

Appendix D

Northside Specific Plan – CalEEMod Model Results

Northside Specific Plan - Baseline Operation - South Coast AQMD Air District, Annual

Northside Specific Plan - Baseline Operation

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	1,543.56	1000sqft	35.44	1,543,560.00	0
Office Park	23,521.44	1000sqft	539.98	23,521,400.00	0
Elementary School	2,447.17	1000sqft	56.18	2,447,170.00	0
General Light Industry	6,300.00	1000sqft	144.63	6,300,000.00	0
Industrial Park	78.40	1000sqft	1.80	78,400.00	0
User Defined Recreational	214.10	User Defined Unit	214.10	9,326,196.00	0
Apartments Low Rise	4,921.00	Dwelling Unit	307.56	4,921,000.00	14074
Apartments Mid Rise	469.00	Dwelling Unit	12.34	469,000.00	1341
Apartments Mid Rise	566.00	Dwelling Unit	14.89	566,000.00	1619
Single Family Housing	7.00	Dwelling Unit	2.27	12,600.00	20
Single Family Housing	6.00	Dwelling Unit	1.95	10,800.00	17
Regional Shopping Center	1,688.32	1000sqft	38.76	1,688,320.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10			Operational Year	2040
Utility Company	Riverside Public Utilities				
CO2 Intensity (lb/MW hr)	595.8	CH4 Intensity (lb/MW hr)	0.013	N2O Intensity (lb/MW hr)	0.003

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1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.0 Project Characteristics. Operational year 2040. GHG intensity factors adjusted for RPS assuming 60% renewables by December 31, 2030.

Land Use - Per Rick Engineering Traffic Impact Analysis (October 14, 2019). Baseline without project at year 2040 buildout of existing plan.

Construction Phase - Operation analysis only

Off-road Equipment - Operation analysis only

Off-road Equipment - Operation analysis only

Trips and VMT - Operation analysis only

On-road Fugitive Dust - Operation analysis only

Demolition - Operation analysis only

Grading - Operation analysis only

Architectural Coating - Operation analysis only

Vehicle Trips - Trip rates based on Rick Engineering Traffic Analysis, January 2020.1.49. Weekend trips conservatively assumed equal to weekday trips.

Vehicle Emission Factors - CalEEMod default values for 2040.

Vehicle Emission Factors - CalEEMod default values for 2040.

Vehicle Emission Factors - CalEEMod default values for 2040.

Road Dust - CalEEMod default values.

Woodstoves - CalEEMod default values.

Consumer Products - CalEEMod default values.

Area Coating - CalEEMod default values.

Landscape Equipment - CalEEMod default values.

Energy Use - CalEEMod default values.

Water And Wastewater - CalEEMod default values.

Solid Waste - CalEEMod default values.

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - No area source mitigation.

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Energy Mitigation - No energy mitigation.

Water Mitigation - No water mitigation.

Waste Mitigation - No solid waste mitigation.

Operational Off-Road Equipment -

Construction Off-road Equipment Mitigation - Operational analysis only

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	155,000.00	1.00
tblConstructionPhase	PhaseEndDate	2/15/2614	1/1/2020
tblLandUse	LandUseSquareFeet	0.00	9,326,196.00
tblLandUse	LotAcreage	0.00	214.10
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.013
tblProjectCharacteristics	CO2IntensityFactor	1325.65	595.8
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.003
tblTripsAndVMT	VendorTripNumber	7,998.00	0.00
tblTripsAndVMT	WorkerTripNumber	20,478.00	0.00
tblVehicleTrips	ST_TR	7.16	1.49
tblVehicleTrips	ST_TR	6.39	1.11
tblVehicleTrips	ST_TR	0.00	4.07
tblVehicleTrips	ST_TR	1.32	1.01
tblVehicleTrips	ST_TR	2.46	2.25
tblVehicleTrips	ST_TR	2.49	0.61
tblVehicleTrips	ST_TR	1.64	2.39

