational uses include community center
 Construction Phase - Construction is modeled separately
 Off-road Equipment -

Trips and VMT -

Demolition -

Grading -

Vehicle Trips - Recreation/community center trip rate and pass-by trip reduction from Traffic Study

Woodstoves - Wood stoves are not proposed, fireplaces would be gas

Land Use Change -

Sequestration -

Construction Off-road Equipment Mitigation - Construction mitigation per SCAQMD

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

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					
2011	1.52	8.09	10.57	0.02	1.08	0.48	1.56	0.02	0.47	0.49	0.00	1,558.58	1,558.58	0.13	0.00	1,561.24
2012	1.40	7.50	9.93	0.02	1.08	0.44	1.53	0.02	0.43	0.45	0.00	1,548.65	1,548.65	0.12	0.00	1,551.12
2013	1.29	6.92	9.30	0.02	1.08	0.40	1.48	0.02	0.39	0.41	0.00	1,533.18	1,533.18	0.11	0.00	1,535.45
2014	1.18	6.36	8.76	0.02	1.08	0.36	1.45	0.02	0.35	0.37	0.00	1,520.11	1,520.11	0.10	0.00	1,522.20
2015	1.09	5.78	8.26	0.02	1.08	0.32	1.41	0.02	0.32	0.34	0.00	1,504.38	1,504.38	0.09	0.00	1,506.31
2016	0.95	4.98	7.40	0.02	1.02	0.28	1.30	0.02	0.27	0.29	0.00	1,406.92	1,406.92	0.08	0.00	1,408.60
Total	7.43	39.63	54.22	0.12	6.42	2.28	8.73	0.12	2.23	2.35	0.00	9,071.82	9,071.82	0.63	0.00	9,084.92

2.1 Overall Construction

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					
2011	1.52	8.09	10.57	0.02	0.81	0.48	1.29	0.02	0.47	0.49	0.00	1,558.58	1,558.58	0.13	0.00	1,561.24
2012	1.40	7.50	9.93	0.02	0.82	0.44	1.26	0.02	0.43	0.45	0.00	1,548.65	1,548.65	0.12	0.00	1,551.12
2013	1.29	6.92	9.30	0.02	0.82	0.40	1.22	0.02	0.39	0.41	0.00	1,533.18	1,533.18	0.11	0.00	1,535.45
2014	1.18	6.36	8.76	0.02	0.82	0.36	1.18	0.02	0.35	0.37	0.00	1,520.11	1,520.11	0.10	0.00	1,522.20
2015	1.09	5.78	8.26	0.02	0.82	0.32	1.14	0.02	0.32	0.34	0.00	1,504.38	1,504.38	0.09	0.00	1,506.31
2016	0.95	4.98	7.40	0.02	0.77	0.28	1.04	0.02	0.27	0.29	0.00	1,406.92	1,406.92	0.08	0.00	1,408.60
Total	7.43	39.63	54.22	0.12	4.86	2.28	7.13	0.12	2.23	2.35	0.00	9,071.82	9,071.82	0.63	0.00	9,084.92

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	6.97	0.22	17.96	0.01		0.00	0.89		0.00	0.89	88.48	530.81	619.29	0.29	0.01	629.18
Energy	0.12	1.01	0.43	0.01		0.00	0.08		0.00	0.08	0.00	2,272.03	2,272.03	0.07	0.04	2,286.06
Mobile	4.93	12.04	45.63	0.12	11.78	0.64	12.42	0.19	0.62	0.80	0.00	9,117.50	9,117.50	0.36	0.00	9,125.00
Waste						0.00	0.00		0.00	0.00	101.22	0.00	101.22	5.98	0.00	226.83
Water						0.00	0.00		0.00	0.00	0.00	317.25	317.25	1.67	0.05	366.84
Total	12.02	13.27	64.02	0.14	11.78	0.64	13.39	0.19	0.62	1.77	189.70	12,237.59	12,427.29	8.37	0.10	12,633.91

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	4.21	0.15	12.72	0.00		0.00	0.07		0.00	0.07	0.00	20.72	20.72	0.02	0.00	21.14
Energy	0.10	0.88	0.37	0.01		0.00	0.07		0.00	0.07	0.00	2,003.12	2,003.12	0.06	0.04	2,015.49
Mobile	3.81	9.20	33.75	0.08	7.95	0.44	8.39	0.13	0.43	0.55	0.00	6,234.53	6,234.53	0.25	0.00	6,239.81
Waste						0.00	0.00		0.00	0.00	50.61	0.00	50.61	2.99	0.00	113.42
Water						0.00	0.00		0.00	0.00	0.00	256.09	256.09	1.34	0.04	295.78
Total	8.12	10.23	46.84	0.09	7.95	0.44	8.53	0.13	0.43	0.69	50.61	8,514.46	8,565.07	4.66	0.08	8,685.64

3.0 Construction Detail

3.1 Mitigation Measures Construction

- Use DPF for Construction Equipment
- Replace Ground Cover
- Water Exposed Area
- Water Unpaved Roads
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

3.2 Building Construction - 2011

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	0.79	5.23	3.12	0.01		0.36	0.36		0.36	0.36	0.00	476.40	476.40	0.06	0.00	477.75
Total	0.79	5.23	3.12	0.01		0.36	0.36		0.36	0.36	0.00	476.40	476.40	0.06	0.00	477.75

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	0.00	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
Vendor	0.21	2.29	1.45	0.00	0.10	0.08	0.18	0.00	0.08	0.08	0.00	287.29	287.29	0.01	0.00	287.49
Worker	0.52	0.57	6.00	0.01	0.98	0.03	1.02	0.01	0.03	0.05	0.00	794.89	794.89	0.05	0.00	796.00
Total	0.73	2.86	7.45	0.01	1.08	0.11	1.20	0.01	0.11	0.13	0.00	1,082.18	1,082.18	0.06	0.00	1,083.49

3.2 Building Construction - 2011

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	0.79	5.23	3.12	0.01		0.36	0.36		0.36	0.36	0.00	476.40	476.40	0.06	0.00	477.75
Total	0.79	5.23	3.12	0.01		0.36	0.36		0.36	0.36	0.00	476.40	476.40	0.06	0.00	477.75

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	0.00	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
Vendor	0.21	2.29	1.45	0.00	0.07	0.08	0.16	0.00	0.08	0.08	0.00	287.29	287.29	0.01	0.00	287.49
Worker	0.52	0.57	6.00	0.01	0.74	0.03	0.77	0.01	0.03	0.05	0.00	794.89	794.89	0.05	0.00	796.00
Total	0.73	2.86	7.45	0.01	0.81	0.11	0.93	0.01	0.11	0.13	0.00	1,082.18	1,082.18	0.06	0.00	1,083.49

3.2 Building Construction - 2012

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	0.73	4.87	3.10	0.01		0.33	0.33		0.33	0.33	0.00	478.23	478.23	0.06	0.00	479.48
Total	0.73	4.87	3.10	0.01		0.33	0.33		0.33	0.33	0.00	478.23	478.23	0.06	0.00	479.48

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	0.00	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
Vendor	0.19	2.11	1.32	0.00	0.10	0.07	0.17	0.00	0.07	0.07	0.00	289.00	289.00	0.01	0.00	289.18
Worker	0.48	0.52	5.51	0.01	0.99	0.04	1.02	0.01	0.03	0.05	0.00	781.42	781.42	0.05	0.00	782.45
Total	0.67	2.63	6.83	0.01	1.09	0.11	1.19	0.01	0.10	0.12	0.00	1,070.42	1,070.42	0.06	0.00	1,071.63

3.2 Building Construction - 2012

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	0.73	4.87	3.10	0.01		0.33	0.33		0.33	0.33	0.00	478.23	478.23	0.06	0.00	479.48
Total	0.73	4.87	3.10	0.01		0.33	0.33		0.33	0.33	0.00	478.23	478.23	0.06	0.00	479.48

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	0.00	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
Vendor	0.19	2.11	1.32	0.00	0.07	0.07	0.15	0.00	0.07	0.07	0.00	289.00	289.00	0.01	0.00	289.18
Worker	0.48	0.52	5.51	0.01	0.74	0.04	0.78	0.01	0.03	0.05	0.00	781.42	781.42	0.05	0.00	782.45
Total	0.67	2.63	6.83	0.01	0.81	0.11	0.93	0.01	0.10	0.12	0.00	1,070.42	1,070.42	0.06	0.00	1,071.63

3.2 Building Construction - 2013

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	0.67	4.52	3.06	0.01		0.30	0.30		0.30	0.30	0.00	478.23	478.23	0.05	0.00	479.38
Total	0.67	4.52	3.06	0.01		0.30	0.30		0.30	0.30	0.00	478.23	478.23	0.05	0.00	479.38

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	0.00	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
Vendor	0.17	1.92	1.20	0.00	0.10	0.07	0.17	0.00	0.06	0.06	0.00	289.62	289.62	0.01	0.00	289.79
Worker	0.44	0.47	5.04	0.01	0.99	0.04	1.02	0.01	0.03	0.05	0.00	765.33	765.33	0.05	0.00	766.28
Total	0.61	2.39	6.24	0.01	1.09	0.11	1.19	0.01	0.09	0.11	0.00	1,054.95	1,054.95	0.06	0.00	1,056.07

3.2 Building Construction - 2013

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	0.67	4.52	3.06	0.01		0.30	0.30		0.30	0.30	0.00	478.23	478.23	0.05	0.00	479.38
Total	0.67	4.52	3.06	0.01		0.30	0.30		0.30	0.30	0.00	478.23	478.23	0.05	0.00	479.38

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	0.00	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
Vendor	0.17	1.92	1.20	0.00	0.07	0.07	0.14	0.00	0.06	0.06	0.00	289.62	289.62	0.01	0.00	289.79
Worker	0.44	0.47	5.04	0.01	0.74	0.04	0.78	0.01	0.03	0.05	0.00	765.33	765.33	0.05	0.00	766.28
Total	0.61	2.39	6.24	0.01	0.81	0.11	0.92	0.01	0.09	0.11	0.00	1,054.95	1,054.95	0.06	0.00	1,056.07

3.2 Building Construction - 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	0.62	4.18	3.03	0.01		0.26	0.26		0.26	0.26	0.00	478.23	478.23	0.05	0.00	479.28
Total	0.62	4.18	3.03	0.01		0.26	0.26		0.26	0.26	0.00	478.23	478.23	0.05	0.00	479.28

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	0.00	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
Vendor	0.16	1.74	1.10	0.00	0.10	0.06	0.16	0.00	0.06	0.06	0.00	290.15	290.15	0.01	0.00	290.30
Worker	0.41	0.43	4.64	0.01	0.99	0.04	1.02	0.01	0.03	0.05	0.00	751.73	751.73	0.04	0.00	752.61
Total	0.57	2.17	5.74	0.01	1.09	0.10	1.18	0.01	0.09	0.11	0.00	1,041.88	1,041.88	0.05	0.00	1,042.91

3.2 Building Construction - 2014

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	0.62	4.18	3.03	0.01		0.26	0.26		0.26	0.26	0.00	478.23	478.23	0.05	0.00	479.28
Total	0.62	4.18	3.03	0.01		0.26	0.26		0.26	0.26	0.00	478.23	478.23	0.05	0.00	479.28

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	0.00	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
Vendor	0.16	1.74	1.10	0.00	0.07	0.06	0.13	0.00	0.06	0.06	0.00	290.15	290.15	0.01	0.00	290.30
Worker	0.41	0.43	4.64	0.01	0.74	0.04	0.78	0.01	0.03	0.05	0.00	751.73	751.73	0.04	0.00	752.61
Total	0.57	2.17	5.74	0.01	0.81	0.10	0.91	0.01	0.09	0.11	0.00	1,041.88	1,041.88	0.05	0.00	1,042.91

3.2 Building Construction - 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	0.57	3.80	3.00	0.01		0.23	0.23		0.23	0.23	0.00	478.23	478.23	0.05	0.00	479.20
Total	0.57	3.80	3.00	0.01		0.23	0.23		0.23	0.23	0.00	478.23	478.23	0.05	0.00	479.20

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	0.00	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
Vendor	0.14	1.58	1.01	0.00	0.10	0.05	0.15	0.00	0.05	0.05	0.00	290.66	290.66	0.01	0.00	290.79
Worker	0.38	0.39	4.25	0.01	0.99	0.04	1.02	0.01	0.03	0.05	0.00	735.50	735.50	0.04	0.00	736.32
Total	0.52	1.97	5.26	0.01	1.09	0.09	1.17	0.01	0.08	0.10	0.00	1,026.16	1,026.16	0.05	0.00	1,027.11

3.2 Building Construction - 2015

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	0.57	3.80	3.00	0.01		0.23	0.23		0.23	0.23	0.00	478.23	478.23	0.05	0.00	479.20
Total	0.57	3.80	3.00	0.01		0.23	0.23		0.23	0.23	0.00	478.23	478.23	0.05	0.00	479.20

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	0.00	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
Vendor	0.14	1.58	1.01	0.00	0.07	0.05	0.13	0.00	0.05	0.05	0.00	290.66	290.66	0.01	0.00	290.79
Worker	0.38	0.39	4.25	0.01	0.74	0.04	0.78	0.01	0.03	0.05	0.00	735.50	735.50	0.04	0.00	736.32
Total	0.52	1.97	5.26	0.01	0.81	0.09	0.91	0.01	0.08	0.10	0.00	1,026.16	1,026.16	0.05	0.00	1,027.11

3.2 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	0.49	3.26	2.80	0.01		0.19	0.19		0.19	0.19	0.00	450.74	450.74	0.04	0.00	451.58
Total	0.49	3.26	2.80	0.01		0.19	0.19		0.19	0.19	0.00	450.74	450.74	0.04	0.00	451.58

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	0.00	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
Vendor	0.12	1.38	0.88	0.00	0.09	0.05	0.14	0.00	0.04	0.04	0.00	274.63	274.63	0.01	0.00	274.75
Worker	0.33	0.34	3.72	0.01	0.93	0.04	0.97	0.01	0.03	0.05	0.00	681.55	681.55	0.03	0.00	682.28
Total	0.45	1.72	4.60	0.01	1.02	0.09	1.11	0.01	0.07	0.09	0.00	956.18	956.18	0.04	0.00	957.03

3.2 Building Construction - 2016

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	0.49	3.26	2.80	0.01		0.19	0.19		0.19	0.19	0.00	450.74	450.74	0.04	0.00	451.58
Total	0.49	3.26	2.80	0.01		0.19	0.19		0.19	0.19	0.00	450.74	450.74	0.04	0.00	451.58

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	0.00	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
Vendor	0.12	1.38	0.88	0.00	0.07	0.05	0.12	0.00	0.04	0.04	0.00	274.63	274.63	0.01	0.00	274.75
Worker	0.33	0.34	3.72	0.01	0.70	0.04	0.73	0.01	0.03	0.05	0.00	681.55	681.55	0.03	0.00	682.28
Total	0.45	1.72	4.60	0.01	0.77	0.09	0.85	0.01	0.07	0.09	0.00	956.18	956.18	0.04	0.00	957.03

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

- Increase Density
- Improve Walkability Design
- Improve Destination Accessibility
- Increase Transit Accessibility
- Improve Pedestrian Network
- Implement Trip Reduction Program
- Market Commute Trip Reduction Option
- Employee Vanpool/Shuttle
- Provide Riade Sharing Program

	ROG	NOx	CO	SO2	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	3.81	9.20	33.75	0.08	7.95	0.44	8.39	0.13	0.43	0.55	0.00	6,234.53	6,234.53	0.25	0.00	6,239.81
Unmitigated	4.93	12.04	45.63	0.12	11.78	0.64	12.42	0.19	0.62	0.80	0.00	9,117.50	9,117.50	0.36	0.00	9,125.00
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	1,512.00	1,611.00	1365.75	5,013,347	3,383,701

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Condo/Townhouse	3,732.70	3,279.28	2780.06	11,763,037	7,939,326
Single Family Housing	1,435.50	1,512.00	1315.50	4,760,343	3,212,938
Recreational Swimming Pool	68.10	31.31	40.10	142,069	87,440
Total	6,748.30	6,433.59	5,501.41	21,678,796	14,623,405

4.3 Trip Type Information

Land Use	Miles			Trip %		
	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
Apartments Low Rise	12.70	7.00	9.50	40.20	19.20	40.60
Condo/Townhouse	12.70	7.00	9.50	40.20	19.20	40.60
Single Family Housing	12.70	7.00	9.50	40.20	19.20	40.60
Recreational Swimming Pool	8.90	13.30	7.40	33.00	48.00	19.00

5.0 Energy Detail

5.1 Mitigation Measures Energy

Exceed Title 24

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						0.00	0.00		0.00	0.00	0.00	989.06	989.06	0.04	0.02	995.26
Electricity Unmitigated						0.00	0.00		0.00	0.00	0.00	1,107.90	1,107.90	0.05	0.02	1,114.84
NaturalGas Mitigated	0.10	0.88	0.37	0.01		0.00	0.07		0.00	0.07	0.00	1,014.05	1,014.05	0.02	0.02	1,020.22
NaturalGas Unmitigated	0.12	1.01	0.43	0.01		0.00	0.08		0.00	0.08	0.00	1,164.14	1,164.14	0.02	0.02	1,171.22
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	tons/yr										MT/yr					
Apartments Low Rise	4.31988e+006	0.02	0.20	0.08	0.00		0.00	0.02		0.00	0.02	0.00	230.53	230.53	0.00	0.00	231.93
Condo/Townhouse	1.12849e+007	0.06	0.52	0.22	0.00		0.00	0.04		0.00	0.04	0.00	602.21	602.21	0.01	0.01	605.87
Recreational Swimming Pool	0	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
Single Family Housing	6.2103e+006	0.03	0.29	0.12	0.00		0.00	0.02		0.00	0.02	0.00	331.41	331.41	0.01	0.01	333.42
Total		0.11	1.01	0.42	0.00		0.00	0.08		0.00	0.08	0.00	1,164.15	1,164.15	0.02	0.02	1,171.22

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	tons/yr										MT/yr					
Apartments Low Rise	3.76492e+006	0.02	0.17	0.07	0.00		0.00	0.01		0.00	0.01	0.00	200.91	200.91	0.00	0.00	202.13
Condo/Townhouse	9.82535e+006	0.05	0.45	0.19	0.00		0.00	0.04		0.00	0.04	0.00	524.32	524.32	0.01	0.01	527.51
Recreational Swimming Pool	0	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
Single Family Housing	5.41233e+006	0.03	0.25	0.11	0.00		0.00	0.02		0.00	0.02	0.00	288.82	288.82	0.01	0.01	290.58
Total		0.10	0.87	0.37	0.00		0.00	0.07		0.00	0.07	0.00	1,014.05	1,014.05	0.02	0.02	1,020.22

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
Apartments Low Rise	801065					233.01	0.01	0.00	234.47
Condo/Townhouse	1.98982e+006					578.78	0.03	0.01	582.41
Recreational Swimming Pool	0					0.00	0.00	0.00	0.00
Single Family Housing	1.01801e+006					296.11	0.01	0.01	297.97
Total						1,107.90	0.05	0.02	1,114.85

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
Apartments Low Rise	712579					207.27	0.01	0.00	208.57
Condo/Townhouse	1.7772e+006					516.93	0.02	0.01	520.17
Recreational Swimming Pool	0					0.00	0.00	0.00	0.00
Single Family Housing	910583					264.86	0.01	0.00	266.52
Total						989.06	0.04	0.01	995.26

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
- Use only Natural Gas Hearths
- No Hearths Installed

	ROG	NOx	CO	SO2	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	4.21	0.15	12.72	0.00		0.00	0.07		0.00	0.07	0.00	20.72	20.72	0.02	0.00	21.14
Unmitigated	6.97	0.22	17.96	0.01		0.00	0.89		0.00	0.89	88.48	530.81	619.29	0.29	0.01	629.18
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	0.37					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	3.45					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	2.76	0.07	5.24	0.01		0.00	0.82		0.00	0.82	88.48	510.09	598.57	0.27	0.01	608.04
Landscaping	0.39	0.15	12.72	0.00		0.00	0.07		0.00	0.07	0.00	20.72	20.72	0.02	0.00	21.14
Total	6.97	0.22	17.96	0.01		0.00	0.89		0.00	0.89	88.48	530.81	619.29	0.29	0.01	629.18

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	0.37					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	3.45					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	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
Landscaping	0.39	0.15	12.72	0.00		0.00	0.07		0.00	0.07	0.00	20.72	20.72	0.02	0.00	21.14	
Total	4.21	0.15	12.72	0.00		0.00	0.07		0.00	0.07	0.00	20.72	20.72	0.02	0.00	21.14	

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
- Turf Reduction
- Use Water Efficient Irrigation System

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr				MT/yr			
Mitigated					256.09	1.34	0.04	295.78
Unmitigated					317.25	1.67	0.05	366.84
Total	NA	NA	NA	NA	NA	NA	NA	NA

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
Apartments Low Rise	14.6597 / 9.24196					85.55	0.45	0.01	98.93
Condo/Townhouse	29.8405 / 18.8125					174.15	0.92	0.03	201.37
Recreational Swimming Pool	0.0887147 / 0.0543735					0.51	0.00	0.00	0.59
Single Family Housing	9.7731 / 6.1613					57.04	0.30	0.01	65.95
Total						317.25	1.67	0.05	366.84

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
Apartments Low Rise	11.7277 / 7.66488					69.32	0.36	0.01	80.02
Condo/Townhouse	23.8724 / 16.6516					144.49	0.74	0.02	166.30
Recreational Swimming Pool	0.0709718 / -0.962262					-2.84	0.00	0.00	-2.80
Single Family Housing	7.81848 / 4.77215					45.12	0.24	0.01	52.25
Total						256.09	1.34	0.04	295.77

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
	tons/yr				MT/yr			
Mitigated					50.61	2.99	0.00	113.42
Unmitigated					101.22	5.98	0.00	226.83
Total	NA	NA	NA	NA	NA	NA	NA	NA

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
Apartments Low Rise	103.5					21.01	1.24	0.00	47.08
Condo/Townhouse	210.68					42.77	2.53	0.00	95.84
Recreational Swimming Pool	8.55					1.74	0.10	0.00	3.89
Single Family Housing	175.89					35.70	2.11	0.00	80.02
Total						101.22	5.98	0.00	226.83

8.2 Waste by Land Use

Mitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
Apartments Low Rise	51.75					10.50	0.62	0.00	23.54
Condo/Townhouse	105.34					21.38	1.26	0.00	47.92
Recreational Swimming Pool	4.275					0.87	0.05	0.00	1.94
Single Family Housing	87.945					17.85	1.06	0.00	40.01
Total						50.60	2.99	0.00	113.41

9.0 Vegetation

**Serrano Summit Project Alternative Operations
South Coast AQMD Air District, Summer**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Recreational Swimming Pool	1.5	1000sqft
Apartments Low Rise	225	Dwelling Unit
Condo/Townhouse	458	Dwelling Unit
Single Family Housing	150	Dwelling Unit

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Utility Company	Southern California Edison
Climate Zone	9	Precipitation Freq (Days)	31		

1.3 User Entered Comments

Project Characteristics -
 Land Use - Recreational uses include community center
 Construction Phase - Construction is modeled separately
 Off-road Equipment -

Trips and VMT -

Demolition -

Grading -

Vehicle Trips - Recreation/community center trip rate and pass-by trip reduction from Traffic Study

Woodstoves - Wood stoves are not proposed, fireplaces would be gas

Land Use Change -

Sequestration -

Construction Off-road Equipment Mitigation - Construction mitigation per SCAQMD

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

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					
2011	11.72	62.10	82.78	0.14	9.21	3.69	12.90	0.13	3.62	3.75	0.00	13,658.00	0.00	1.08	0.00	13,680.77
2012	10.77	57.38	77.48	0.14	9.21	3.38	12.59	0.13	3.31	3.45	0.00	13,515.93	0.00	1.00	0.00	13,536.98
2013	9.90	52.91	72.58	0.14	9.21	3.06	12.28	0.13	3.00	3.14	0.00	13,377.99	0.00	0.92	0.00	13,397.37
2014	9.10	48.65	68.42	0.14	9.21	2.76	11.97	0.13	2.70	2.84	0.00	13,261.46	0.00	0.85	0.00	13,279.36
2015	8.37	44.25	64.49	0.14	9.21	2.49	11.70	0.13	2.43	2.57	0.00	13,121.22	0.00	0.79	0.00	13,137.78
2016	7.76	40.43	61.34	0.14	9.21	2.24	11.45	0.13	2.19	2.32	0.00	13,016.65	0.00	0.73	0.00	13,032.00
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2.1 Overall Construction (Maximum Daily Emission)

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					
2011	11.72	62.10	82.78	0.14	6.91	3.69	10.60	0.13	3.62	3.75	0.00	13,658.00	0.00	1.08	0.00	13,680.77
2012	10.77	57.38	77.48	0.14	6.91	3.38	10.29	0.13	3.31	3.45	0.00	13,515.93	0.00	1.00	0.00	13,536.98
2013	9.90	52.91	72.58	0.14	6.91	3.06	9.98	0.13	3.00	3.14	0.00	13,377.99	0.00	0.92	0.00	13,397.37
2014	9.10	48.65	68.42	0.14	6.91	2.76	9.67	0.13	2.70	2.84	0.00	13,261.46	0.00	0.85	0.00	13,279.36
2015	8.37	44.25	64.49	0.14	6.91	2.49	9.40	0.13	2.43	2.57	0.00	13,121.22	0.00	0.79	0.00	13,137.78
2016	7.76	40.43	61.34	0.14	6.91	2.24	9.16	0.13	2.19	2.32	0.00	13,016.65	0.00	0.73	0.00	13,032.00
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	111.74	4.87	345.50	0.67		0.00	44.43		0.00	44.42	5,878.26	15,119.25		23.39	0.36	21,600.25
Energy	0.64	5.51	2.34	0.04		0.00	0.45		0.00	0.45		7,031.47		0.13	0.13	7,074.26
Mobile	29.79	69.76	272.46	0.71	76.16	3.73	79.89	1.09	3.59	4.68		61,568.89		2.28		61,616.69
Total	142.17	80.14	620.30	1.42	76.16	3.73	124.77	1.09	3.59	49.55	5,878.26	83,719.61		25.80	0.49	90,291.20

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	23.07	0.80	69.77	0.00		0.00	0.38		0.00	0.38	0.00	125.25		0.12	0.00	127.81
Energy	0.56	4.80	2.04	0.03		0.00	0.39		0.00	0.39		6,124.93		0.12	0.11	6,162.21
Mobile	23.28	53.44	197.01	0.49	51.37	2.57	53.94	0.73	2.47	3.21		42,084.80		1.60		42,118.36
Total	46.91	59.04	268.82	0.52	51.37	2.57	54.71	0.73	2.47	3.98	0.00	48,334.98		1.84	0.11	48,408.38

3.0 Construction Detail

3.1 Mitigation Measures Construction

- Use DPF for Construction Equipment
- Replace Ground Cover
- Water Exposed Area
- Water Unpaved Roads
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

3.2 Building Construction - 2011

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	6.11	40.22	24.03	0.04		2.80	2.80		2.80	2.80		4,040.62		0.55		4,052.11
Total	6.11	40.22	24.03	0.04		2.80	2.80		2.80	2.80		4,040.62		0.55		4,052.11

3.2 Building Construction - 2011

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	1.56	17.68	10.42	0.02	0.83	0.62	1.45	0.02	0.57	0.60		2,443.56		0.08		2,445.19
Worker	4.04	4.20	48.32	0.07	8.38	0.26	8.65	0.11	0.24	0.36		7,173.82		0.46		7,183.46
Total	5.60	21.88	58.74	0.09	9.21	0.88	10.10	0.13	0.81	0.96		9,617.38		0.54		9,628.65

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	6.11	40.22	24.03	0.04		2.80	2.80		2.80	2.80	0.00	4,040.62		0.55		4,052.11
Total	6.11	40.22	24.03	0.04		2.80	2.80		2.80	2.80	0.00	4,040.62		0.55		4,052.11

3.2 Building Construction - 2011

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	1.56	17.68	10.42	0.02	0.63	0.62	1.26	0.02	0.57	0.60		2,443.56		0.08		2,445.19
Worker	4.04	4.20	48.32	0.07	6.28	0.26	6.55	0.11	0.24	0.36		7,173.82		0.46		7,183.46
Total	5.60	21.88	58.74	0.09	6.91	0.88	7.81	0.13	0.81	0.96		9,617.38		0.54		9,628.65

3.2 Building Construction - 2012

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	5.63	37.37	23.73	0.04		2.54	2.54		2.54	2.54		4,040.62		0.51		4,051.23
Total	5.63	37.37	23.73	0.04		2.54	2.54		2.54	2.54		4,040.62		0.51		4,051.23

3.2 Building Construction - 2012

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	1.43	16.19	9.43	0.02	0.83	0.57	1.40	0.02	0.52	0.54		2,448.93		0.07		2,450.41
Worker	3.72	3.82	44.32	0.07	8.38	0.27	8.65	0.11	0.25	0.36		7,026.38		0.43		7,035.34
Total	5.15	20.01	53.75	0.09	9.21	0.84	10.05	0.13	0.77	0.90		9,475.31		0.50		9,485.75

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	5.63	37.37	23.73	0.04		2.54	2.54		2.54	2.54	0.00	4,040.62		0.51		4,051.23
Total	5.63	37.37	23.73	0.04		2.54	2.54		2.54	2.54	0.00	4,040.62		0.51		4,051.23

3.2 Building Construction - 2012

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	1.43	16.19	9.43	0.02	0.63	0.57	1.20	0.02	0.52	0.54		2,448.93		0.07		2,450.41
Worker	3.72	3.82	44.32	0.07	6.28	0.27	6.55	0.11	0.25	0.36		7,026.38		0.43		7,035.34
Total	5.15	20.01	53.75	0.09	6.91	0.84	7.75	0.13	0.77	0.90		9,475.31		0.50		9,485.75

3.2 Building Construction - 2013

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	5.17	34.66	23.45	0.04		2.28	2.28		2.28	2.28		4,040.62		0.46		4,050.31
Total	5.17	34.66	23.45	0.04		2.28	2.28		2.28	2.28		4,040.62		0.46		4,050.31

3.2 Building Construction - 2013

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	1.30	14.78	8.49	0.02	0.83	0.51	1.34	0.02	0.47	0.49		2,454.41		0.06		2,455.75
Worker	3.43	3.47	40.64	0.07	8.38	0.27	8.65	0.11	0.25	0.37		6,882.97		0.40		6,891.30
Total	4.73	18.25	49.13	0.09	9.21	0.78	9.99	0.13	0.72	0.86		9,337.38		0.46		9,347.05

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	5.17	34.66	23.45	0.04		2.28	2.28		2.28	2.28	0.00	4,040.62		0.46		4,050.31
Total	5.17	34.66	23.45	0.04		2.28	2.28		2.28	2.28	0.00	4,040.62		0.46		4,050.31

3.2 Building Construction - 2013

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	1.30	14.78	8.49	0.02	0.63	0.51	1.14	0.02	0.47	0.49		2,454.41		0.06		2,455.75
Worker	3.43	3.47	40.64	0.07	6.28	0.27	6.56	0.11	0.25	0.37		6,882.97		0.40		6,891.30
Total	4.73	18.25	49.13	0.09	6.91	0.78	7.70	0.13	0.72	0.86		9,337.38		0.46		9,347.05

3.2 Building Construction - 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	4.74	32.06	23.20	0.04		2.02	2.02		2.02	2.02		4,040.61		0.42		4,049.51
Total	4.74	32.06	23.20	0.04		2.02	2.02		2.02	2.02		4,040.61		0.42		4,049.51

3.2 Building Construction - 2014

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	1.18	13.42	7.75	0.02	0.83	0.46	1.29	0.02	0.42	0.44		2,459.06		0.06		2,460.28
Worker	3.18	3.17	37.47	0.07	8.38	0.28	8.66	0.11	0.26	0.37		6,761.79		0.37		6,769.56
Total	4.36	16.59	45.22	0.09	9.21	0.74	9.95	0.13	0.68	0.81		9,220.85		0.43		9,229.84

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	4.74	32.06	23.20	0.04		2.02	2.02		2.02	2.02	0.00	4,040.61		0.42		4,049.51
Total	4.74	32.06	23.20	0.04		2.02	2.02		2.02	2.02	0.00	4,040.61		0.42		4,049.51

3.2 Building Construction - 2014

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	1.18	13.42	7.75	0.02	0.63	0.46	1.09	0.02	0.42	0.44		2,459.06		0.06		2,460.28
Worker	3.18	3.17	37.47	0.07	6.28	0.28	6.56	0.11	0.26	0.37		6,761.79		0.37		6,769.56
Total	4.36	16.59	45.22	0.09	6.91	0.74	7.65	0.13	0.68	0.81		9,220.85		0.43		9,229.84

3.2 Building Construction - 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	4.34	29.16	22.98	0.04		1.80	1.80		1.80	1.80		4,040.61		0.39		4,048.81
Total	4.34	29.16	22.98	0.04		1.80	1.80		1.80	1.80		4,040.61		0.39		4,048.81

3.2 Building Construction - 2015

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	1.07	12.21	7.06	0.02	0.83	0.41	1.24	0.02	0.37	0.39		2,463.50		0.05		2,464.60
Worker	2.96	2.88	34.45	0.07	8.38	0.28	8.66	0.11	0.26	0.38		6,617.10		0.35		6,624.37
Total	4.03	15.09	41.51	0.09	9.21	0.69	9.90	0.13	0.63	0.77		9,080.60		0.40		9,088.97

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	4.34	29.16	22.98	0.04		1.80	1.80		1.80	1.80	0.00	4,040.61		0.39		4,048.81
Total	4.34	29.16	22.98	0.04		1.80	1.80		1.80	1.80	0.00	4,040.61		0.39		4,048.81

3.2 Building Construction - 2015

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	1.07	12.21	7.06	0.02	0.63	0.41	1.04	0.02	0.37	0.39		2,463.50		0.05		2,464.60
Worker	2.96	2.88	34.45	0.07	6.28	0.28	6.57	0.11	0.26	0.38		6,617.10		0.35		6,624.37
Total	4.03	15.09	41.51	0.09	6.91	0.69	7.61	0.13	0.63	0.77		9,080.60		0.40		9,088.97

3.2 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	lb/day										lb/day					
Off-Road	3.99	26.52	22.80	0.04		1.58	1.58		1.58	1.58		4,040.61		0.36		4,048.10
Total	3.99	26.52	22.80	0.04		1.58	1.58		1.58	1.58		4,040.61		0.36		4,048.10

3.2 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	lb/day										lb/day					
Hauling	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
Vendor	0.98	11.27	6.52	0.02	0.83	0.37	1.20	0.02	0.34	0.36		2,469.76		0.05		2,470.76
Worker	2.79	2.65	32.01	0.07	8.38	0.29	8.67	0.11	0.27	0.38		6,506.28		0.33		6,513.13
Total	3.77	13.92	38.53	0.09	9.21	0.66	9.87	0.13	0.61	0.74		8,976.04		0.38		8,983.89

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	3.99	26.52	22.80	0.04		1.58	1.58		1.58	1.58	0.00	4,040.61		0.36		4,048.10
Total	3.99	26.52	22.80	0.04		1.58	1.58		1.58	1.58	0.00	4,040.61		0.36		4,048.10

3.2 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	lb/day										lb/day					
Hauling	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
Vendor	0.98	11.27	6.52	0.02	0.63	0.37	1.00	0.02	0.34	0.36		2,469.76		0.05		2,470.76
Worker	2.79	2.65	32.01	0.07	6.28	0.29	6.57	0.11	0.27	0.38		6,506.28		0.33		6,513.13
Total	3.77	13.92	38.53	0.09	6.91	0.66	7.57	0.13	0.61	0.74		8,976.04		0.38		8,983.89

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

- Increase Density
- Improve Walkability Design
- Improve Destination Accessibility
- Increase Transit Accessibility
- Improve Pedestrian Network
- Implement Trip Reduction Program
- Market Commute Trip Reduction Option
- Employee Vanpool/Shuttle

Provide Riade Sharing Program

	ROG	NOx	CO	SO2	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	23.28	53.44	197.01	0.49	51.37	2.57	53.94	0.73	2.47	3.21		42,084.80		1.60		42,118.36
Unmitigated	29.79	69.76	272.46	0.71	76.16	3.73	79.89	1.09	3.59	4.68		61,568.89		2.28		61,616.69
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	1,512.00	1,611.00	1365.75	5,013,347	3,383,701
Condo/Townhouse	3,732.70	3,279.28	2780.06	11,763,037	7,939,326
Single Family Housing	1,435.50	1,512.00	1315.50	4,760,343	3,212,938
Recreational Swimming Pool	68.10	31.31	40.10	142,069	87,440
Total	6,748.30	6,433.59	5,501.41	21,678,796	14,623,405

4.3 Trip Type Information

Land Use	Miles			Trip %		
	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
Apartments Low Rise	12.70	7.00	9.50	40.20	19.20	40.60

Land Use	Miles			Trip %		
	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
Condo/Townhouse	12.70	7.00	9.50	40.20	19.20	40.60
Single Family Housing	12.70	7.00	9.50	40.20	19.20	40.60
Recreational Swimming Pool	8.90	13.30	7.40	33.00	48.00	19.00

5.0 Energy Detail

5.1 Mitigation Measures Energy

Exceed Title 24

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	lb/day										lb/day					
NaturalGas Mitigated	0.56	4.80	2.04	0.03		0.00	0.39		0.00	0.39		6,124.93		0.12	0.11	6,162.21
NaturalGas Unmitigated	0.64	5.51	2.34	0.04		0.00	0.45		0.00	0.45		7,031.47		0.13	0.13	7,074.26
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	lb/day										lb/day					
Apartments Low Rise	11835.3	0.13	1.09	0.46	0.01		0.00	0.09		0.00	0.09		1,392.39		0.03	0.03	1,400.86
Condo/Townhouse	30917.6	0.33	2.85	1.21	0.02		0.00	0.23		0.00	0.23		3,637.37		0.07	0.07	3,659.51
Recreational Swimming Pool	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Single Family Housing	17014.5	0.18	1.57	0.67	0.01		0.00	0.13		0.00	0.13		2,001.71		0.04	0.04	2,013.89
Total		0.64	5.51	2.34	0.04		0.00	0.45		0.00	0.45		7,031.47		0.14	0.14	7,074.26

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	lb/day										lb/day					
Apartments Low Rise	10.3148	0.11	0.95	0.40	0.01		0.00	0.08		0.00	0.08		1,213.51		0.02	0.02	1,220.90
Condo/Townhouse	26.9188	0.29	2.48	1.06	0.02		0.00	0.20		0.00	0.20		3,166.92		0.06	0.06	3,186.19
Recreational Swimming Pool	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Single Family Housing	14.8283	0.16	1.37	0.58	0.01		0.00	0.11		0.00	0.11		1,744.51		0.03	0.03	1,755.12
Total		0.56	4.80	2.04	0.04		0.00	0.39		0.00	0.39		6,124.94		0.11	0.11	6,162.21

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

Use only Natural Gas Hearths

No Hearths Installed

	ROG	NOx	CO	SO2	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	23.07	0.80	69.77	0.00		0.00	0.38		0.00	0.38	0.00	125.25		0.12	0.00	127.81
Unmitigated	111.74	4.87	345.50	0.67		0.00	44.43		0.00	44.42	5,878.26	15,119.25		23.39	0.36	21,600.25
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	2.05					0.00	0.00		0.00	0.00						0.00
Consumer Products	18.90					0.00	0.00		0.00	0.00						0.00
Hearth	88.66	4.07	275.73	0.67		0.00	44.05		0.00	44.04	5,878.26	14,994.00		23.27	0.36	21,472.44
Landscaping	2.12	0.80	69.77	0.00		0.00	0.38		0.00	0.38		125.25		0.12		127.81
Total	111.73	4.87	345.50	0.67		0.00	44.43		0.00	44.42	5,878.26	15,119.25		23.39	0.36	21,600.25

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	2.05					0.00	0.00		0.00	0.00						0.00
Consumer Products	18.90					0.00	0.00		0.00	0.00						0.00
Hearth	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
Landscaping	2.12	0.80	69.77	0.00		0.00	0.38		0.00	0.38		125.25		0.12		127.81
Total	23.07	0.80	69.77	0.00		0.00	0.38		0.00	0.38	0.00	125.25		0.12	0.00	127.81

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

Turf Reduction

Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Vegetation

**Serrano Summit Project Alternative Operations
South Coast AQMD Air District, Winter**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Recreational Swimming Pool	1.5	1000sqft
Apartments Low Rise	225	Dwelling Unit
Condo/Townhouse	458	Dwelling Unit
Single Family Housing	150	Dwelling Unit

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Utility Company	Southern California Edison
Climate Zone	9	Precipitation Freq (Days)	31		

1.3 User Entered Comments

Project Characteristics -
 Land Use - Recreational uses include community center
 Construction Phase - Construction is modeled separately
 Off-road Equipment -

Trips and VMT -

Demolition -

Grading -

Vehicle Trips - Recreation/community center trip rate and pass-by trip reduction from Traffic Study

Woodstoves - Wood stoves are not proposed, fireplaces would be gas

Land Use Change -

Sequestration -

Construction Off-road Equipment Mitigation - Construction mitigation per SCAQMD

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

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					
2011	12.04	63.62	80.46	0.13	9.21	3.70	12.91	0.13	3.63	3.76	0.00	13,022.32	0.00	1.07	0.00	13,044.73
2012	11.07	58.72	75.33	0.13	9.21	3.39	12.60	0.13	3.32	3.46	0.00	12,891.01	0.00	0.99	0.00	12,911.72
2013	10.17	54.09	70.60	0.13	9.21	3.08	12.29	0.13	3.01	3.15	0.00	12,763.36	0.00	0.91	0.00	12,782.38
2014	9.35	49.66	66.55	0.13	9.21	2.77	11.98	0.13	2.71	2.85	0.00	12,655.53	0.00	0.84	0.00	12,673.08
2015	8.61	45.12	62.76	0.13	9.21	2.49	11.70	0.13	2.44	2.57	0.00	12,525.72	0.00	0.77	0.00	12,541.94
2016	7.98	41.19	59.69	0.13	9.21	2.25	11.46	0.13	2.20	2.33	0.00	12,429.63	0.00	0.71	0.00	12,444.65
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2.1 Overall Construction (Maximum Daily Emission)

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					
2011	12.04	63.62	80.46	0.13	6.91	3.70	10.61	0.13	3.63	3.76	0.00	13,022.32	0.00	1.07	0.00	13,044.73
2012	11.07	58.72	75.33	0.13	6.91	3.39	10.30	0.13	3.32	3.46	0.00	12,891.01	0.00	0.99	0.00	12,911.72
2013	10.17	54.09	70.60	0.13	6.91	3.08	9.99	0.13	3.01	3.15	0.00	12,763.36	0.00	0.91	0.00	12,782.38
2014	9.35	49.66	66.55	0.13	6.91	2.77	9.68	0.13	2.71	2.85	0.00	12,655.53	0.00	0.84	0.00	12,673.08
2015	8.61	45.12	62.76	0.13	6.91	2.49	9.41	0.13	2.44	2.57	0.00	12,525.72	0.00	0.77	0.00	12,541.94
2016	7.98	41.19	59.69	0.13	6.91	2.25	9.16	0.13	2.20	2.33	0.00	12,429.63	0.00	0.71	0.00	12,444.65
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	111.74	4.87	345.50	0.67		0.00	44.43		0.00	44.42	5,878.26	15,119.25		23.39	0.36	21,600.25
Energy	0.64	5.51	2.34	0.04		0.00	0.45		0.00	0.45		7,031.47		0.13	0.13	7,074.26
Mobile	30.71	73.91	262.26	0.67	76.16	3.76	79.92	1.09	3.62	4.70		57,305.20		2.32		57,353.91
Total	143.09	84.29	610.10	1.38	76.16	3.76	124.80	1.09	3.62	49.57	5,878.26	79,455.92		25.84	0.49	86,028.42

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	23.07	0.80	69.77	0.00		0.00	0.38		0.00	0.38	0.00	125.25		0.12	0.00	127.81
Energy	0.56	4.80	2.04	0.03		0.00	0.39		0.00	0.39		6,124.93		0.12	0.11	6,162.21
Mobile	23.64	55.92	195.23	0.46	51.37	2.60	53.97	0.73	2.50	3.23		39,176.24		1.64		39,210.70
Total	47.27	61.52	267.04	0.49	51.37	2.60	54.74	0.73	2.50	4.00	0.00	45,426.42		1.88	0.11	45,500.72

3.0 Construction Detail

3.1 Mitigation Measures Construction

- Use DPF for Construction Equipment
- Replace Ground Cover
- Water Exposed Area
- Water Unpaved Roads
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

3.2 Building Construction - 2011

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	6.11	40.22	24.03	0.04		2.80	2.80		2.80	2.80		4,040.62		0.55		4,052.11
Total	6.11	40.22	24.03	0.04		2.80	2.80		2.80	2.80		4,040.62		0.55		4,052.11

3.2 Building Construction - 2011

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	1.64	18.57	11.51	0.02	0.83	0.64	1.47	0.02	0.59	0.61		2,425.41		0.08		2,427.12
Worker	4.29	4.83	44.91	0.06	8.38	0.26	8.65	0.11	0.24	0.36		6,556.29		0.44		6,565.49
Total	5.93	23.40	56.42	0.08	9.21	0.90	10.12	0.13	0.83	0.97		8,981.70		0.52		8,992.61

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	6.11	40.22	24.03	0.04		2.80	2.80		2.80	2.80	0.00	4,040.62		0.55		4,052.11
Total	6.11	40.22	24.03	0.04		2.80	2.80		2.80	2.80	0.00	4,040.62		0.55		4,052.11

3.2 Building Construction - 2011

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	1.64	18.57	11.51	0.02	0.63	0.64	1.27	0.02	0.59	0.61		2,425.41		0.08		2,427.12
Worker	4.29	4.83	44.91	0.06	6.28	0.26	6.55	0.11	0.24	0.36		6,556.29		0.44		6,565.49
Total	5.93	23.40	56.42	0.08	6.91	0.90	7.82	0.13	0.83	0.97		8,981.70		0.52		8,992.61

3.2 Building Construction - 2012

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	5.63	37.37	23.73	0.04		2.54	2.54		2.54	2.54		4,040.62		0.51		4,051.23
Total	5.63	37.37	23.73	0.04		2.54	2.54		2.54	2.54		4,040.62		0.51		4,051.23

3.2 Building Construction - 2012

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	1.50	16.96	10.52	0.02	0.83	0.58	1.41	0.02	0.53	0.55		2,430.27		0.07		2,431.83
Worker	3.94	4.39	41.08	0.06	8.38	0.27	8.65	0.11	0.25	0.36		6,420.13		0.41		6,428.67
Total	5.44	21.35	51.60	0.08	9.21	0.85	10.06	0.13	0.78	0.91		8,850.40		0.48		8,860.50

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	5.63	37.37	23.73	0.04		2.54	2.54		2.54	2.54	0.00	4,040.62		0.51		4,051.23
Total	5.63	37.37	23.73	0.04		2.54	2.54		2.54	2.54	0.00	4,040.62		0.51		4,051.23

3.2 Building Construction - 2012

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	1.50	16.96	10.52	0.02	0.63	0.58	1.21	0.02	0.53	0.55		2,430.27		0.07		2,431.83
Worker	3.94	4.39	41.08	0.06	6.28	0.27	6.55	0.11	0.25	0.36		6,420.13		0.41		6,428.67
Total	5.44	21.35	51.60	0.08	6.91	0.85	7.76	0.13	0.78	0.91		8,850.40		0.48		8,860.50

3.2 Building Construction - 2013

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	5.17	34.66	23.45	0.04		2.28	2.28		2.28	2.28		4,040.62		0.46		4,050.31
Total	5.17	34.66	23.45	0.04		2.28	2.28		2.28	2.28		4,040.62		0.46		4,050.31

3.2 Building Construction - 2013

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	1.36	15.43	9.58	0.02	0.83	0.52	1.35	0.02	0.48	0.50		2,435.22		0.07		2,436.63
Worker	3.64	3.99	37.57	0.06	8.38	0.27	8.65	0.11	0.25	0.37		6,287.53		0.38		6,295.44
Total	5.00	19.42	47.15	0.08	9.21	0.79	10.00	0.13	0.73	0.87		8,722.75		0.45		8,732.07

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	5.17	34.66	23.45	0.04		2.28	2.28		2.28	2.28	0.00	4,040.62		0.46		4,050.31
Total	5.17	34.66	23.45	0.04		2.28	2.28		2.28	2.28	0.00	4,040.62		0.46		4,050.31

3.2 Building Construction - 2013

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	1.36	15.43	9.58	0.02	0.63	0.52	1.15	0.02	0.48	0.50		2,435.22		0.07		2,436.63
Worker	3.64	3.99	37.57	0.06	6.28	0.27	6.56	0.11	0.25	0.37		6,287.53		0.38		6,295.44
Total	5.00	19.42	47.15	0.08	6.91	0.79	7.71	0.13	0.73	0.87		8,722.75		0.45		8,732.07

3.2 Building Construction - 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	4.74	32.06	23.20	0.04		2.02	2.02		2.02	2.02		4,040.61		0.42		4,049.51
Total	4.74	32.06	23.20	0.04		2.02	2.02		2.02	2.02		4,040.61		0.42		4,049.51

3.2 Building Construction - 2014

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	1.24	13.96	8.83	0.02	0.83	0.46	1.29	0.02	0.43	0.45		2,439.44		0.06		2,440.72
Worker	3.37	3.64	34.52	0.06	8.38	0.28	8.66	0.11	0.26	0.37		6,175.47		0.35		6,182.85
Total	4.61	17.60	43.35	0.08	9.21	0.74	9.95	0.13	0.69	0.82		8,614.91		0.41		8,623.57

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	4.74	32.06	23.20	0.04		2.02	2.02		2.02	2.02	0.00	4,040.61		0.42		4,049.51
Total	4.74	32.06	23.20	0.04		2.02	2.02		2.02	2.02	0.00	4,040.61		0.42		4,049.51

3.2 Building Construction - 2014

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	1.24	13.96	8.83	0.02	0.63	0.46	1.10	0.02	0.43	0.45		2,439.44		0.06		2,440.72
Worker	3.37	3.64	34.52	0.06	6.28	0.28	6.56	0.11	0.26	0.37		6,175.47		0.35		6,182.85
Total	4.61	17.60	43.35	0.08	6.91	0.74	7.66	0.13	0.69	0.82		8,614.91		0.41		8,623.57

3.2 Building Construction - 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	4.34	29.16	22.98	0.04		1.80	1.80		1.80	1.80		4,040.61		0.39		4,048.81
Total	4.34	29.16	22.98	0.04		1.80	1.80		1.80	1.80		4,040.61		0.39		4,048.81

3.2 Building Construction - 2015

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	1.13	12.65	8.13	0.02	0.83	0.41	1.24	0.02	0.38	0.40		2,443.42		0.06		2,444.59
Worker	3.14	3.31	31.64	0.06	8.38	0.28	8.66	0.11	0.26	0.38		6,041.68		0.33		6,048.54
Total	4.27	15.96	39.77	0.08	9.21	0.69	9.90	0.13	0.64	0.78		8,485.10		0.39		8,493.13

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	4.34	29.16	22.98	0.04		1.80	1.80		1.80	1.80	0.00	4,040.61		0.39		4,048.81
Total	4.34	29.16	22.98	0.04		1.80	1.80		1.80	1.80	0.00	4,040.61		0.39		4,048.81

3.2 Building Construction - 2015

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	1.13	12.65	8.13	0.02	0.63	0.41	1.05	0.02	0.38	0.40		2,443.42		0.06		2,444.59
Worker	3.14	3.31	31.64	0.06	6.28	0.28	6.57	0.11	0.26	0.38		6,041.68		0.33		6,048.54
Total	4.27	15.96	39.77	0.08	6.91	0.69	7.62	0.13	0.64	0.78		8,485.10		0.39		8,493.13

3.2 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	lb/day										lb/day					
Off-Road	3.99	26.52	22.80	0.04		1.58	1.58		1.58	1.58		4,040.61		0.36		4,048.10
Total	3.99	26.52	22.80	0.04		1.58	1.58		1.58	1.58		4,040.61		0.36		4,048.10

3.2 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	lb/day										lb/day					
Hauling	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
Vendor	1.03	11.63	7.57	0.02	0.83	0.37	1.20	0.02	0.34	0.36		2,449.25		0.05		2,450.31
Worker	2.96	3.04	29.32	0.06	8.38	0.29	8.67	0.11	0.27	0.38		5,939.77		0.31		5,946.23
Total	3.99	14.67	36.89	0.08	9.21	0.66	9.87	0.13	0.61	0.74		8,389.02		0.36		8,396.54

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	3.99	26.52	22.80	0.04		1.58	1.58		1.58	1.58	0.00	4,040.61		0.36		4,048.10
Total	3.99	26.52	22.80	0.04		1.58	1.58		1.58	1.58	0.00	4,040.61		0.36		4,048.10

3.2 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	lb/day										lb/day					
Hauling	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
Vendor	1.03	11.63	7.57	0.02	0.63	0.37	1.00	0.02	0.34	0.36		2,449.25		0.05		2,450.31
Worker	2.96	3.04	29.32	0.06	6.28	0.29	6.57	0.11	0.27	0.38		5,939.77		0.31		5,946.23
Total	3.99	14.67	36.89	0.08	6.91	0.66	7.57	0.13	0.61	0.74		8,389.02		0.36		8,396.54

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

- Increase Density
- Improve Walkability Design
- Improve Destination Accessibility
- Increase Transit Accessibility
- Improve Pedestrian Network
- Implement Trip Reduction Program
- Market Commute Trip Reduction Option
- Employee Vanpool/Shuttle

Provide Riade Sharing Program

	ROG	NOx	CO	SO2	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	23.64	55.92	195.23	0.46	51.37	2.60	53.97	0.73	2.50	3.23		39,176.24		1.64		39,210.70
Unmitigated	30.71	73.91	262.26	0.67	76.16	3.76	79.92	1.09	3.62	4.70		57,305.20		2.32		57,353.91
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	1,512.00	1,611.00	1365.75	5,013,347	3,383,701
Condo/Townhouse	3,732.70	3,279.28	2780.06	11,763,037	7,939,326
Single Family Housing	1,435.50	1,512.00	1315.50	4,760,343	3,212,938
Recreational Swimming Pool	68.10	31.31	40.10	142,069	87,440
Total	6,748.30	6,433.59	5,501.41	21,678,796	14,623,405

4.3 Trip Type Information

Land Use	Miles			Trip %		
	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
Apartments Low Rise	12.70	7.00	9.50	40.20	19.20	40.60

Land Use	Miles			Trip %		
	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
Condo/Townhouse	12.70	7.00	9.50	40.20	19.20	40.60
Single Family Housing	12.70	7.00	9.50	40.20	19.20	40.60
Recreational Swimming Pool	8.90	13.30	7.40	33.00	48.00	19.00

5.0 Energy Detail

5.1 Mitigation Measures Energy

Exceed Title 24

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	lb/day										lb/day					
NaturalGas Mitigated	0.56	4.80	2.04	0.03		0.00	0.39		0.00	0.39		6,124.93		0.12	0.11	6,162.21
NaturalGas Unmitigated	0.64	5.51	2.34	0.04		0.00	0.45		0.00	0.45		7,031.47		0.13	0.13	7,074.26
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	lb/day										lb/day					
Apartments Low Rise	11835.3	0.13	1.09	0.46	0.01		0.00	0.09		0.00	0.09		1,392.39		0.03	0.03	1,400.86
Condo/Townhouse	30917.6	0.33	2.85	1.21	0.02		0.00	0.23		0.00	0.23		3,637.37		0.07	0.07	3,659.51
Recreational Swimming Pool	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Single Family Housing	17014.5	0.18	1.57	0.67	0.01		0.00	0.13		0.00	0.13		2,001.71		0.04	0.04	2,013.89
Total		0.64	5.51	2.34	0.04		0.00	0.45		0.00	0.45		7,031.47		0.14	0.14	7,074.26

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	lb/day										lb/day					
Apartments Low Rise	10.3148	0.11	0.95	0.40	0.01		0.00	0.08		0.00	0.08		1,213.51		0.02	0.02	1,220.90
Condo/Townhouse	26.9188	0.29	2.48	1.06	0.02		0.00	0.20		0.00	0.20		3,166.92		0.06	0.06	3,186.19
Recreational Swimming Pool	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Single Family Housing	14.8283	0.16	1.37	0.58	0.01		0.00	0.11		0.00	0.11		1,744.51		0.03	0.03	1,755.12
Total		0.56	4.80	2.04	0.04		0.00	0.39		0.00	0.39		6,124.94		0.11	0.11	6,162.21

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

Use only Natural Gas Hearths

No Hearths Installed

	ROG	NOx	CO	SO2	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	23.07	0.80	69.77	0.00		0.00	0.38		0.00	0.38	0.00	125.25		0.12	0.00	127.81
Unmitigated	111.74	4.87	345.50	0.67		0.00	44.43		0.00	44.42	5,878.26	15,119.25		23.39	0.36	21,600.25
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	2.05					0.00	0.00		0.00	0.00						0.00
Consumer Products	18.90					0.00	0.00		0.00	0.00						0.00
Hearth	88.66	4.07	275.73	0.67		0.00	44.05		0.00	44.04	5,878.26	14,994.00		23.27	0.36	21,472.44
Landscaping	2.12	0.80	69.77	0.00		0.00	0.38		0.00	0.38		125.25		0.12		127.81
Total	111.73	4.87	345.50	0.67		0.00	44.43		0.00	44.42	5,878.26	15,119.25		23.39	0.36	21,600.25

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	2.05					0.00	0.00		0.00	0.00						0.00
Consumer Products	18.90					0.00	0.00		0.00	0.00						0.00
Hearth	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
Landscaping	2.12	0.80	69.77	0.00		0.00	0.38		0.00	0.38		125.25		0.12		127.81
Total	23.07	0.80	69.77	0.00		0.00	0.38		0.00	0.38	0.00	125.25		0.12	0.00	127.81

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
- Turf Reduction
- Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

- Institute Recycling and Composting Services

9.0 Vegetation

**Serrano Ops Reduced Commercial and Residential Alt
South Coast AQMD Air District, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Government Office Building	92.4	1000sqft
Condo/Townhouse	366	Dwelling Unit
Single Family Housing	120	Dwelling Unit

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Utility Company	Southern California Edison
Climate Zone	9	Precipitation Freq (Days)	31		

1.3 User Entered Comments

- Project Characteristics -
- Land Use - Commercial uses include community center and police center
- Construction Phase - Construction is modeled separately
- Off-road Equipment -
- Trips and VMT -

Demolition -

Grading -

Vehicle Trips - Trip rates and pass-by trip reduction from Traffic Study

Woodstoves - Wood stoves are not proposed, fireplaces would be gas

Land Use Change -

Sequestration -

Construction Off-road Equipment Mitigation - Construction mitigation per SCAQMD

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

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					
2011	1.27	7.30	7.90	0.01	0.68	0.45	1.12	0.01	0.44	0.45	0.00	1,181.83	1,181.83	0.10	0.00	1,184.02
2012	1.17	6.78	7.48	0.01	0.68	0.41	1.09	0.01	0.40	0.41	0.00	1,176.67	1,176.67	0.10	0.00	1,178.69
2013	1.08	6.26	7.07	0.01	0.68	0.37	1.05	0.01	0.36	0.38	0.00	1,167.23	1,167.23	0.09	0.00	1,169.09
2014	0.99	5.76	6.71	0.01	0.68	0.33	1.01	0.01	0.33	0.34	0.00	1,159.26	1,159.26	0.08	0.00	1,160.97
2015	0.23	1.34	1.64	0.00	0.17	0.08	0.25	0.00	0.08	0.08	0.00	295.12	295.12	0.02	0.00	295.53
Total	4.74	27.44	30.80	0.04	2.89	1.64	4.52	0.04	1.61	1.66	0.00	4,980.11	4,980.11	0.39	0.00	4,988.30

2.1 Overall Construction

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					
2011	1.27	7.30	7.90	0.01	0.51	0.45	0.96	0.01	0.44	0.45	0.00	1,181.83	1,181.83	0.10	0.00	1,184.02
2012	1.17	6.78	7.48	0.01	0.51	0.41	0.92	0.01	0.40	0.41	0.00	1,176.67	1,176.67	0.10	0.00	1,178.69
2013	1.08	6.26	7.07	0.01	0.51	0.37	0.88	0.01	0.36	0.38	0.00	1,167.23	1,167.23	0.09	0.00	1,169.09
2014	0.99	5.76	6.71	0.01	0.51	0.33	0.84	0.01	0.33	0.34	0.00	1,159.26	1,159.26	0.08	0.00	1,160.97
2015	0.23	1.34	1.64	0.00	0.13	0.08	0.21	0.00	0.08	0.08	0.00	295.12	295.12	0.02	0.00	295.53
Total	4.74	27.44	30.80	0.04	2.17	1.64	3.81	0.04	1.61	1.66	0.00	4,980.11	4,980.11	0.39	0.00	4,988.30

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	4.61	0.13	10.48	0.01		0.00	0.52		0.00	0.52	51.62	309.69	361.31	0.17	0.01	367.09
Energy	0.08	0.69	0.32	0.00		0.00	0.06		0.00	0.06	0.00	1,890.18	1,890.18	0.06	0.03	1,901.88
Mobile	4.28	10.42	39.21	0.10	9.94	0.54	10.48	0.16	0.52	0.68	0.00	7,710.69	7,710.69	0.30	0.00	7,717.07
Waste						0.00	0.00		0.00	0.00	80.17	0.00	80.17	4.74	0.00	179.66
Water						0.00	0.00		0.00	0.00	0.00	290.88	290.88	1.54	0.04	336.50
Total	8.97	11.24	50.01	0.11	9.94	0.54	11.06	0.16	0.52	1.26	131.79	10,201.44	10,333.23	6.81	0.08	10,502.20

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	3.00	0.09	7.42	0.00		0.00	0.04		0.00	0.04	0.00	12.09	12.09	0.01	0.00	12.34
Energy	0.07	0.60	0.27	0.00		0.00	0.05		0.00	0.05	0.00	1,642.88	1,642.88	0.06	0.03	1,653.05
Mobile	3.27	7.88	28.57	0.07	6.50	0.37	6.86	0.10	0.35	0.45	0.00	5,125.94	5,125.94	0.21	0.00	5,130.34
Waste						0.00	0.00		0.00	0.00	40.08	0.00	40.08	2.37	0.00	89.83
Water						0.00	0.00		0.00	0.00	0.00	236.90	236.90	1.23	0.03	273.42
Total	6.34	8.57	36.26	0.07	6.50	0.37	6.95	0.10	0.35	0.54	40.08	7,017.81	7,057.89	3.88	0.06	7,158.98

3.0 Construction Detail

3.1 Mitigation Measures Construction

- Use DPF for Construction Equipment
- Replace Ground Cover
- Water Exposed Area
- Water Unpaved Roads
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

3.2 Building Construction - 2011

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	0.79	5.23	3.12	0.01		0.36	0.36		0.36	0.36	0.00	476.40	476.40	0.06	0.00	477.75
Total	0.79	5.23	3.12	0.01		0.36	0.36		0.36	0.36	0.00	476.40	476.40	0.06	0.00	477.75

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	0.00	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
Vendor	0.16	1.73	1.09	0.00	0.07	0.06	0.14	0.00	0.06	0.06	0.00	216.27	216.27	0.01	0.00	216.42
Worker	0.32	0.35	3.69	0.01	0.60	0.02	0.63	0.01	0.02	0.03	0.00	489.17	489.17	0.03	0.00	489.84
Total	0.48	2.08	4.78	0.01	0.67	0.08	0.77	0.01	0.08	0.09	0.00	705.44	705.44	0.04	0.00	706.26

3.2 Building Construction - 2011

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	0.79	5.23	3.12	0.01		0.36	0.36		0.36	0.36	0.00	476.40	476.40	0.06	0.00	477.75
Total	0.79	5.23	3.12	0.01		0.36	0.36		0.36	0.36	0.00	476.40	476.40	0.06	0.00	477.75

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	0.00	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
Vendor	0.16	1.73	1.09	0.00	0.06	0.06	0.12	0.00	0.06	0.06	0.00	216.27	216.27	0.01	0.00	216.42
Worker	0.32	0.35	3.69	0.01	0.45	0.02	0.48	0.01	0.02	0.03	0.00	489.17	489.17	0.03	0.00	489.84
Total	0.48	2.08	4.78	0.01	0.51	0.08	0.60	0.01	0.08	0.09	0.00	705.44	705.44	0.04	0.00	706.26

3.2 Building Construction - 2012

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	0.73	4.87	3.10	0.01		0.33	0.33		0.33	0.33	0.00	478.23	478.23	0.06	0.00	479.48
Total	0.73	4.87	3.10	0.01		0.33	0.33		0.33	0.33	0.00	478.23	478.23	0.06	0.00	479.48

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	0.00	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
Vendor	0.14	1.59	1.00	0.00	0.07	0.06	0.13	0.00	0.05	0.05	0.00	217.56	217.56	0.01	0.00	217.70
Worker	0.29	0.32	3.39	0.01	0.61	0.02	0.63	0.01	0.02	0.03	0.00	480.87	480.87	0.03	0.00	481.51
Total	0.43	1.91	4.39	0.01	0.68	0.08	0.76	0.01	0.07	0.08	0.00	698.43	698.43	0.04	0.00	699.21

3.2 Building Construction - 2012

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	0.73	4.87	3.10	0.01		0.33	0.33		0.33	0.33	0.00	478.23	478.23	0.06	0.00	479.48
Total	0.73	4.87	3.10	0.01		0.33	0.33		0.33	0.33	0.00	478.23	478.23	0.06	0.00	479.48

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	0.00	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
Vendor	0.14	1.59	1.00	0.00	0.06	0.06	0.11	0.00	0.05	0.05	0.00	217.56	217.56	0.01	0.00	217.70
Worker	0.29	0.32	3.39	0.01	0.46	0.02	0.48	0.01	0.02	0.03	0.00	480.87	480.87	0.03	0.00	481.51
Total	0.43	1.91	4.39	0.01	0.52	0.08	0.59	0.01	0.07	0.08	0.00	698.43	698.43	0.04	0.00	699.21

3.2 Building Construction - 2013

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	0.67	4.52	3.06	0.01		0.30	0.30		0.30	0.30	0.00	478.23	478.23	0.05	0.00	479.38
Total	0.67	4.52	3.06	0.01		0.30	0.30		0.30	0.30	0.00	478.23	478.23	0.05	0.00	479.38

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	0.00	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
Vendor	0.13	1.45	0.90	0.00	0.07	0.05	0.12	0.00	0.05	0.05	0.00	218.03	218.03	0.01	0.00	218.16
Worker	0.27	0.29	3.10	0.01	0.61	0.02	0.63	0.01	0.02	0.03	0.00	470.97	470.97	0.03	0.00	471.56
Total	0.40	1.74	4.00	0.01	0.68	0.07	0.75	0.01	0.07	0.08	0.00	689.00	689.00	0.04	0.00	689.72

3.2 Building Construction - 2013

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	0.67	4.52	3.06	0.01		0.30	0.30		0.30	0.30	0.00	478.23	478.23	0.05	0.00	479.38
Total	0.67	4.52	3.06	0.01		0.30	0.30		0.30	0.30	0.00	478.23	478.23	0.05	0.00	479.38

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	0.00	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
Vendor	0.13	1.45	0.90	0.00	0.06	0.05	0.11	0.00	0.05	0.05	0.00	218.03	218.03	0.01	0.00	218.16
Worker	0.27	0.29	3.10	0.01	0.46	0.02	0.48	0.01	0.02	0.03	0.00	470.97	470.97	0.03	0.00	471.56
Total	0.40	1.74	4.00	0.01	0.52	0.07	0.59	0.01	0.07	0.08	0.00	689.00	689.00	0.04	0.00	689.72

3.2 Building Construction - 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	0.62	4.18	3.03	0.01		0.26	0.26		0.26	0.26	0.00	478.23	478.23	0.05	0.00	479.28
Total	0.62	4.18	3.03	0.01		0.26	0.26		0.26	0.26	0.00	478.23	478.23	0.05	0.00	479.28

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	0.00	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
Vendor	0.12	1.31	0.83	0.00	0.07	0.05	0.12	0.00	0.04	0.04	0.00	218.43	218.43	0.01	0.00	218.54
Worker	0.25	0.27	2.85	0.01	0.61	0.02	0.63	0.01	0.02	0.03	0.00	462.60	462.60	0.03	0.00	463.15
Total	0.37	1.58	3.68	0.01	0.68	0.07	0.75	0.01	0.06	0.07	0.00	681.03	681.03	0.04	0.00	681.69

3.2 Building Construction - 2014

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	0.62	4.18	3.03	0.01		0.26	0.26		0.26	0.26	0.00	478.23	478.23	0.05	0.00	479.28
Total	0.62	4.18	3.03	0.01		0.26	0.26		0.26	0.26	0.00	478.23	478.23	0.05	0.00	479.28

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	0.00	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
Vendor	0.12	1.31	0.83	0.00	0.06	0.05	0.10	0.00	0.04	0.04	0.00	218.43	218.43	0.01	0.00	218.54
Worker	0.25	0.27	2.85	0.01	0.46	0.02	0.48	0.01	0.02	0.03	0.00	462.60	462.60	0.03	0.00	463.15
Total	0.37	1.58	3.68	0.01	0.52	0.07	0.58	0.01	0.06	0.07	0.00	681.03	681.03	0.04	0.00	681.69

3.2 Building Construction - 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	0.15	0.98	0.77	0.00		0.06	0.06		0.06	0.06	0.00	122.76	122.76	0.01	0.00	123.01
Total	0.15	0.98	0.77	0.00		0.06	0.06		0.06	0.06	0.00	122.76	122.76	0.01	0.00	123.01

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	0.00	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
Vendor	0.03	0.31	0.20	0.00	0.02	0.01	0.03	0.00	0.01	0.01	0.00	56.17	56.17	0.00	0.00	56.20
Worker	0.06	0.06	0.67	0.00	0.16	0.01	0.16	0.00	0.01	0.01	0.00	116.19	116.19	0.01	0.00	116.32
Total	0.09	0.37	0.87	0.00	0.18	0.02	0.19	0.00	0.02	0.02	0.00	172.36	172.36	0.01	0.00	172.52

3.2 Building Construction - 2015

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	0.15	0.98	0.77	0.00		0.06	0.06		0.06	0.06	0.00	122.76	122.76	0.01	0.00	123.01
Total	0.15	0.98	0.77	0.00		0.06	0.06		0.06	0.06	0.00	122.76	122.76	0.01	0.00	123.01

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	0.00	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
Vendor	0.03	0.31	0.20	0.00	0.01	0.01	0.02	0.00	0.01	0.01	0.00	56.17	56.17	0.00	0.00	56.20
Worker	0.06	0.06	0.67	0.00	0.12	0.01	0.12	0.00	0.01	0.01	0.00	116.19	116.19	0.01	0.00	116.32
Total	0.09	0.37	0.87	0.00	0.13	0.02	0.14	0.00	0.02	0.02	0.00	172.36	172.36	0.01	0.00	172.52

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

- Increase Density
- Improve Walkability Design
- Improve Destination Accessibility
- Increase Transit Accessibility
- Improve Pedestrian Network
- Implement Trip Reduction Program
- Market Commute Trip Reduction Option
- Employee Vanpool/Shuttle
- Provide Riade Sharing Program

	ROG	NOx	CO	SO2	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	3.27	7.88	28.57	0.07	6.50	0.37	6.86	0.10	0.35	0.45	0.00	5,125.94	5,125.94	0.21	0.00	5,130.34
Unmitigated	4.28	10.42	39.21	0.10	9.94	0.54	10.48	0.16	0.52	0.68	0.00	7,710.69	7,710.69	0.30	0.00	7,717.07
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Condo/Townhouse	2,982.90	2,620.56	2221.62	9,400,156	6,344,527

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Government Office Building	2,881.96	0.00	0.00	5,076,195	3,044,196
Single Family Housing	1,148.40	1,209.60	1052.40	3,808,274	2,570,350
Total	7,013.26	3,830.16	3,274.02	18,284,625	11,959,074

4.3 Trip Type Information

Land Use	Miles			Trip %		
	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
Condo/Townhouse	12.70	7.00	9.50	40.20	19.20	40.60
Government Office Building	8.90	13.30	7.40	33.00	62.00	5.00
Single Family Housing	12.70	7.00	9.50	40.20	19.20	40.60

5.0 Energy Detail

5.1 Mitigation Measures Energy

Exceed Title 24

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						0.00	0.00		0.00	0.00	0.00	946.72	946.72	0.04	0.02	952.66
Electricity Unmitigated						0.00	0.00		0.00	0.00	0.00	1,089.92	1,089.92	0.05	0.02	1,096.75
NaturalGas Mitigated	0.07	0.60	0.27	0.00		0.00	0.05		0.00	0.05	0.00	696.15	696.15	0.01	0.01	700.39
NaturalGas Unmitigated	0.08	0.69	0.32	0.00		0.00	0.06		0.00	0.06	0.00	800.26	800.26	0.02	0.01	805.13
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	tons/yr										MT/yr					
Condo/Townhouse	9.0181e+006	0.05	0.42	0.18	0.00		0.00	0.03		0.00	0.03	0.00	481.24	481.24	0.01	0.01	484.17
Government Office Building	1.00993e+006	0.01	0.05	0.04	0.00		0.00	0.00		0.00	0.00	0.00	53.89	53.89	0.00	0.00	54.22
Single Family Housing	4.96824e+006	0.03	0.23	0.10	0.00		0.00	0.02		0.00	0.02	0.00	265.12	265.12	0.01	0.00	266.74
Total		0.09	0.70	0.32	0.00		0.00	0.05		0.00	0.05	0.00	800.25	800.25	0.02	0.01	805.13

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	tons/yr										MT/yr					
Condo/Townhouse	7.8517e+006	0.04	0.36	0.15	0.00		0.00	0.03		0.00	0.03	0.00	419.00	419.00	0.01	0.01	421.55
Government Office Building	863848	0.00	0.04	0.04	0.00		0.00	0.00		0.00	0.00	0.00	46.10	46.10	0.00	0.00	46.38
Single Family Housing	4.32986e+006	0.02	0.20	0.08	0.00		0.00	0.02		0.00	0.02	0.00	231.06	231.06	0.00	0.00	232.46
Total		0.06	0.60	0.27	0.00		0.00	0.05		0.00	0.05	0.00	696.16	696.16	0.01	0.01	700.39

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
Condo/Townhouse	1.59012e+006					462.52	0.02	0.01	465.42
Government Office Building	1.34257e+006					390.51	0.02	0.01	392.96
Single Family Housing	814410					236.89	0.01	0.00	238.37
Total						1,089.92	0.05	0.02	1,096.75

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
Condo/Townhouse	1.4202e+006					413.10	0.02	0.01	415.68
Government Office Building	1.10612e+006					321.74	0.01	0.01	323.75
Single Family Housing	728466					211.89	0.01	0.00	213.22
Total						946.73	0.04	0.02	952.65

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
- Use only Natural Gas Hearths
- No Hearths Installed

	ROG	NOx	CO	SO2	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	3.00	0.09	7.42	0.00		0.00	0.04		0.00	0.04	0.00	12.09	12.09	0.01	0.00	12.34
Unmitigated	4.61	0.13	10.48	0.01		0.00	0.52		0.00	0.52	51.62	309.69	361.31	0.17	0.01	367.09
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	0.33					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	2.44					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	1.61	0.04	3.05	0.00		0.00	0.48		0.00	0.48	51.62	297.60	349.22	0.16	0.01	354.75
Landscaping	0.23	0.09	7.42	0.00		0.00	0.04		0.00	0.04	0.00	12.09	12.09	0.01	0.00	12.34
Total	4.61	0.13	10.47	0.00		0.00	0.52		0.00	0.52	51.62	309.69	361.31	0.17	0.01	367.09

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	0.33					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	2.44					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	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
Landscaping	0.23	0.09	7.42	0.00		0.00	0.04		0.00	0.04	0.00	12.09	12.09	0.01	0.00		12.34
Total	3.00	0.09	7.42	0.00		0.00	0.04		0.00	0.04	0.00	12.09	12.09	0.01	0.00		12.34

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
- Turf Reduction
- Use Water Efficient Irrigation System

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr				MT/yr			
Mitigated					236.90	1.23	0.03	273.42
Unmitigated					290.88	1.54	0.04	336.50
Total	NA	NA	NA	NA	NA	NA	NA	NA

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
Condo/Townhouse	23.8464 / 15.0336					139.17	0.73	0.02	160.92
Government Office Building	18.3562 / 11.2505					106.09	0.57	0.02	122.82
Single Family Housing	7.81848 / 4.92904					45.63	0.24	0.01	52.76
Total						290.89	1.54	0.05	336.50

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
Condo/Townhouse	19.0771 / 13.1032					114.81	0.59	0.02	132.23
Government Office Building	14.6849 / 9.55094					86.65	0.45	0.01	100.05
Single Family Housing	6.25479 / 3.61505					35.44	0.19	0.01	41.14
Total						236.90	1.23	0.04	273.42

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
	tons/yr				MT/yr			
Mitigated					40.08	2.37	0.00	89.83
Unmitigated					80.17	4.74	0.00	179.66
Total	NA	NA	NA	NA	NA	NA	NA	NA

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
Condo/Townhouse	168.36					34.18	2.02	0.00	76.59
Government Office Building	85.93					17.44	1.03	0.00	39.09
Single Family Housing	140.63					28.55	1.69	0.00	63.97
Total						80.17	4.74	0.00	179.65

8.2 Waste by Land Use

Mitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
Condo/Townhouse	84.18					17.09	1.01	0.00	38.29
Government Office Building	42.965					8.72	0.52	0.00	19.55
Single Family Housing	70.315					14.27	0.84	0.00	31.99
Total						40.08	2.37	0.00	89.83

9.0 Vegetation

**Serrano Ops Reduced Commercial and Residential Alt
South Coast AQMD Air District, Summer**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Government Office Building	92.4	1000sqft
Condo/Townhouse	366	Dwelling Unit
Single Family Housing	120	Dwelling Unit

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Utility Company	Southern California Edison
Climate Zone	9	Precipitation Freq (Days)	31		

1.3 User Entered Comments

- Project Characteristics -
- Land Use - Commercial uses include community center and police center
- Construction Phase - Construction is modeled separately
- Off-road Equipment -
- Trips and VMT -

Demolition -

Grading -

Vehicle Trips - Trip rates and pass-by trip reduction from Traffic Study

Woodstoves - Wood stoves are not proposed, fireplaces would be gas

Land Use Change -

Sequestration -

Construction Off-road Equipment Mitigation - Construction mitigation per SCAQMD

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

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					
2011	9.78	56.11	61.61	0.10	5.78	3.43	9.21	0.09	3.38	3.47	0.00	10,294.81	0.00	0.89	0.00	10,313.47
2012	8.99	51.91	58.10	0.10	5.78	3.13	8.92	0.09	3.09	3.17	0.00	10,208.12	0.00	0.82	0.00	10,225.36
2013	8.26	47.93	54.85	0.10	5.78	2.83	8.61	0.09	2.79	2.88	0.00	10,123.99	0.00	0.75	0.00	10,139.83
2014	7.58	44.11	52.09	0.10	5.78	2.54	8.32	0.09	2.50	2.59	0.00	10,052.92	0.00	0.70	0.00	10,067.52
2015	6.97	40.12	49.50	0.10	5.78	2.28	8.06	0.09	2.24	2.32	0.00	9,967.22	0.00	0.64	0.00	9,980.72
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2.1 Overall Construction (Maximum Daily Emission)

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					
2011	9.78	56.11	61.61	0.10	4.34	3.43	7.77	0.09	3.38	3.47	0.00	10,294.81	0.00	0.89	0.00	10,313.47
2012	8.99	51.91	58.10	0.10	4.34	3.13	7.48	0.09	3.09	3.17	0.00	10,208.12	0.00	0.82	0.00	10,225.36
2013	8.26	47.93	54.85	0.10	4.34	2.83	7.17	0.09	2.79	2.88	0.00	10,123.99	0.00	0.75	0.00	10,139.83
2014	7.58	44.11	52.09	0.10	4.34	2.54	6.88	0.09	2.50	2.59	0.00	10,052.92	0.00	0.70	0.00	10,067.52
2015	6.97	40.12	49.50	0.10	4.34	2.28	6.62	0.09	2.24	2.32	0.00	9,967.22	0.00	0.64	0.00	9,980.72
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	68.15	2.84	201.57	0.39		0.00	25.92		0.00	25.92	3,429.57	8,821.07		13.65	0.21	12,602.31
Energy	0.44	3.80	1.73	0.02		0.00	0.31		0.00	0.31		4,833.61		0.09	0.09	4,863.02
Mobile	28.32	65.99	253.91	0.65	69.78	3.44	73.21	0.99	3.31	4.30		56,588.32		2.11		56,632.54
Total	96.91	72.63	457.21	1.06	69.78	3.44	99.44	0.99	3.31	30.53	3,429.57	70,243.00		15.85	0.30	74,097.87

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	16.42	0.47	40.70	0.00		0.00	0.22		0.00	0.22	0.00	73.07		0.07	0.00	74.57
Energy	0.39	3.31	1.50	0.02		0.00	0.27		0.00	0.27		4,204.81		0.08	0.08	4,230.40
Mobile	21.90	49.89	179.49	0.43	45.32	2.29	47.62	0.65	2.21	2.85		37,368.99		1.44		37,399.16
Total	38.71	53.67	221.69	0.45	45.32	2.29	48.11	0.65	2.21	3.34	0.00	41,646.87		1.59	0.08	41,704.13

3.0 Construction Detail

3.1 Mitigation Measures Construction

- Use DPF for Construction Equipment
- Replace Ground Cover
- Water Exposed Area
- Water Unpaved Roads
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

3.2 Building Construction - 2011

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	6.11	40.22	24.03	0.04		2.80	2.80		2.80	2.80		4,040.62		0.55		4,052.11
Total	6.11	40.22	24.03	0.04		2.80	2.80		2.80	2.80		4,040.62		0.55		4,052.11

3.2 Building Construction - 2011

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	1.18	13.31	7.85	0.02	0.62	0.47	1.09	0.02	0.43	0.45		1,839.54		0.06		1,840.76
Worker	2.49	2.58	29.74	0.04	5.16	0.16	5.32	0.07	0.15	0.22		4,414.66		0.28		4,420.59
Total	3.67	15.89	37.59	0.06	5.78	0.63	6.41	0.09	0.58	0.67		6,254.20		0.34		6,261.35

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	6.11	40.22	24.03	0.04		2.80	2.80		2.80	2.80	0.00	4,040.62		0.55		4,052.11
Total	6.11	40.22	24.03	0.04		2.80	2.80		2.80	2.80	0.00	4,040.62		0.55		4,052.11

3.2 Building Construction - 2011

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	1.18	13.31	7.85	0.02	0.47	0.47	0.94	0.02	0.43	0.45		1,839.54		0.06		1,840.76
Worker	2.49	2.58	29.74	0.04	3.87	0.16	4.03	0.07	0.15	0.22		4,414.66		0.28		4,420.59
Total	3.67	15.89	37.59	0.06	4.34	0.63	4.97	0.09	0.58	0.67		6,254.20		0.34		6,261.35

3.2 Building Construction - 2012

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	5.63	37.37	23.73	0.04		2.54	2.54		2.54	2.54		4,040.62		0.51		4,051.23
Total	5.63	37.37	23.73	0.04		2.54	2.54		2.54	2.54		4,040.62		0.51		4,051.23

3.2 Building Construction - 2012

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	1.08	12.19	7.10	0.02	0.62	0.43	1.05	0.02	0.39	0.41		1,843.58		0.05		1,844.69
Worker	2.29	2.35	27.27	0.04	5.16	0.17	5.32	0.07	0.15	0.22		4,323.93		0.26		4,329.44
Total	3.37	14.54	34.37	0.06	5.78	0.60	6.37	0.09	0.54	0.63		6,167.51		0.31		6,174.13

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	5.63	37.37	23.73	0.04		2.54	2.54		2.54	2.54	0.00	4,040.62		0.51		4,051.23
Total	5.63	37.37	23.73	0.04		2.54	2.54		2.54	2.54	0.00	4,040.62		0.51		4,051.23

3.2 Building Construction - 2012

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	1.08	12.19	7.10	0.02	0.47	0.43	0.90	0.02	0.39	0.41		1,843.58		0.05		1,844.69
Worker	2.29	2.35	27.27	0.04	3.87	0.17	4.03	0.07	0.15	0.22		4,323.93		0.26		4,329.44
Total	3.37	14.54	34.37	0.06	4.34	0.60	4.93	0.09	0.54	0.63		6,167.51		0.31		6,174.13

3.2 Building Construction - 2013

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	5.17	34.66	23.45	0.04		2.28	2.28		2.28	2.28		4,040.62		0.46		4,050.31
Total	5.17	34.66	23.45	0.04		2.28	2.28		2.28	2.28		4,040.62		0.46		4,050.31

3.2 Building Construction - 2013

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.98	11.13	6.39	0.02	0.62	0.38	1.01	0.02	0.35	0.37		1,847.70		0.05		1,848.71
Worker	2.11	2.14	25.01	0.04	5.16	0.17	5.33	0.07	0.16	0.23		4,235.67		0.24		4,240.80
Total	3.09	13.27	31.40	0.06	5.78	0.55	6.34	0.09	0.51	0.60		6,083.37		0.29		6,089.51

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	5.17	34.66	23.45	0.04		2.28	2.28		2.28	2.28	0.00	4,040.62		0.46		4,050.31
Total	5.17	34.66	23.45	0.04		2.28	2.28		2.28	2.28	0.00	4,040.62		0.46		4,050.31

3.2 Building Construction - 2013

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.98	11.13	6.39	0.02	0.47	0.38	0.86	0.02	0.35	0.37		1,847.70		0.05		1,848.71
Worker	2.11	2.14	25.01	0.04	3.87	0.17	4.04	0.07	0.16	0.23		4,235.67		0.24		4,240.80
Total	3.09	13.27	31.40	0.06	4.34	0.55	4.90	0.09	0.51	0.60		6,083.37		0.29		6,089.51

3.2 Building Construction - 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	4.74	32.06	23.20	0.04		2.02	2.02		2.02	2.02		4,040.61		0.42		4,049.51
Total	4.74	32.06	23.20	0.04		2.02	2.02		2.02	2.02		4,040.61		0.42		4,049.51

3.2 Building Construction - 2014

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.89	10.10	5.83	0.02	0.62	0.34	0.97	0.02	0.32	0.33		1,851.21		0.04		1,852.12
Worker	1.96	1.95	23.06	0.04	5.16	0.17	5.33	0.07	0.16	0.23		4,161.10		0.23		4,165.89
Total	2.85	12.05	28.89	0.06	5.78	0.51	6.30	0.09	0.48	0.56		6,012.31		0.27		6,018.01

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	4.74	32.06	23.20	0.04		2.02	2.02		2.02	2.02	0.00	4,040.61		0.42		4,049.51
Total	4.74	32.06	23.20	0.04		2.02	2.02		2.02	2.02	0.00	4,040.61		0.42		4,049.51

3.2 Building Construction - 2014

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.89	10.10	5.83	0.02	0.47	0.34	0.82	0.02	0.32	0.33		1,851.21		0.04		1,852.12
Worker	1.96	1.95	23.06	0.04	3.87	0.17	4.04	0.07	0.16	0.23		4,161.10		0.23		4,165.89
Total	2.85	12.05	28.89	0.06	4.34	0.51	4.86	0.09	0.48	0.56		6,012.31		0.27		6,018.01

3.2 Building Construction - 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	4.34	29.16	22.98	0.04		1.80	1.80		1.80	1.80		4,040.61		0.39		4,048.81
Total	4.34	29.16	22.98	0.04		1.80	1.80		1.80	1.80		4,040.61		0.39		4,048.81

3.2 Building Construction - 2015

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.80	9.19	5.32	0.02	0.62	0.31	0.93	0.02	0.28	0.30		1,854.54		0.04		1,855.37
Worker	1.82	1.77	21.20	0.04	5.16	0.17	5.33	0.07	0.16	0.23		4,072.06		0.21		4,076.53
Total	2.62	10.96	26.52	0.06	5.78	0.48	6.26	0.09	0.44	0.53		5,926.60		0.25		5,931.90

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	4.34	29.16	22.98	0.04		1.80	1.80		1.80	1.80	0.00	4,040.61		0.39		4,048.81
Total	4.34	29.16	22.98	0.04		1.80	1.80		1.80	1.80	0.00	4,040.61		0.39		4,048.81

3.2 Building Construction - 2015

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.80	9.19	5.32	0.02	0.47	0.31	0.78	0.02	0.28	0.30		1,854.54		0.04		1,855.37
Worker	1.82	1.77	21.20	0.04	3.87	0.17	4.04	0.07	0.16	0.23		4,072.06		0.21		4,076.53
Total	2.62	10.96	26.52	0.06	4.34	0.48	4.82	0.09	0.44	0.53		5,926.60		0.25		5,931.90

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

- Increase Density
- Improve Walkability Design
- Improve Destination Accessibility
- Increase Transit Accessibility
- Improve Pedestrian Network
- Implement Trip Reduction Program
- Market Commute Trip Reduction Option
- Employee Vanpool/Shuttle

Provide Riade Sharing Program

	ROG	NOx	CO	SO2	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	21.90	49.89	179.49	0.43	45.32	2.29	47.62	0.65	2.21	2.85		37,368.99		1.44		37,399.16
Unmitigated	28.32	65.99	253.91	0.65	69.78	3.44	73.21	0.99	3.31	4.30		56,588.32		2.11		56,632.54
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Condo/Townhouse	2,982.90	2,620.56	2221.62	9,400,156	6,344,527
Government Office Building	2,881.96	0.00	0.00	5,076,195	3,044,196
Single Family Housing	1,148.40	1,209.60	1052.40	3,808,274	2,570,350
Total	7,013.26	3,830.16	3,274.02	18,284,625	11,959,074

4.3 Trip Type Information

Land Use	Miles			Trip %		
	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
Condo/Townhouse	12.70	7.00	9.50	40.20	19.20	40.60

Land Use	Miles			Trip %		
	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
Government Office Building	8.90	13.30	7.40	33.00	62.00	5.00
Single Family Housing	12.70	7.00	9.50	40.20	19.20	40.60

5.0 Energy Detail

5.1 Mitigation Measures Energy

Exceed Title 24

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	lb/day										lb/day					
NaturalGas Mitigated	0.39	3.31	1.50	0.02		0.00	0.27		0.00	0.27		4,204.81		0.08	0.08	4,230.40
NaturalGas Unmitigated	0.44	3.80	1.73	0.02		0.00	0.31		0.00	0.31		4,833.61		0.09	0.09	4,863.02
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	lb/day										lb/day					
Condo/Townhouse	24707.1	0.27	2.28	0.97	0.01		0.00	0.18		0.00	0.18		2,906.72		0.06	0.05	2,924.41
Government Office Building	2766.94	0.03	0.27	0.23	0.00		0.00	0.02		0.00	0.02		325.52		0.01	0.01	327.50
Single Family Housing	13611.6	0.15	1.25	0.53	0.01		0.00	0.10		0.00	0.10		1,601.37		0.03	0.03	1,611.11
Total		0.45	3.80	1.73	0.02		0.00	0.30		0.00	0.30		4,833.61		0.10	0.09	4,863.02

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	lb/day										lb/day					
Condo/Townhouse	21.5115	0.23	1.98	0.84	0.01		0.00	0.16		0.00	0.16		2,530.77		0.05	0.05	2,546.17
Government Office Building	2.36671	0.03	0.23	0.19	0.00		0.00	0.02		0.00	0.02		278.44		0.01	0.01	280.13
Single Family Housing	11.8626	0.13	1.09	0.47	0.01		0.00	0.09		0.00	0.09		1,395.60		0.03	0.03	1,404.10
Total		0.39	3.30	1.50	0.02		0.00	0.27		0.00	0.27		4,204.81		0.09	0.09	4,230.40

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

Use only Natural Gas Hearths

No Hearths Installed

	ROG	NOx	CO	SO2	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	16.42	0.47	40.70	0.00		0.00	0.22		0.00	0.22	0.00	73.07		0.07	0.00	74.57
Unmitigated	68.15	2.84	201.57	0.39		0.00	25.92		0.00	25.92	3,429.57	8,821.07		13.65	0.21	12,602.31
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	1.83					0.00	0.00		0.00	0.00						0.00
Consumer Products	13.35					0.00	0.00		0.00	0.00						0.00
Hearth	51.73	2.37	160.87	0.39		0.00	25.70		0.00	25.69	3,429.57	8,748.00		13.58	0.21	12,527.74
Landscaping	1.24	0.47	40.70	0.00		0.00	0.22		0.00	0.22		73.07		0.07		74.57
Total	68.15	2.84	201.57	0.39		0.00	25.92		0.00	25.91	3,429.57	8,821.07		13.65	0.21	12,602.31

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	1.83					0.00	0.00		0.00	0.00						0.00
Consumer Products	13.35					0.00	0.00		0.00	0.00						0.00
Hearth	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
Landscaping	1.24	0.47	40.70	0.00		0.00	0.22		0.00	0.22		73.07		0.07		74.57
Total	16.42	0.47	40.70	0.00		0.00	0.22		0.00	0.22	0.00	73.07		0.07	0.00	74.57

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

Turf Reduction

Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Vegetation

**Serrano Ops Reduced Commercial and Residential Alt
South Coast AQMD Air District, Winter**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Government Office Building	92.4	1000sqft
Condo/Townhouse	366	Dwelling Unit
Single Family Housing	120	Dwelling Unit

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Utility Company	Southern California Edison
Climate Zone	9	Precipitation Freq (Days)	31		

1.3 User Entered Comments

- Project Characteristics -
- Land Use - Commercial uses include community center and police center
- Construction Phase - Construction is modeled separately
- Off-road Equipment -
- Trips and VMT -

Demolition -

Grading -

Vehicle Trips - Trip rates and pass-by trip reduction from Traffic Study

Woodstoves - Wood stoves are not proposed, fireplaces would be gas

Land Use Change -

Sequestration -

Construction Off-road Equipment Mitigation - Construction mitigation per SCAQMD

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

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					
2011	9.99	57.17	60.34	0.10	5.78	3.44	9.22	0.09	3.39	3.47	0.00	9,901.13	0.00	0.88	0.00	9,919.58
2012	9.18	52.84	56.93	0.10	5.78	3.14	8.92	0.09	3.10	3.18	0.00	9,820.99	0.00	0.81	0.00	9,838.03
2013	8.43	48.74	53.78	0.10	5.78	2.84	8.62	0.09	2.80	2.88	0.00	9,743.12	0.00	0.74	0.00	9,758.74
2014	7.75	44.81	51.09	0.10	5.78	2.55	8.33	0.09	2.51	2.59	0.00	9,677.34	0.00	0.69	0.00	9,691.74
2015	7.12	40.72	48.58	0.10	5.78	2.28	8.06	0.09	2.24	2.33	0.00	9,598.01	0.00	0.63	0.00	9,611.30
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2.1 Overall Construction (Maximum Daily Emission)

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					
2011	9.99	57.17	60.34	0.10	4.34	3.44	7.78	0.09	3.39	3.47	0.00	9,901.13	0.00	0.88	0.00	9,919.58
2012	9.18	52.84	56.93	0.10	4.34	3.14	7.48	0.09	3.10	3.18	0.00	9,820.99	0.00	0.81	0.00	9,838.03
2013	8.43	48.74	53.78	0.10	4.34	2.84	7.18	0.09	2.80	2.88	0.00	9,743.12	0.00	0.74	0.00	9,758.74
2014	7.75	44.81	51.09	0.10	4.34	2.55	6.89	0.09	2.51	2.59	0.00	9,677.34	0.00	0.69	0.00	9,691.74
2015	7.12	40.72	48.58	0.10	4.34	2.28	6.62	0.09	2.24	2.33	0.00	9,598.01	0.00	0.63	0.00	9,611.30
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	68.15	2.84	201.57	0.39		0.00	25.92		0.00	25.92	3,429.57	8,821.07		13.65	0.21	12,602.31
Energy	0.44	3.80	1.73	0.02		0.00	0.31		0.00	0.31		4,833.61		0.09	0.09	4,863.02
Mobile	29.09	69.68	246.22	0.61	69.78	3.46	73.24	0.99	3.33	4.33		52,671.43		2.15		52,716.58
Total	97.68	76.32	449.52	1.02	69.78	3.46	99.47	0.99	3.33	30.56	3,429.57	66,326.11		15.89	0.30	70,181.91

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	16.42	0.47	40.70	0.00		0.00	0.22		0.00	0.22	0.00	73.07		0.07	0.00	74.57
Energy	0.39	3.31	1.50	0.02		0.00	0.27		0.00	0.27		4,204.81		0.08	0.08	4,230.40
Mobile	22.11	51.94	180.11	0.40	45.32	2.32	47.64	0.65	2.23	2.88		34,788.82		1.48		34,819.91
Total	38.92	55.72	222.31	0.42	45.32	2.32	48.13	0.65	2.23	3.37	0.00	39,066.70		1.63	0.08	39,124.88

3.0 Construction Detail

3.1 Mitigation Measures Construction

- Use DPF for Construction Equipment
- Replace Ground Cover
- Water Exposed Area
- Water Unpaved Roads
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

3.2 Building Construction - 2011

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	6.11	40.22	24.03	0.04		2.80	2.80		2.80	2.80		4,040.62		0.55		4,052.11
Total	6.11	40.22	24.03	0.04		2.80	2.80		2.80	2.80		4,040.62		0.55		4,052.11

3.2 Building Construction - 2011

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	1.24	13.98	8.67	0.02	0.62	0.48	1.10	0.02	0.44	0.46		1,825.87		0.06		1,827.16
Worker	2.64	2.97	27.64	0.04	5.16	0.16	5.32	0.07	0.15	0.22		4,034.64		0.27		4,040.30
Total	3.88	16.95	36.31	0.06	5.78	0.64	6.42	0.09	0.59	0.68		5,860.51		0.33		5,867.46

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	6.11	40.22	24.03	0.04		2.80	2.80		2.80	2.80	0.00	4,040.62		0.55		4,052.11
Total	6.11	40.22	24.03	0.04		2.80	2.80		2.80	2.80	0.00	4,040.62		0.55		4,052.11

3.2 Building Construction - 2011

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	1.24	13.98	8.67	0.02	0.47	0.48	0.95	0.02	0.44	0.46		1,825.87		0.06		1,827.16
Worker	2.64	2.97	27.64	0.04	3.87	0.16	4.03	0.07	0.15	0.22		4,034.64		0.27		4,040.30
Total	3.88	16.95	36.31	0.06	4.34	0.64	4.98	0.09	0.59	0.68		5,860.51		0.33		5,867.46

3.2 Building Construction - 2012

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	5.63	37.37	23.73	0.04		2.54	2.54		2.54	2.54		4,040.62		0.51		4,051.23
Total	5.63	37.37	23.73	0.04		2.54	2.54		2.54	2.54		4,040.62		0.51		4,051.23

3.2 Building Construction - 2012

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	1.13	12.77	7.92	0.02	0.62	0.43	1.06	0.02	0.40	0.42		1,829.53		0.06		1,830.70
Worker	2.43	2.70	25.28	0.04	5.16	0.17	5.32	0.07	0.15	0.22		3,950.85		0.25		3,956.10
Total	3.56	15.47	33.20	0.06	5.78	0.60	6.38	0.09	0.55	0.64		5,780.38		0.31		5,786.80

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	5.63	37.37	23.73	0.04		2.54	2.54		2.54	2.54	0.00	4,040.62		0.51		4,051.23
Total	5.63	37.37	23.73	0.04		2.54	2.54		2.54	2.54	0.00	4,040.62		0.51		4,051.23

3.2 Building Construction - 2012

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	1.13	12.77	7.92	0.02	0.47	0.43	0.91	0.02	0.40	0.42		1,829.53		0.06		1,830.70
Worker	2.43	2.70	25.28	0.04	3.87	0.17	4.03	0.07	0.15	0.22		3,950.85		0.25		3,956.10
Total	3.56	15.47	33.20	0.06	4.34	0.60	4.94	0.09	0.55	0.64		5,780.38		0.31		5,786.80

3.2 Building Construction - 2013

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	5.17	34.66	23.45	0.04		2.28	2.28		2.28	2.28		4,040.62		0.46		4,050.31
Total	5.17	34.66	23.45	0.04		2.28	2.28		2.28	2.28		4,040.62		0.46		4,050.31

3.2 Building Construction - 2013

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	1.03	11.62	7.21	0.02	0.62	0.39	1.02	0.02	0.36	0.38		1,833.25		0.05		1,834.32
Worker	2.24	2.45	23.12	0.04	5.16	0.17	5.33	0.07	0.16	0.23		3,869.25		0.23		3,874.11
Total	3.27	14.07	30.33	0.06	5.78	0.56	6.35	0.09	0.52	0.61		5,702.50		0.28		5,708.43

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	5.17	34.66	23.45	0.04		2.28	2.28		2.28	2.28	0.00	4,040.62		0.46		4,050.31
Total	5.17	34.66	23.45	0.04		2.28	2.28		2.28	2.28	0.00	4,040.62		0.46		4,050.31

3.2 Building Construction - 2013

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	1.03	11.62	7.21	0.02	0.47	0.39	0.87	0.02	0.36	0.38		1,833.25		0.05		1,834.32
Worker	2.24	2.45	23.12	0.04	3.87	0.17	4.04	0.07	0.16	0.23		3,869.25		0.23		3,874.11
Total	3.27	14.07	30.33	0.06	4.34	0.56	4.91	0.09	0.52	0.61		5,702.50		0.28		5,708.43

3.2 Building Construction - 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	4.74	32.06	23.20	0.04		2.02	2.02		2.02	2.02		4,040.61		0.42		4,049.51
Total	4.74	32.06	23.20	0.04		2.02	2.02		2.02	2.02		4,040.61		0.42		4,049.51

3.2 Building Construction - 2014

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.93	10.51	6.65	0.02	0.62	0.35	0.97	0.02	0.32	0.34		1,836.43		0.05		1,837.40
Worker	2.08	2.24	21.24	0.04	5.16	0.17	5.33	0.07	0.16	0.23		3,800.29		0.22		3,804.83
Total	3.01	12.75	27.89	0.06	5.78	0.52	6.30	0.09	0.48	0.57		5,636.72		0.27		5,642.23

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	4.74	32.06	23.20	0.04		2.02	2.02		2.02	2.02	0.00	4,040.61		0.42		4,049.51
Total	4.74	32.06	23.20	0.04		2.02	2.02		2.02	2.02	0.00	4,040.61		0.42		4,049.51

3.2 Building Construction - 2014

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.93	10.51	6.65	0.02	0.47	0.35	0.82	0.02	0.32	0.34		1,836.43		0.05		1,837.40
Worker	2.08	2.24	21.24	0.04	3.87	0.17	4.04	0.07	0.16	0.23		3,800.29		0.22		3,804.83
Total	3.01	12.75	27.89	0.06	4.34	0.52	4.86	0.09	0.48	0.57		5,636.72		0.27		5,642.23

3.2 Building Construction - 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	4.34	29.16	22.98	0.04		1.80	1.80		1.80	1.80		4,040.61		0.39		4,048.81
Total	4.34	29.16	22.98	0.04		1.80	1.80		1.80	1.80		4,040.61		0.39		4,048.81

3.2 Building Construction - 2015

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.85	9.53	6.12	0.02	0.62	0.31	0.94	0.02	0.29	0.30		1,839.43		0.04		1,840.31
Worker	1.93	2.04	19.47	0.04	5.16	0.17	5.33	0.07	0.16	0.23		3,717.96		0.20		3,722.18
Total	2.78	11.57	25.59	0.06	5.78	0.48	6.27	0.09	0.45	0.53		5,557.39		0.24		5,562.49

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	4.34	29.16	22.98	0.04		1.80	1.80		1.80	1.80	0.00	4,040.61		0.39		4,048.81
Total	4.34	29.16	22.98	0.04		1.80	1.80		1.80	1.80	0.00	4,040.61		0.39		4,048.81

3.2 Building Construction - 2015

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.85	9.53	6.12	0.02	0.47	0.31	0.79	0.02	0.29	0.30		1,839.43		0.04		1,840.31
Worker	1.93	2.04	19.47	0.04	3.87	0.17	4.04	0.07	0.16	0.23		3,717.96		0.20		3,722.18
Total	2.78	11.57	25.59	0.06	4.34	0.48	4.83	0.09	0.45	0.53		5,557.39		0.24		5,562.49

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

- Increase Density
- Improve Walkability Design
- Improve Destination Accessibility
- Increase Transit Accessibility
- Improve Pedestrian Network
- Implement Trip Reduction Program
- Market Commute Trip Reduction Option
- Employee Vanpool/Shuttle

Provide Riade Sharing Program

	ROG	NOx	CO	SO2	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	22.11	51.94	180.11	0.40	45.32	2.32	47.64	0.65	2.23	2.88		34,788.82		1.48		34,819.91
Unmitigated	29.09	69.68	246.22	0.61	69.78	3.46	73.24	0.99	3.33	4.33		52,671.43		2.15		52,716.58
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Condo/Townhouse	2,982.90	2,620.56	2221.62	9,400,156	6,344,527
Government Office Building	2,881.96	0.00	0.00	5,076,195	3,044,196
Single Family Housing	1,148.40	1,209.60	1052.40	3,808,274	2,570,350
Total	7,013.26	3,830.16	3,274.02	18,284,625	11,959,074

4.3 Trip Type Information

Land Use	Miles			Trip %		
	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
Condo/Townhouse	12.70	7.00	9.50	40.20	19.20	40.60

Land Use	Miles			Trip %		
	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
Government Office Building	8.90	13.30	7.40	33.00	62.00	5.00
Single Family Housing	12.70	7.00	9.50	40.20	19.20	40.60

5.0 Energy Detail

5.1 Mitigation Measures Energy

Exceed Title 24

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	lb/day										lb/day					
NaturalGas Mitigated	0.39	3.31	1.50	0.02		0.00	0.27		0.00	0.27		4,204.81		0.08	0.08	4,230.40
NaturalGas Unmitigated	0.44	3.80	1.73	0.02		0.00	0.31		0.00	0.31		4,833.61		0.09	0.09	4,863.02
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	lb/day										lb/day					
Condo/Townhouse	24707.1	0.27	2.28	0.97	0.01		0.00	0.18		0.00	0.18		2,906.72		0.06	0.05	2,924.41
Government Office Building	2766.94	0.03	0.27	0.23	0.00		0.00	0.02		0.00	0.02		325.52		0.01	0.01	327.50
Single Family Housing	13611.6	0.15	1.25	0.53	0.01		0.00	0.10		0.00	0.10		1,601.37		0.03	0.03	1,611.11
Total		0.45	3.80	1.73	0.02		0.00	0.30		0.00	0.30		4,833.61		0.10	0.09	4,863.02

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	lb/day										lb/day					
Condo/Townhouse	21.5115	0.23	1.98	0.84	0.01		0.00	0.16		0.00	0.16		2,530.77		0.05	0.05	2,546.17
Government Office Building	2.36671	0.03	0.23	0.19	0.00		0.00	0.02		0.00	0.02		278.44		0.01	0.01	280.13
Single Family Housing	11.8626	0.13	1.09	0.47	0.01		0.00	0.09		0.00	0.09		1,395.60		0.03	0.03	1,404.10
Total		0.39	3.30	1.50	0.02		0.00	0.27		0.00	0.27		4,204.81		0.09	0.09	4,230.40

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
- Use only Natural Gas Hearths
- No Hearths Installed

	ROG	NOx	CO	SO2	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	16.42	0.47	40.70	0.00		0.00	0.22		0.00	0.22	0.00	73.07		0.07	0.00	74.57
Unmitigated	68.15	2.84	201.57	0.39		0.00	25.92		0.00	25.92	3,429.57	8,821.07		13.65	0.21	12,602.31
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	1.83					0.00	0.00		0.00	0.00							0.00
Consumer Products	13.35					0.00	0.00		0.00	0.00							0.00
Hearth	51.73	2.37	160.87	0.39		0.00	25.70		0.00	25.69	3,429.57	8,748.00		13.58	0.21		12,527.74
Landscaping	1.24	0.47	40.70	0.00		0.00	0.22		0.00	0.22		73.07		0.07			74.57
Total	68.15	2.84	201.57	0.39		0.00	25.92		0.00	25.91	3,429.57	8,821.07		13.65	0.21		12,602.31

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	1.83					0.00	0.00		0.00	0.00							0.00
Consumer Products	13.35					0.00	0.00		0.00	0.00							0.00
Hearth	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
Landscaping	1.24	0.47	40.70	0.00		0.00	0.22		0.00	0.22		73.07		0.07			74.57
Total	16.42	0.47	40.70	0.00		0.00	0.22		0.00	0.22	0.00	73.07		0.07	0.00		74.57

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
- Turf Reduction
- Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

- Institute Recycling and Composting Services

9.0 Vegetation

**Serrano Ops Reduced Residential Alt
South Coast AQMD Air District, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Recreational Swimming Pool	1.35	1000sqft
Apartments Low Rise	202	Dwelling Unit
Condo/Townhouse	412	Dwelling Unit
Single Family Housing	135	Dwelling Unit

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Utility Company	Southern California Edison
Climate Zone	9	Precipitation Freq (Days)	31		

1.3 User Entered Comments

Project Characteristics -
 Land Use - Recreational uses include community center
 Construction Phase - Construction is modeled separately
 Off-road Equipment -

Trips and VMT -

Demolition -

Grading -

Vehicle Trips - Recreation/community center trip rate and pass-by trip reduction from Traffic Study

Woodstoves - Wood stoves are not proposed, fireplaces would be gas

Land Use Change -

Sequestration -

Construction Off-road Equipment Mitigation - Construction mitigation per SCAQMD

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

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					
2011	1.45	7.80	9.82	0.02	0.97	0.47	1.44	0.02	0.46	0.48	0.00	1,449.45	1,449.45	0.12	0.00	1,451.98
2012	1.34	7.24	9.24	0.02	0.98	0.43	1.41	0.02	0.42	0.44	0.00	1,440.71	1,440.71	0.11	0.00	1,443.05
2013	1.23	6.68	8.67	0.02	0.98	0.39	1.37	0.02	0.38	0.40	0.00	1,426.80	1,426.80	0.10	0.00	1,428.95
2014	1.13	6.14	8.19	0.02	0.98	0.35	1.33	0.02	0.34	0.36	0.00	1,415.05	1,415.05	0.09	0.00	1,417.03
2015	1.03	5.58	7.73	0.02	0.98	0.32	1.29	0.02	0.31	0.33	0.00	1,400.90	1,400.90	0.09	0.00	1,402.73
2016	0.90	4.80	6.94	0.02	0.92	0.27	1.19	0.01	0.26	0.28	0.00	1,310.49	1,310.49	0.08	0.00	1,312.09
Total	7.08	38.24	50.59	0.12	5.81	2.23	8.03	0.11	2.17	2.29	0.00	8,443.40	8,443.40	0.59	0.00	8,455.83

2.1 Overall Construction

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					
2011	1.45	7.80	9.82	0.02	0.73	0.47	1.20	0.02	0.46	0.48	0.00	1,449.45	1,449.45	0.12	0.00	1,451.98
2012	1.34	7.24	9.24	0.02	0.73	0.43	1.16	0.02	0.42	0.44	0.00	1,440.71	1,440.71	0.11	0.00	1,443.05
2013	1.23	6.68	8.67	0.02	0.73	0.39	1.12	0.02	0.38	0.40	0.00	1,426.80	1,426.80	0.10	0.00	1,428.95
2014	1.13	6.14	8.19	0.02	0.73	0.35	1.08	0.02	0.34	0.36	0.00	1,415.05	1,415.05	0.09	0.00	1,417.03
2015	1.03	5.58	7.73	0.02	0.73	0.32	1.05	0.02	0.31	0.33	0.00	1,400.90	1,400.90	0.09	0.00	1,402.73
2016	0.90	4.80	6.94	0.02	0.69	0.27	0.96	0.01	0.26	0.28	0.00	1,310.49	1,310.49	0.08	0.00	1,312.09
Total	7.08	38.24	50.59	0.12	4.34	2.23	6.57	0.11	2.17	2.29	0.00	8,443.40	8,443.40	0.59	0.00	8,455.83

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	6.27	0.19	16.15	0.01		0.00	0.80		0.00	0.80	79.56	477.28	556.84	0.26	0.01	565.74
Energy	0.11	0.90	0.38	0.01		0.00	0.07		0.00	0.07	0.00	2,043.28	2,043.28	0.07	0.04	2,055.90
Mobile	4.43	10.83	41.03	0.10	10.59	0.58	11.17	0.17	0.56	0.72	0.00	8,199.00	8,199.00	0.32	0.00	8,205.75
Waste						0.00	0.00		0.00	0.00	91.02	0.00	91.02	5.38	0.00	203.98
Water						0.00	0.00		0.00	0.00	0.00	285.26	285.26	1.50	0.04	329.85
Total	10.81	11.92	57.56	0.12	10.59	0.58	12.04	0.17	0.56	1.59	170.58	11,004.82	11,175.40	7.53	0.09	11,361.22

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	3.79	0.13	11.44	0.00		0.00	0.06		0.00	0.06	0.00	18.63	18.63	0.02	0.00	19.01
Energy	0.09	0.79	0.34	0.01		0.00	0.06		0.00	0.06	0.00	1,801.44	1,801.44	0.06	0.03	1,812.57
Mobile	3.42	8.27	30.35	0.07	7.15	0.40	7.54	0.11	0.38	0.50	0.00	5,606.45	5,606.45	0.23	0.00	5,611.21
Waste						0.00	0.00		0.00	0.00	45.51	0.00	45.51	2.69	0.00	101.99
Water						0.00	0.00		0.00	0.00	0.00	228.95	228.95	1.20	0.03	264.62
Total	7.30	9.19	42.13	0.08	7.15	0.40	7.66	0.11	0.38	0.62	45.51	7,655.47	7,700.98	4.20	0.06	7,809.40

3.0 Construction Detail

3.1 Mitigation Measures Construction

- Use DPF for Construction Equipment
- Replace Ground Cover
- Water Exposed Area
- Water Unpaved Roads
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

3.2 Building Construction - 2011

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	0.79	5.23	3.12	0.01		0.36	0.36		0.36	0.36	0.00	476.40	476.40	0.06	0.00	477.75
Total	0.79	5.23	3.12	0.01		0.36	0.36		0.36	0.36	0.00	476.40	476.40	0.06	0.00	477.75

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	0.00	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
Vendor	0.19	2.06	1.30	0.00	0.09	0.07	0.16	0.00	0.07	0.07	0.00	258.24	258.24	0.01	0.00	258.42
Worker	0.46	0.51	5.39	0.01	0.88	0.03	0.91	0.01	0.03	0.04	0.00	714.82	714.82	0.05	0.00	715.82
Total	0.65	2.57	6.69	0.01	0.97	0.10	1.07	0.01	0.10	0.11	0.00	973.06	973.06	0.06	0.00	974.24

3.2 Building Construction - 2011

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	0.79	5.23	3.12	0.01		0.36	0.36		0.36	0.36	0.00	476.40	476.40	0.06	0.00	477.75
Total	0.79	5.23	3.12	0.01		0.36	0.36		0.36	0.36	0.00	476.40	476.40	0.06	0.00	477.75

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	0.00	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
Vendor	0.19	2.06	1.30	0.00	0.07	0.07	0.14	0.00	0.07	0.07	0.00	258.24	258.24	0.01	0.00	258.42
Worker	0.46	0.51	5.39	0.01	0.66	0.03	0.69	0.01	0.03	0.04	0.00	714.82	714.82	0.05	0.00	715.82
Total	0.65	2.57	6.69	0.01	0.73	0.10	0.83	0.01	0.10	0.11	0.00	973.06	973.06	0.06	0.00	974.24

3.2 Building Construction - 2012

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	0.73	4.87	3.10	0.01		0.33	0.33		0.33	0.33	0.00	478.23	478.23	0.06	0.00	479.48
Total	0.73	4.87	3.10	0.01		0.33	0.33		0.33	0.33	0.00	478.23	478.23	0.06	0.00	479.48

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	0.00	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
Vendor	0.17	1.89	1.19	0.00	0.09	0.07	0.16	0.00	0.06	0.06	0.00	259.78	259.78	0.01	0.00	259.94
Worker	0.43	0.47	4.95	0.01	0.89	0.03	0.92	0.01	0.03	0.04	0.00	702.71	702.71	0.04	0.00	703.63
Total	0.60	2.36	6.14	0.01	0.98	0.10	1.08	0.01	0.09	0.10	0.00	962.49	962.49	0.05	0.00	963.57

3.2 Building Construction - 2012

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	0.73	4.87	3.10	0.01		0.33	0.33		0.33	0.33	0.00	478.23	478.23	0.06	0.00	479.48
Total	0.73	4.87	3.10	0.01		0.33	0.33		0.33	0.33	0.00	478.23	478.23	0.06	0.00	479.48

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	0.00	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
Vendor	0.17	1.89	1.19	0.00	0.07	0.07	0.13	0.00	0.06	0.06	0.00	259.78	259.78	0.01	0.00	259.94
Worker	0.43	0.47	4.95	0.01	0.67	0.03	0.70	0.01	0.03	0.04	0.00	702.71	702.71	0.04	0.00	703.63
Total	0.60	2.36	6.14	0.01	0.74	0.10	0.83	0.01	0.09	0.10	0.00	962.49	962.49	0.05	0.00	963.57

3.2 Building Construction - 2013

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	0.67	4.52	3.06	0.01		0.30	0.30		0.30	0.30	0.00	478.23	478.23	0.05	0.00	479.38
Total	0.67	4.52	3.06	0.01		0.30	0.30		0.30	0.30	0.00	478.23	478.23	0.05	0.00	479.38

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	0.00	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
Vendor	0.16	1.73	1.08	0.00	0.09	0.06	0.15	0.00	0.06	0.06	0.00	260.34	260.34	0.01	0.00	260.48
Worker	0.39	0.43	4.53	0.01	0.89	0.03	0.92	0.01	0.03	0.04	0.00	688.24	688.24	0.04	0.00	689.09
Total	0.55	2.16	5.61	0.01	0.98	0.09	1.07	0.01	0.09	0.10	0.00	948.58	948.58	0.05	0.00	949.57

3.2 Building Construction - 2013

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	0.67	4.52	3.06	0.01		0.30	0.30		0.30	0.30	0.00	478.23	478.23	0.05	0.00	479.38
Total	0.67	4.52	3.06	0.01		0.30	0.30		0.30	0.30	0.00	478.23	478.23	0.05	0.00	479.38

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	0.00	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
Vendor	0.16	1.73	1.08	0.00	0.07	0.06	0.13	0.00	0.06	0.06	0.00	260.34	260.34	0.01	0.00	260.48
Worker	0.39	0.43	4.53	0.01	0.67	0.03	0.70	0.01	0.03	0.04	0.00	688.24	688.24	0.04	0.00	689.09
Total	0.55	2.16	5.61	0.01	0.74	0.09	0.83	0.01	0.09	0.10	0.00	948.58	948.58	0.05	0.00	949.57

3.2 Building Construction - 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	0.62	4.18	3.03	0.01		0.26	0.26		0.26	0.26	0.00	478.23	478.23	0.05	0.00	479.28
Total	0.62	4.18	3.03	0.01		0.26	0.26		0.26	0.26	0.00	478.23	478.23	0.05	0.00	479.28

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	0.00	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
Vendor	0.14	1.57	0.99	0.00	0.09	0.05	0.14	0.00	0.05	0.05	0.00	260.81	260.81	0.01	0.00	260.95
Worker	0.36	0.39	4.17	0.01	0.89	0.03	0.92	0.01	0.03	0.04	0.00	676.01	676.01	0.04	0.00	676.80
Total	0.50	1.96	5.16	0.01	0.98	0.08	1.06	0.01	0.08	0.09	0.00	936.82	936.82	0.05	0.00	937.75

3.2 Building Construction - 2014

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	0.62	4.18	3.03	0.01		0.26	0.26		0.26	0.26	0.00	478.23	478.23	0.05	0.00	479.28
Total	0.62	4.18	3.03	0.01		0.26	0.26		0.26	0.26	0.00	478.23	478.23	0.05	0.00	479.28

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	0.00	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
Vendor	0.14	1.57	0.99	0.00	0.07	0.05	0.12	0.00	0.05	0.05	0.00	260.81	260.81	0.01	0.00	260.95
Worker	0.36	0.39	4.17	0.01	0.67	0.03	0.70	0.01	0.03	0.04	0.00	676.01	676.01	0.04	0.00	676.80
Total	0.50	1.96	5.16	0.01	0.74	0.08	0.82	0.01	0.08	0.09	0.00	936.82	936.82	0.05	0.00	937.75

3.2 Building Construction - 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	0.57	3.80	3.00	0.01		0.23	0.23		0.23	0.23	0.00	478.23	478.23	0.05	0.00	479.20
Total	0.57	3.80	3.00	0.01		0.23	0.23		0.23	0.23	0.00	478.23	478.23	0.05	0.00	479.20

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	0.00	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
Vendor	0.13	1.42	0.91	0.00	0.09	0.05	0.14	0.00	0.04	0.05	0.00	261.27	261.27	0.01	0.00	261.39
Worker	0.34	0.35	3.82	0.01	0.89	0.03	0.92	0.01	0.03	0.04	0.00	661.41	661.41	0.04	0.00	662.15
Total	0.47	1.77	4.73	0.01	0.98	0.08	1.06	0.01	0.07	0.09	0.00	922.68	922.68	0.05	0.00	923.54

3.2 Building Construction - 2015

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	0.57	3.80	3.00	0.01		0.23	0.23		0.23	0.23	0.00	478.23	478.23	0.05	0.00	479.20
Total	0.57	3.80	3.00	0.01		0.23	0.23		0.23	0.23	0.00	478.23	478.23	0.05	0.00	479.20

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	0.00	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
Vendor	0.13	1.42	0.91	0.00	0.07	0.05	0.12	0.00	0.04	0.05	0.00	261.27	261.27	0.01	0.00	261.39
Worker	0.34	0.35	3.82	0.01	0.67	0.03	0.70	0.01	0.03	0.04	0.00	661.41	661.41	0.04	0.00	662.15
Total	0.47	1.77	4.73	0.01	0.74	0.08	0.82	0.01	0.07	0.09	0.00	922.68	922.68	0.05	0.00	923.54

3.2 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	0.49	3.26	2.80	0.01		0.19	0.19		0.19	0.19	0.00	450.74	450.74	0.04	0.00	451.58
Total	0.49	3.26	2.80	0.01		0.19	0.19		0.19	0.19	0.00	450.74	450.74	0.04	0.00	451.58

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	0.00	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
Vendor	0.11	1.24	0.79	0.00	0.08	0.04	0.12	0.00	0.04	0.04	0.00	246.86	246.86	0.00	0.00	246.96
Worker	0.30	0.31	3.34	0.01	0.84	0.03	0.87	0.01	0.03	0.04	0.00	612.89	612.89	0.03	0.00	613.55
Total	0.41	1.55	4.13	0.01	0.92	0.07	0.99	0.01	0.07	0.08	0.00	859.75	859.75	0.03	0.00	860.51

3.2 Building Construction - 2016

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	0.49	3.26	2.80	0.01		0.19	0.19		0.19	0.19	0.00	450.74	450.74	0.04	0.00	451.58
Total	0.49	3.26	2.80	0.01		0.19	0.19		0.19	0.19	0.00	450.74	450.74	0.04	0.00	451.58

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	0.00	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
Vendor	0.11	1.24	0.79	0.00	0.06	0.04	0.10	0.00	0.04	0.04	0.00	246.86	246.86	0.00	0.00	246.96
Worker	0.30	0.31	3.34	0.01	0.63	0.03	0.66	0.01	0.03	0.04	0.00	612.89	612.89	0.03	0.00	613.55
Total	0.41	1.55	4.13	0.01	0.69	0.07	0.76	0.01	0.07	0.08	0.00	859.75	859.75	0.03	0.00	860.51

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

- Increase Density
- Improve Walkability Design
- Improve Destination Accessibility
- Increase Transit Accessibility
- Improve Pedestrian Network
- Implement Trip Reduction Program
- Market Commute Trip Reduction Option
- Employee Vanpool/Shuttle
- Provide Riade Sharing Program

	ROG	NOx	CO	SO2	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	3.42	8.27	30.35	0.07	7.15	0.40	7.54	0.11	0.38	0.50	0.00	5,606.45	5,606.45	0.23	0.00	5,611.21
Unmitigated	4.43	10.83	41.03	0.10	10.59	0.58	11.17	0.17	0.56	0.72	0.00	8,199.00	8,199.00	0.32	0.00	8,205.75
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	1,357.44	1,446.32	1226.14	4,500,872	3,037,811

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Condo/Townhouse	3,357.80	2,949.92	2500.84	10,581,597	7,141,926
Recreational Swimming Pool	61.43	28.17	36.09	128,095	78,839
Single Family Housing	1,291.95	1,360.80	1183.95	4,284,308	2,891,644
Total	6,068.62	5,785.21	4,947.02	19,494,872	13,150,221

4.3 Trip Type Information

Land Use	Miles			Trip %		
	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
Apartments Low Rise	12.70	7.00	9.50	40.20	19.20	40.60
Condo/Townhouse	12.70	7.00	9.50	40.20	19.20	40.60
Recreational Swimming Pool	8.90	13.30	7.40	33.00	48.00	19.00
Single Family Housing	12.70	7.00	9.50	40.20	19.20	40.60

5.0 Energy Detail

5.1 Mitigation Measures Energy

Exceed Title 24

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						0.00	0.00		0.00	0.00	0.00	889.47	889.47	0.04	0.02	895.05
Electricity Unmitigated						0.00	0.00		0.00	0.00	0.00	996.34	996.34	0.05	0.02	1,002.58
NaturalGas Mitigated	0.09	0.79	0.34	0.01		0.00	0.06		0.00	0.06	0.00	911.97	911.97	0.02	0.02	917.52
NaturalGas Unmitigated	0.11	0.90	0.38	0.01		0.00	0.07		0.00	0.07	0.00	1,046.95	1,046.95	0.02	0.02	1,053.32
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	tons/yr										MT/yr					
Apartments Low Rise	3.87829e+006	0.02	0.18	0.08	0.00		0.00	0.01		0.00	0.01	0.00	206.96	206.96	0.00	0.00	208.22
Condo/Townhouse	1.01515e+007	0.05	0.47	0.20	0.00		0.00	0.04		0.00	0.04	0.00	541.72	541.72	0.01	0.01	545.02
Recreational Swimming Pool	0	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
Single Family Housing	5.58927e+006	0.03	0.26	0.11	0.00		0.00	0.02		0.00	0.02	0.00	298.26	298.26	0.01	0.01	300.08
Total		0.10	0.91	0.39	0.00		0.00	0.07		0.00	0.07	0.00	1,046.94	1,046.94	0.02	0.02	1,053.32

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	tons/yr										MT/yr					
Apartments Low Rise	3.38006e+006	0.02	0.16	0.07	0.00		0.00	0.01		0.00	0.01	0.00	180.37	180.37	0.00	0.00	181.47
Condo/Townhouse	8.83853e+006	0.05	0.41	0.17	0.00		0.00	0.03		0.00	0.03	0.00	471.66	471.66	0.01	0.01	474.53
Recreational Swimming Pool	0	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
Single Family Housing	4.8711e+006	0.03	0.22	0.10	0.00		0.00	0.02		0.00	0.02	0.00	259.94	259.94	0.00	0.00	261.52
Total		0.10	0.79	0.34	0.00		0.00	0.06		0.00	0.06	0.00	911.97	911.97	0.01	0.01	917.52

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
Apartments Low Rise	719179					209.19	0.01	0.00	210.50
Condo/Townhouse	1.78997e+006					520.65	0.02	0.01	523.91
Recreational Swimming Pool	0					0.00	0.00	0.00	0.00
Single Family Housing	916211					266.50	0.01	0.00	268.17
Total						996.34	0.04	0.01	1,002.58

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
Apartments Low Rise	639737					186.08	0.01	0.00	187.25
Condo/Townhouse	1.5987e+006					465.01	0.02	0.01	467.93
Recreational Swimming Pool	0					0.00	0.00	0.00	0.00
Single Family Housing	819525					238.38	0.01	0.00	239.87
Total						889.47	0.04	0.01	895.05

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
- Use only Natural Gas Hearths
- No Hearths Installed

	ROG	NOx	CO	SO2	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	3.79	0.13	11.44	0.00		0.00	0.06		0.00	0.06	0.00	18.63	18.63	0.02	0.00	19.01
Unmitigated	6.27	0.19	16.15	0.01		0.00	0.80		0.00	0.80	79.56	477.28	556.84	0.26	0.01	565.74
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	0.34					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	3.10					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	2.48	0.06	4.71	0.01		0.00	0.74		0.00	0.74	79.56	458.65	538.21	0.24	0.01	546.73
Landscaping	0.35	0.13	11.44	0.00		0.00	0.06		0.00	0.06	0.00	18.63	18.63	0.02	0.00	19.01
Total	6.27	0.19	16.15	0.01		0.00	0.80		0.00	0.80	79.56	477.28	556.84	0.26	0.01	565.74

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	0.34					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	3.10					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	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
Landscaping	0.35	0.13	11.44	0.00		0.00	0.06		0.00	0.06	0.00	18.63	18.63	0.02	0.00	19.01
Total	3.79	0.13	11.44	0.00		0.00	0.06		0.00	0.06	0.00	18.63	18.63	0.02	0.00	19.01

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
- Turf Reduction
- Use Water Efficient Irrigation System

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr				MT/yr			
Mitigated					228.95	1.20	0.03	264.62
Unmitigated					285.26	1.50	0.04	329.85
Total	NA	NA	NA	NA	NA	NA	NA	NA

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
Apartments Low Rise	13.1611 / 8.29722					76.81	0.41	0.01	88.81
Condo/Townhouse	26.8435 / 16.923					156.66	0.83	0.02	181.14
Recreational Swimming Pool	0.0798432 / 0.0489362					0.46	0.00	0.00	0.53
Single Family Housing	8.79579 / 5.54517					51.33	0.27	0.01	59.36
Total						285.26	1.51	0.04	329.84

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
Apartments Low Rise	10.5289 / 6.77777					61.90	0.32	0.01	71.51
Condo/Townhouse	21.4748 / 14.8774					129.65	0.66	0.02	149.27
Recreational Swimming Pool	0.0638746 / -0.967368					-2.88	0.00	0.00	-2.85
Single Family Housing	7.03663 / 4.1936					40.28	0.22	0.01	46.70
Total						228.95	1.20	0.04	264.63

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
	tons/yr				MT/yr			
Mitigated					45.51	2.69	0.00	101.99
Unmitigated					91.02	5.38	0.00	203.98
Total	NA	NA	NA	NA	NA	NA	NA	NA

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
Apartments Low Rise	92.92					18.86	1.11	0.00	42.27
Condo/Townhouse	189.52					38.47	2.27	0.00	86.22
Recreational Swimming Pool	7.7					1.56	0.09	0.00	3.50
Single Family Housing	158.26					32.13	1.90	0.00	71.99
Total						91.02	5.37	0.00	203.98

8.2 Waste by Land Use

Mitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
Apartments Low Rise	46.46					9.43	0.56	0.00	21.14
Condo/Townhouse	94.76					19.24	1.14	0.00	43.11
Recreational Swimming Pool	3.85					0.78	0.05	0.00	1.75
Single Family Housing	79.13					16.06	0.95	0.00	36.00
Total						45.51	2.70	0.00	102.00

9.0 Vegetation

Serrano Ops Reduced Residential Alt
South Coast AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Recreational Swimming Pool	1.35	1000sqft
Apartments Low Rise	202	Dwelling Unit
Condo/Townhouse	412	Dwelling Unit
Single Family Housing	135	Dwelling Unit

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Utility Company	Southern California Edison
Climate Zone	9	Precipitation Freq (Days)	31		

1.3 User Entered Comments

Project Characteristics -
 Land Use - Recreational uses include community center
 Construction Phase - Construction is modeled separately
 Off-road Equipment -

Trips and VMT -

Demolition -

Grading -

Vehicle Trips - Recreation/community center trip rate and pass-by trip reduction from Traffic Study

Woodstoves - Wood stoves are not proposed, fireplaces would be gas

Land Use Change -

Sequestration -

Construction Off-road Equipment Mitigation - Construction mitigation per SCAQMD

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

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					
2011	11.15	59.89	76.85	0.13	8.28	3.60	11.88	0.12	3.53	3.65	0.00	12,688.26	0.00	1.03	0.00	12,709.89
2012	10.26	55.36	72.06	0.13	8.28	3.29	11.58	0.12	3.24	3.36	0.00	12,560.50	0.00	0.95	0.00	12,580.49
2013	9.42	51.07	67.63	0.13	8.28	2.99	11.27	0.12	2.93	3.05	0.00	12,436.46	0.00	0.88	0.00	12,454.86
2014	8.66	46.97	63.86	0.13	8.28	2.69	10.97	0.12	2.64	2.76	0.00	12,331.66	0.00	0.81	0.00	12,348.65
2015	7.97	42.72	60.31	0.13	8.28	2.42	10.70	0.12	2.37	2.49	0.00	12,205.54	0.00	0.75	0.00	12,221.26
2016	7.38	39.03	57.45	0.13	8.28	2.18	10.46	0.12	2.13	2.25	0.00	12,111.51	0.00	0.69	0.00	12,126.06
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2.1 Overall Construction (Maximum Daily Emission)

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					
2011	11.15	59.89	76.85	0.13	6.22	3.60	9.81	0.12	3.53	3.65	0.00	12,688.26	0.00	1.03	0.00	12,709.89
2012	10.26	55.36	72.06	0.13	6.22	3.29	9.51	0.12	3.24	3.36	0.00	12,560.50	0.00	0.95	0.00	12,580.49
2013	9.42	51.07	67.63	0.13	6.22	2.99	9.20	0.12	2.93	3.05	0.00	12,436.46	0.00	0.88	0.00	12,454.86
2014	8.66	46.97	63.86	0.13	6.22	2.69	8.90	0.12	2.64	2.76	0.00	12,331.66	0.00	0.81	0.00	12,348.65
2015	7.97	42.72	60.31	0.13	6.22	2.42	8.63	0.12	2.37	2.49	0.00	12,205.54	0.00	0.75	0.00	12,221.26
2016	7.38	39.03	57.45	0.13	6.22	2.18	8.39	0.12	2.13	2.25	0.00	12,111.51	0.00	0.69	0.00	12,126.06
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	100.47	4.38	310.66	0.60		0.00	39.95		0.00	39.94	5,285.49	13,594.62		21.03	0.32	19,422.08
Energy	0.58	4.95	2.11	0.03		0.00	0.40		0.00	0.40		6,323.64		0.12	0.12	6,362.12
Mobile	26.79	62.74	245.01	0.64	68.49	3.36	71.85	0.98	3.23	4.21		55,366.43		2.05		55,409.42
Total	127.84	72.07	557.78	1.27	68.49	3.36	112.20	0.98	3.23	44.55	5,285.49	75,284.69		23.20	0.44	81,193.62

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	20.75	0.72	62.73	0.00		0.00	0.34		0.00	0.34	0.00	112.62		0.11	0.00	114.92
Energy	0.50	4.31	1.84	0.03		0.00	0.35		0.00	0.35		5,508.36		0.11	0.10	5,541.88
Mobile	20.93	48.06	177.16	0.44	46.20	2.31	48.51	0.66	2.23	2.88		37,845.10		1.44		37,875.28
Total	42.18	53.09	241.73	0.47	46.20	2.31	49.20	0.66	2.23	3.57	0.00	43,466.08		1.66	0.10	43,532.08

3.0 Construction Detail

3.1 Mitigation Measures Construction

- Use DPF for Construction Equipment
- Replace Ground Cover
- Water Exposed Area
- Water Unpaved Roads
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

3.2 Building Construction - 2011

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	6.11	40.22	24.03	0.04		2.80	2.80		2.80	2.80		4,040.62		0.55		4,052.11
Total	6.11	40.22	24.03	0.04		2.80	2.80		2.80	2.80		4,040.62		0.55		4,052.11

3.2 Building Construction - 2011

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	1.41	15.89	9.37	0.02	0.75	0.56	1.31	0.02	0.52	0.54		2,196.46		0.07		2,197.93
Worker	3.64	3.78	43.45	0.06	7.54	0.24	7.77	0.10	0.22	0.32		6,451.18		0.41		6,459.85
Total	5.05	19.67	52.82	0.08	8.29	0.80	9.08	0.12	0.74	0.86		8,647.64		0.48		8,657.78

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	6.11	40.22	24.03	0.04		2.80	2.80		2.80	2.80	0.00	4,040.62		0.55		4,052.11
Total	6.11	40.22	24.03	0.04		2.80	2.80		2.80	2.80	0.00	4,040.62		0.55		4,052.11

3.2 Building Construction - 2011

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	1.41	15.89	9.37	0.02	0.57	0.56	1.13	0.02	0.52	0.54		2,196.46		0.07		2,197.93
Worker	3.64	3.78	43.45	0.06	5.65	0.24	5.89	0.10	0.22	0.32		6,451.18		0.41		6,459.85
Total	5.05	19.67	52.82	0.08	6.22	0.80	7.02	0.12	0.74	0.86		8,647.64		0.48		8,657.78

3.2 Building Construction - 2012

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	5.63	37.37	23.73	0.04		2.54	2.54		2.54	2.54		4,040.62		0.51		4,051.23
Total	5.63	37.37	23.73	0.04		2.54	2.54		2.54	2.54		4,040.62		0.51		4,051.23

3.2 Building Construction - 2012

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	1.28	14.56	8.47	0.02	0.75	0.51	1.26	0.02	0.47	0.49		2,201.28		0.06		2,202.62
Worker	3.34	3.44	39.85	0.06	7.54	0.24	7.78	0.10	0.23	0.33		6,318.60		0.38		6,326.65
Total	4.62	18.00	48.32	0.08	8.29	0.75	9.04	0.12	0.70	0.82		8,519.88		0.44		8,529.27

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	5.63	37.37	23.73	0.04		2.54	2.54		2.54	2.54	0.00	4,040.62		0.51		4,051.23
Total	5.63	37.37	23.73	0.04		2.54	2.54		2.54	2.54	0.00	4,040.62		0.51		4,051.23

3.2 Building Construction - 2012

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	1.28	14.56	8.47	0.02	0.57	0.51	1.08	0.02	0.47	0.49		2,201.28		0.06		2,202.62
Worker	3.34	3.44	39.85	0.06	5.65	0.24	5.89	0.10	0.23	0.33		6,318.60		0.38		6,326.65
Total	4.62	18.00	48.32	0.08	6.22	0.75	6.97	0.12	0.70	0.82		8,519.88		0.44		8,529.27

3.2 Building Construction - 2013

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	5.17	34.66	23.45	0.04		2.28	2.28		2.28	2.28		4,040.62		0.46		4,050.31
Total	5.17	34.66	23.45	0.04		2.28	2.28		2.28	2.28		4,040.62		0.46		4,050.31

3.2 Building Construction - 2013

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	1.17	13.29	7.63	0.02	0.75	0.46	1.20	0.02	0.42	0.44		2,206.21		0.06		2,207.42
Worker	3.08	3.12	36.55	0.06	7.54	0.25	7.78	0.10	0.23	0.33		6,189.63		0.36		6,197.12
Total	4.25	16.41	44.18	0.08	8.29	0.71	8.98	0.12	0.65	0.77		8,395.84		0.42		8,404.54

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	5.17	34.66	23.45	0.04		2.28	2.28		2.28	2.28	0.00	4,040.62		0.46		4,050.31
Total	5.17	34.66	23.45	0.04		2.28	2.28		2.28	2.28	0.00	4,040.62		0.46		4,050.31

3.2 Building Construction - 2013

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	1.17	13.29	7.63	0.02	0.57	0.46	1.03	0.02	0.42	0.44		2,206.21		0.06		2,207.42
Worker	3.08	3.12	36.55	0.06	5.65	0.25	5.90	0.10	0.23	0.33		6,189.63		0.36		6,197.12
Total	4.25	16.41	44.18	0.08	6.22	0.71	6.93	0.12	0.65	0.77		8,395.84		0.42		8,404.54

3.2 Building Construction - 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	4.74	32.06	23.20	0.04		2.02	2.02		2.02	2.02		4,040.61		0.42		4,049.51
Total	4.74	32.06	23.20	0.04		2.02	2.02		2.02	2.02		4,040.61		0.42		4,049.51

3.2 Building Construction - 2014

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	1.06	12.06	6.97	0.02	0.75	0.41	1.16	0.02	0.38	0.40		2,210.39		0.05		2,211.49
Worker	2.86	2.85	33.69	0.06	7.54	0.25	7.79	0.10	0.23	0.34		6,080.65		0.33		6,087.65
Total	3.92	14.91	40.66	0.08	8.29	0.66	8.95	0.12	0.61	0.74		8,291.04		0.38		8,299.14

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	4.74	32.06	23.20	0.04		2.02	2.02		2.02	2.02	0.00	4,040.61		0.42		4,049.51
Total	4.74	32.06	23.20	0.04		2.02	2.02		2.02	2.02	0.00	4,040.61		0.42		4,049.51

3.2 Building Construction - 2014

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	1.06	12.06	6.97	0.02	0.57	0.41	0.98	0.02	0.38	0.40		2,210.39		0.05		2,211.49
Worker	2.86	2.85	33.69	0.06	5.65	0.25	5.90	0.10	0.23	0.34		6,080.65		0.33		6,087.65
Total	3.92	14.91	40.66	0.08	6.22	0.66	6.88	0.12	0.61	0.74		8,291.04		0.38		8,299.14

3.2 Building Construction - 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	4.34	29.16	22.98	0.04		1.80	1.80		1.80	1.80		4,040.61		0.39		4,048.81
Total	4.34	29.16	22.98	0.04		1.80	1.80		1.80	1.80		4,040.61		0.39		4,048.81

3.2 Building Construction - 2015

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.96	10.97	6.35	0.02	0.75	0.37	1.11	0.02	0.34	0.35		2,214.38		0.05		2,215.37
Worker	2.66	2.59	30.98	0.06	7.54	0.26	7.79	0.10	0.24	0.34		5,950.55		0.31		5,957.08
Total	3.62	13.56	37.33	0.08	8.29	0.63	8.90	0.12	0.58	0.69		8,164.93		0.36		8,172.45

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	4.34	29.16	22.98	0.04		1.80	1.80		1.80	1.80	0.00	4,040.61		0.39		4,048.81
Total	4.34	29.16	22.98	0.04		1.80	1.80		1.80	1.80	0.00	4,040.61		0.39		4,048.81

3.2 Building Construction - 2015

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.96	10.97	6.35	0.02	0.57	0.37	0.93	0.02	0.34	0.35		2,214.38		0.05		2,215.37
Worker	2.66	2.59	30.98	0.06	5.65	0.26	5.91	0.10	0.24	0.34		5,950.55		0.31		5,957.08
Total	3.62	13.56	37.33	0.08	6.22	0.63	6.84	0.12	0.58	0.69		8,164.93		0.36		8,172.45

3.2 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	lb/day										lb/day					
Off-Road	3.99	26.52	22.80	0.04		1.58	1.58		1.58	1.58		4,040.61		0.36		4,048.10
Total	3.99	26.52	22.80	0.04		1.58	1.58		1.58	1.58		4,040.61		0.36		4,048.10

3.2 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	lb/day										lb/day					
Hauling	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
Vendor	0.88	10.13	5.86	0.02	0.75	0.33	1.07	0.02	0.30	0.32		2,220.00		0.04		2,220.91
Worker	2.51	2.38	28.79	0.06	7.54	0.26	7.80	0.10	0.24	0.34		5,850.89		0.29		5,857.05
Total	3.39	12.51	34.65	0.08	8.29	0.59	8.87	0.12	0.54	0.66		8,070.89		0.33		8,077.96

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	3.99	26.52	22.80	0.04		1.58	1.58		1.58	1.58	0.00	4,040.61		0.36		4,048.10
Total	3.99	26.52	22.80	0.04		1.58	1.58		1.58	1.58	0.00	4,040.61		0.36		4,048.10

3.2 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	lb/day										lb/day					
Hauling	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
Vendor	0.88	10.13	5.86	0.02	0.57	0.33	0.90	0.02	0.30	0.32		2,220.00		0.04		2,220.91
Worker	2.51	2.38	28.79	0.06	5.65	0.26	5.91	0.10	0.24	0.34		5,850.89		0.29		5,857.05
Total	3.39	12.51	34.65	0.08	6.22	0.59	6.81	0.12	0.54	0.66		8,070.89		0.33		8,077.96

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

- Increase Density
- Improve Walkability Design
- Improve Destination Accessibility
- Increase Transit Accessibility
- Improve Pedestrian Network
- Implement Trip Reduction Program
- Market Commute Trip Reduction Option
- Employee Vanpool/Shuttle

Provide Riade Sharing Program

	ROG	NOx	CO	SO2	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	20.93	48.06	177.16	0.44	46.20	2.31	48.51	0.66	2.23	2.88		37,845.10		1.44		37,875.28
Unmitigated	26.79	62.74	245.01	0.64	68.49	3.36	71.85	0.98	3.23	4.21		55,366.43		2.05		55,409.42
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	1,357.44	1,446.32	1226.14	4,500,872	3,037,811
Condo/Townhouse	3,357.80	2,949.92	2500.84	10,581,597	7,141,926
Recreational Swimming Pool	61.43	28.17	36.09	128,095	78,839
Single Family Housing	1,291.95	1,360.80	1183.95	4,284,308	2,891,644
Total	6,068.62	5,785.21	4,947.02	19,494,872	13,150,221

4.3 Trip Type Information

Land Use	Miles			Trip %		
	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
Apartments Low Rise	12.70	7.00	9.50	40.20	19.20	40.60

Land Use	Miles			Trip %		
	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
Condo/Townhouse	12.70	7.00	9.50	40.20	19.20	40.60
Recreational Swimming Pool	8.90	13.30	7.40	33.00	48.00	19.00
Single Family Housing	12.70	7.00	9.50	40.20	19.20	40.60

5.0 Energy Detail

5.1 Mitigation Measures Energy

Exceed Title 24

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	lb/day										lb/day					
NaturalGas Mitigated	0.50	4.31	1.84	0.03		0.00	0.35		0.00	0.35		5,508.36		0.11	0.10	5,541.88
NaturalGas Unmitigated	0.58	4.95	2.11	0.03		0.00	0.40		0.00	0.40		6,323.64		0.12	0.12	6,362.12
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	lb/day										lb/day					
Apartments Low Rise	10625.5	0.11	0.98	0.42	0.01		0.00	0.08		0.00	0.08		1,250.05		0.02	0.02	1,257.66
Condo/Townhouse	27812.4	0.30	2.56	1.09	0.02		0.00	0.21		0.00	0.21		3,272.04		0.06	0.06	3,291.96
Recreational Swimming Pool	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Single Family Housing	15313.1	0.17	1.41	0.60	0.01		0.00	0.11		0.00	0.11		1,801.54		0.03	0.03	1,812.50
Total		0.58	4.95	2.11	0.04		0.00	0.40		0.00	0.40		6,323.63		0.11	0.11	6,362.12

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	lb/day										lb/day					
Apartments Low Rise	9.26043	0.10	0.85	0.36	0.01		0.00	0.07		0.00	0.07		1,089.46		0.02	0.02	1,096.09
Condo/Townhouse	24.2151	0.26	2.23	0.95	0.01		0.00	0.18		0.00	0.18		2,848.84		0.05	0.05	2,866.18
Recreational Swimming Pool	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Single Family Housing	13.3455	0.14	1.23	0.52	0.01		0.00	0.10		0.00	0.10		1,570.06		0.03	0.03	1,579.61
Total		0.50	4.31	1.83	0.03		0.00	0.35		0.00	0.35		5,508.36		0.10	0.10	5,541.88

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

Use only Natural Gas Hearths

No Hearths Installed

	ROG	NOx	CO	SO2	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	20.75	0.72	62.73	0.00		0.00	0.34		0.00	0.34	0.00	112.62		0.11	0.00	114.92
Unmitigated	100.47	4.38	310.66	0.60		0.00	39.95		0.00	39.94	5,285.49	13,594.62		21.03	0.32	19,422.08
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	1.84					0.00	0.00		0.00	0.00							0.00
Consumer Products	17.00					0.00	0.00		0.00	0.00							0.00
Hearth	79.72	3.66	247.93	0.60		0.00	39.61		0.00	39.60	5,285.49	13,482.00		20.92	0.32		19,307.15
Landscaping	1.91	0.72	62.73	0.00		0.00	0.34		0.00	0.34		112.62		0.11			114.92
Total	100.47	4.38	310.66	0.60		0.00	39.95		0.00	39.94	5,285.49	13,594.62		21.03	0.32		19,422.07

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	1.84					0.00	0.00		0.00	0.00							0.00
Consumer Products	17.00					0.00	0.00		0.00	0.00							0.00
Hearth	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
Landscaping	1.91	0.72	62.73	0.00		0.00	0.34		0.00	0.34		112.62		0.11			114.92
Total	20.75	0.72	62.73	0.00		0.00	0.34		0.00	0.34	0.00	112.62		0.11	0.00		114.92

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

Turf Reduction

Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Vegetation

Serrano Ops Reduced Residential Alt
South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Recreational Swimming Pool	1.35	1000sqft
Apartments Low Rise	202	Dwelling Unit
Condo/Townhouse	412	Dwelling Unit
Single Family Housing	135	Dwelling Unit

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Utility Company	Southern California Edison
Climate Zone	9	Precipitation Freq (Days)	31		

1.3 User Entered Comments

Project Characteristics -
 Land Use - Recreational uses include community center
 Construction Phase - Construction is modeled separately
 Off-road Equipment -

Trips and VMT -

Demolition -

Grading -

Vehicle Trips - Recreation/community center trip rate and pass-by trip reduction from Traffic Study

Woodstoves - Wood stoves are not proposed, fireplaces would be gas

Land Use Change -

Sequestration -

Construction Off-road Equipment Mitigation - Construction mitigation per SCAQMD

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

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					
2011	11.44	61.25	74.77	0.12	8.28	3.61	11.89	0.12	3.54	3.66	0.00	12,116.62	0.00	1.01	0.00	12,137.93
2012	10.52	56.56	70.13	0.12	8.28	3.30	11.59	0.12	3.25	3.37	0.00	11,998.54	0.00	0.94	0.00	12,018.23
2013	9.67	52.12	65.85	0.12	8.28	2.99	11.28	0.12	2.94	3.06	0.00	11,883.74	0.00	0.86	0.00	11,901.82
2014	8.88	47.88	62.18	0.12	8.28	2.69	10.98	0.12	2.64	2.76	0.00	11,786.77	0.00	0.79	0.00	11,803.45
2015	8.18	43.51	58.75	0.12	8.28	2.42	10.71	0.12	2.38	2.50	0.00	11,670.04	0.00	0.73	0.00	11,685.45
2016	7.58	39.71	55.97	0.12	8.28	2.18	10.46	0.12	2.14	2.26	0.00	11,583.63	0.00	0.68	0.00	11,597.88
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2.1 Overall Construction (Maximum Daily Emission)

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					
2011	11.44	61.25	74.77	0.12	6.22	3.61	9.83	0.12	3.54	3.66	0.00	12,116.62	0.00	1.01	0.00	12,137.93
2012	10.52	56.56	70.13	0.12	6.22	3.30	9.52	0.12	3.25	3.37	0.00	11,998.54	0.00	0.94	0.00	12,018.23
2013	9.67	52.12	65.85	0.12	6.22	2.99	9.21	0.12	2.94	3.06	0.00	11,883.74	0.00	0.86	0.00	11,901.82
2014	8.88	47.88	62.18	0.12	6.22	2.69	8.91	0.12	2.64	2.76	0.00	11,786.77	0.00	0.79	0.00	11,803.45
2015	8.18	43.51	58.75	0.12	6.22	2.42	8.64	0.12	2.38	2.50	0.00	11,670.04	0.00	0.73	0.00	11,685.45
2016	7.58	39.71	55.97	0.12	6.22	2.18	8.40	0.12	2.14	2.26	0.00	11,583.63	0.00	0.68	0.00	11,597.88
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	100.47	4.38	310.66	0.60		0.00	39.95		0.00	39.94	5,285.49	13,594.62		21.03	0.32	19,422.08
Energy	0.58	4.95	2.11	0.03		0.00	0.40		0.00	0.40		6,323.64		0.12	0.12	6,362.12
Mobile	27.62	66.46	235.84	0.60	68.49	3.38	71.87	0.98	3.25	4.23		51,532.27		2.09		51,576.07
Total	128.67	75.79	548.61	1.23	68.49	3.38	112.22	0.98	3.25	44.57	5,285.49	71,450.53		23.24	0.44	77,360.27

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	20.75	0.72	62.73	0.00		0.00	0.34		0.00	0.34	0.00	112.62		0.11	0.00	114.92
Energy	0.50	4.31	1.84	0.03		0.00	0.35		0.00	0.35		5,508.36		0.11	0.10	5,541.88
Mobile	21.26	50.29	175.57	0.41	46.20	2.34	48.53	0.66	2.25	2.91		35,229.56		1.48		35,260.55
Total	42.51	55.32	240.14	0.44	46.20	2.34	49.22	0.66	2.25	3.60	0.00	40,850.54		1.70	0.10	40,917.35

3.0 Construction Detail

3.1 Mitigation Measures Construction

- Use DPF for Construction Equipment
- Replace Ground Cover
- Water Exposed Area
- Water Unpaved Roads
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

3.2 Building Construction - 2011

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	6.11	40.22	24.03	0.04		2.80	2.80		2.80	2.80		4,040.62		0.55		4,052.11
Total	6.11	40.22	24.03	0.04		2.80	2.80		2.80	2.80		4,040.62		0.55		4,052.11

3.2 Building Construction - 2011

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	1.48	16.69	10.35	0.02	0.75	0.57	1.32	0.02	0.53	0.55		2,180.15		0.07		2,181.68
Worker	3.86	4.34	40.39	0.06	7.54	0.24	7.77	0.10	0.22	0.32		5,895.85		0.39		5,904.13
Total	5.34	21.03	50.74	0.08	8.29	0.81	9.09	0.12	0.75	0.87		8,076.00		0.46		8,085.81

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	6.11	40.22	24.03	0.04		2.80	2.80		2.80	2.80	0.00	4,040.62		0.55		4,052.11
Total	6.11	40.22	24.03	0.04		2.80	2.80		2.80	2.80	0.00	4,040.62		0.55		4,052.11

3.2 Building Construction - 2011

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	1.48	16.69	10.35	0.02	0.57	0.57	1.14	0.02	0.53	0.55		2,180.15		0.07		2,181.68
Worker	3.86	4.34	40.39	0.06	5.65	0.24	5.89	0.10	0.22	0.32		5,895.85		0.39		5,904.13
Total	5.34	21.03	50.74	0.08	6.22	0.81	7.03	0.12	0.75	0.87		8,076.00		0.46		8,085.81

3.2 Building Construction - 2012

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	5.63	37.37	23.73	0.04		2.54	2.54		2.54	2.54		4,040.62		0.51		4,051.23
Total	5.63	37.37	23.73	0.04		2.54	2.54		2.54	2.54		4,040.62		0.51		4,051.23

3.2 Building Construction - 2012

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	1.35	15.25	9.45	0.02	0.75	0.52	1.27	0.02	0.48	0.50		2,184.51		0.07		2,185.91
Worker	3.55	3.95	36.94	0.06	7.54	0.24	7.78	0.10	0.23	0.33		5,773.41		0.37		5,781.09
Total	4.90	19.20	46.39	0.08	8.29	0.76	9.05	0.12	0.71	0.83		7,957.92		0.44		7,967.00

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	5.63	37.37	23.73	0.04		2.54	2.54		2.54	2.54	0.00	4,040.62		0.51		4,051.23
Total	5.63	37.37	23.73	0.04		2.54	2.54		2.54	2.54	0.00	4,040.62		0.51		4,051.23

3.2 Building Construction - 2012

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	1.35	15.25	9.45	0.02	0.57	0.52	1.09	0.02	0.48	0.50		2,184.51		0.07		2,185.91
Worker	3.55	3.95	36.94	0.06	5.65	0.24	5.89	0.10	0.23	0.33		5,773.41		0.37		5,781.09
Total	4.90	19.20	46.39	0.08	6.22	0.76	6.98	0.12	0.71	0.83		7,957.92		0.44		7,967.00

3.2 Building Construction - 2013

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	5.17	34.66	23.45	0.04		2.28	2.28		2.28	2.28		4,040.62		0.46		4,050.31
Total	5.17	34.66	23.45	0.04		2.28	2.28		2.28	2.28		4,040.62		0.46		4,050.31

3.2 Building Construction - 2013

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	1.22	13.87	8.61	0.02	0.75	0.47	1.21	0.02	0.43	0.45		2,188.96		0.06		2,190.23
Worker	3.27	3.59	33.78	0.06	7.54	0.25	7.78	0.10	0.23	0.33		5,654.17		0.34		5,661.28
Total	4.49	17.46	42.39	0.08	8.29	0.72	8.99	0.12	0.66	0.78		7,843.13		0.40		7,851.51

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	5.17	34.66	23.45	0.04		2.28	2.28		2.28	2.28	0.00	4,040.62		0.46		4,050.31
Total	5.17	34.66	23.45	0.04		2.28	2.28		2.28	2.28	0.00	4,040.62		0.46		4,050.31

3.2 Building Construction - 2013

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	1.22	13.87	8.61	0.02	0.57	0.47	1.04	0.02	0.43	0.45		2,188.96		0.06		2,190.23
Worker	3.27	3.59	33.78	0.06	5.65	0.25	5.90	0.10	0.23	0.33		5,654.17		0.34		5,661.28
Total	4.49	17.46	42.39	0.08	6.22	0.72	6.94	0.12	0.66	0.78		7,843.13		0.40		7,851.51

3.2 Building Construction - 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	4.74	32.06	23.20	0.04		2.02	2.02		2.02	2.02		4,040.61		0.42		4,049.51
Total	4.74	32.06	23.20	0.04		2.02	2.02		2.02	2.02		4,040.61		0.42		4,049.51

3.2 Building Construction - 2014

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	1.11	12.55	7.93	0.02	0.75	0.42	1.16	0.02	0.38	0.40		2,192.76		0.05		2,193.91
Worker	3.03	3.27	31.05	0.06	7.54	0.25	7.79	0.10	0.23	0.34		5,553.40		0.32		5,560.03
Total	4.14	15.82	38.98	0.08	8.29	0.67	8.95	0.12	0.61	0.74		7,746.16		0.37		7,753.94

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	4.74	32.06	23.20	0.04		2.02	2.02		2.02	2.02	0.00	4,040.61		0.42		4,049.51
Total	4.74	32.06	23.20	0.04		2.02	2.02		2.02	2.02	0.00	4,040.61		0.42		4,049.51

3.2 Building Construction - 2014

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	1.11	12.55	7.93	0.02	0.57	0.42	0.98	0.02	0.38	0.40		2,192.76		0.05		2,193.91
Worker	3.03	3.27	31.05	0.06	5.65	0.25	5.90	0.10	0.23	0.34		5,553.40		0.32		5,560.03
Total	4.14	15.82	38.98	0.08	6.22	0.67	6.88	0.12	0.61	0.74		7,746.16		0.37		7,753.94

3.2 Building Construction - 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	4.34	29.16	22.98	0.04		1.80	1.80		1.80	1.80		4,040.61		0.39		4,048.81
Total	4.34	29.16	22.98	0.04		1.80	1.80		1.80	1.80		4,040.61		0.39		4,048.81

3.2 Building Construction - 2015

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	1.01	11.37	7.31	0.02	0.75	0.37	1.12	0.02	0.34	0.36		2,196.34		0.05		2,197.38
Worker	2.82	2.98	28.46	0.06	7.54	0.26	7.79	0.10	0.24	0.34		5,433.09		0.29		5,439.25
Total	3.83	14.35	35.77	0.08	8.29	0.63	8.91	0.12	0.58	0.70		7,629.43		0.34		7,636.63

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	4.34	29.16	22.98	0.04		1.80	1.80		1.80	1.80	0.00	4,040.61		0.39		4,048.81
Total	4.34	29.16	22.98	0.04		1.80	1.80		1.80	1.80	0.00	4,040.61		0.39		4,048.81

3.2 Building Construction - 2015

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	1.01	11.37	7.31	0.02	0.57	0.37	0.94	0.02	0.34	0.36		2,196.34		0.05		2,197.38
Worker	2.82	2.98	28.46	0.06	5.65	0.26	5.91	0.10	0.24	0.34		5,433.09		0.29		5,439.25
Total	3.83	14.35	35.77	0.08	6.22	0.63	6.85	0.12	0.58	0.70		7,629.43		0.34		7,636.63

3.2 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	lb/day										lb/day					
Off-Road	3.99	26.52	22.80	0.04		1.58	1.58		1.58	1.58		4,040.61		0.36		4,048.10
Total	3.99	26.52	22.80	0.04		1.58	1.58		1.58	1.58		4,040.61		0.36		4,048.10

3.2 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	lb/day										lb/day					
Hauling	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
Vendor	0.93	10.46	6.81	0.02	0.75	0.34	1.08	0.02	0.31	0.33		2,201.57		0.05		2,202.52
Worker	2.66	2.73	26.36	0.06	7.54	0.26	7.80	0.10	0.24	0.34		5,341.44		0.28		5,347.25
Total	3.59	13.19	33.17	0.08	8.29	0.60	8.88	0.12	0.55	0.67		7,543.01		0.33		7,549.77

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	3.99	26.52	22.80	0.04		1.58	1.58		1.58	1.58	0.00	4,040.61		0.36		4,048.10
Total	3.99	26.52	22.80	0.04		1.58	1.58		1.58	1.58	0.00	4,040.61		0.36		4,048.10

3.2 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	lb/day										lb/day					
Hauling	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
Vendor	0.93	10.46	6.81	0.02	0.57	0.34	0.90	0.02	0.31	0.33		2,201.57		0.05		2,202.52
Worker	2.66	2.73	26.36	0.06	5.65	0.26	5.91	0.10	0.24	0.34		5,341.44		0.28		5,347.25
Total	3.59	13.19	33.17	0.08	6.22	0.60	6.81	0.12	0.55	0.67		7,543.01		0.33		7,549.77

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

- Increase Density
- Improve Walkability Design
- Improve Destination Accessibility
- Increase Transit Accessibility
- Improve Pedestrian Network
- Implement Trip Reduction Program
- Market Commute Trip Reduction Option
- Employee Vanpool/Shuttle

Provide Riade Sharing Program

	ROG	NOx	CO	SO2	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	21.26	50.29	175.57	0.41	46.20	2.34	48.53	0.66	2.25	2.91		35,229.56		1.48		35,260.55
Unmitigated	27.62	66.46	235.84	0.60	68.49	3.38	71.87	0.98	3.25	4.23		51,532.27		2.09		51,576.07
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	1,357.44	1,446.32	1226.14	4,500,872	3,037,811
Condo/Townhouse	3,357.80	2,949.92	2500.84	10,581,597	7,141,926
Recreational Swimming Pool	61.43	28.17	36.09	128,095	78,839
Single Family Housing	1,291.95	1,360.80	1183.95	4,284,308	2,891,644
Total	6,068.62	5,785.21	4,947.02	19,494,872	13,150,221

4.3 Trip Type Information

Land Use	Miles			Trip %		
	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
Apartments Low Rise	12.70	7.00	9.50	40.20	19.20	40.60

Land Use	Miles			Trip %		
	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
Condo/Townhouse	12.70	7.00	9.50	40.20	19.20	40.60
Recreational Swimming Pool	8.90	13.30	7.40	33.00	48.00	19.00
Single Family Housing	12.70	7.00	9.50	40.20	19.20	40.60

5.0 Energy Detail

5.1 Mitigation Measures Energy

Exceed Title 24

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	lb/day										lb/day					
NaturalGas Mitigated	0.50	4.31	1.84	0.03		0.00	0.35		0.00	0.35		5,508.36		0.11	0.10	5,541.88
NaturalGas Unmitigated	0.58	4.95	2.11	0.03		0.00	0.40		0.00	0.40		6,323.64		0.12	0.12	6,362.12
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	lb/day										lb/day					
Apartments Low Rise	10625.5	0.11	0.98	0.42	0.01		0.00	0.08		0.00	0.08		1,250.05		0.02	0.02	1,257.66
Condo/Townhouse	27812.4	0.30	2.56	1.09	0.02		0.00	0.21		0.00	0.21		3,272.04		0.06	0.06	3,291.96
Recreational Swimming Pool	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Single Family Housing	15313.1	0.17	1.41	0.60	0.01		0.00	0.11		0.00	0.11		1,801.54		0.03	0.03	1,812.50
Total		0.58	4.95	2.11	0.04		0.00	0.40		0.00	0.40		6,323.63		0.11	0.11	6,362.12

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	lb/day										lb/day					
Apartments Low Rise	9.26043	0.10	0.85	0.36	0.01		0.00	0.07		0.00	0.07		1,089.46		0.02	0.02	1,096.09
Condo/Townhouse	24.2151	0.26	2.23	0.95	0.01		0.00	0.18		0.00	0.18		2,848.84		0.05	0.05	2,866.18
Recreational Swimming Pool	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Single Family Housing	13.3455	0.14	1.23	0.52	0.01		0.00	0.10		0.00	0.10		1,570.06		0.03	0.03	1,579.61
Total		0.50	4.31	1.83	0.03		0.00	0.35		0.00	0.35		5,508.36		0.10	0.10	5,541.88

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

Use only Natural Gas Hearths

No Hearths Installed

	ROG	NOx	CO	SO2	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	20.75	0.72	62.73	0.00		0.00	0.34		0.00	0.34	0.00	112.62		0.11	0.00	114.92
Unmitigated	100.47	4.38	310.66	0.60		0.00	39.95		0.00	39.94	5,285.49	13,594.62		21.03	0.32	19,422.08
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	1.84					0.00	0.00		0.00	0.00						0.00
Consumer Products	17.00					0.00	0.00		0.00	0.00						0.00
Hearth	79.72	3.66	247.93	0.60		0.00	39.61		0.00	39.60	5,285.49	13,482.00		20.92	0.32	19,307.15
Landscaping	1.91	0.72	62.73	0.00		0.00	0.34		0.00	0.34		112.62		0.11		114.92
Total	100.47	4.38	310.66	0.60		0.00	39.95		0.00	39.94	5,285.49	13,594.62		21.03	0.32	19,422.07

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	1.84					0.00	0.00		0.00	0.00						0.00
Consumer Products	17.00					0.00	0.00		0.00	0.00						0.00
Hearth	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
Landscaping	1.91	0.72	62.73	0.00		0.00	0.34		0.00	0.34		112.62		0.11		114.92
Total	20.75	0.72	62.73	0.00		0.00	0.34		0.00	0.34	0.00	112.62		0.11	0.00	114.92

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
- Turf Reduction
- Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

- Institute Recycling and Composting Services

9.0 Vegetation