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tblVehicleTrips	ST_TR	49.97	7.68
tblVehicleTrips	ST_TR	9.91	1.92
tblVehicleTrips	SU_TR	6.07	1.49
tblVehicleTrips	SU_TR	5.86	1.11
tblVehicleTrips	SU_TR	0.00	4.07
tblVehicleTrips	SU_TR	0.68	1.01
tblVehicleTrips	SU_TR	1.05	2.25
tblVehicleTrips	SU_TR	0.73	0.61
tblVehicleTrips	SU_TR	0.76	2.39
tblVehicleTrips	SU_TR	25.24	7.68
tblVehicleTrips	SU_TR	8.62	1.92
tblVehicleTrips	WD_TR	6.59	1.49
tblVehicleTrips	WD_TR	6.65	1.11
tblVehicleTrips	WD_TR	15.43	4.07
tblVehicleTrips	WD_TR	6.97	1.01
tblVehicleTrips	WD_TR	11.03	2.25
tblVehicleTrips	WD_TR	6.83	0.61
tblVehicleTrips	WD_TR	11.42	2.39
tblVehicleTrips	WD_TR	42.70	7.68
tblVehicleTrips	WD_TR	9.52	1.92

2.0 Emissions Summary

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2.1 Overall Construction

Unmitigated Construction

[illegible]

Mitigated Construction

[illegible][illegible]

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

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	231.4135	2.5314	106.3461	0.1171		7.0432	7.0432		7.0432	7.0432	745.3392	1,533.7253	2,279.0645	2.3207	0.0506	2,352.1584
Energy	2.1382	19.1664	14.3360	0.1166		1.4773	1.4773		1.4773	1.4773	0.0000	123,971.7175	123,971.7175	2.6489	0.9056	124,307.8148
Mobile	14.0245	101.5794	188.1585	1.1107	121.9632	0.4525	122.4157	32.6720	0.4212	33.0932	0.0000	103,737.4598	103,737.4598	3.7862	0.0000	103,832.1150
Waste						0.0000	0.0000		0.0000	0.0000	7,902.1581	0.0000	7,902.1581	467.0042	0.0000	19,577.2621
Water						0.0000	0.0000		0.0000	0.0000	2,066.8509	32,637.3478	34,704.1988	212.9975	5.1769	41,571.8402
Total	247.5762	123.2771	308.8405	1.3444	121.9632	8.9729	130.9362	32.6720	8.9416	41.6136	10,714.3482	261,880.2504	272,594.5986	688.7575	6.1331	291,641.1904

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2.2 Overall Operational**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	231.4135	2.5314	106.3461	0.1171		7.0432	7.0432		7.0432	7.0432	745.3392	1,533.7253	2,279.0645	2.3207	0.0506	2,352.1584
Energy	2.1382	19.1664	14.3360	0.1166		1.4773	1.4773		1.4773	1.4773	0.0000	123,971.7175	123,971.7175	2.6489	0.9056	124,307.8148
Mobile	14.0245	101.5794	188.1585	1.1107	121.9632	0.4525	122.4157	32.6720	0.4212	33.0932	0.0000	103,737.4598	103,737.4598	3.7862	0.0000	103,832.1150
Waste						0.0000	0.0000		0.0000	0.0000	7,902.1581	0.0000	7,902.1581	467.0042	0.0000	19,577.2621
Water						0.0000	0.0000		0.0000	0.0000	2,066.8509	32,637.3478	34,704.1988	212.9975	5.1769	41,571.8402
Total	247.5762	123.2771	308.8405	1.3444	121.9632	8.9729	130.9362	32.6720	8.9416	41.6136	10,714.3482	261,880.2504	272,594.5986	688.7575	6.1331	291,641.1904

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	1/1/2020	1/1/2020	5	1	

Acres of Grading (Site Preparation Phase): 0

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Acres of Grading (Grading Phase): 0**Acres of Paving: 0****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	0	7.00	231	0.29
Building Construction	Forklifts	0	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction	Welders	0	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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3.2 Building Construction - 2020

Unmitigated Construction On-Site

[illegible]

Unmitigated Construction Off-Site

[illegible]

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3.2 Building Construction - 2020**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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.0 Operational Detail - Mobile

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4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	14.0245	101.5794	188.1585	1.1107	121.9632	0.4525	122.4157	32.6720	0.4212	33.0932	0.0000	103,737.4598	103,737.4598	3.7862	0.0000	103,832.1150
Unmitigated	14.0245	101.5794	188.1585	1.1107	121.9632	0.4525	122.4157	32.6720	0.4212	33.0932	0.0000	103,737.4598	103,737.4598	3.7862	0.0000	103,832.1150

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	7,332.29	7,332.29	7332.29	25,055,549	25,055,549
Apartments Mid Rise	520.59	520.59	520.59	1,778,935	1,778,935
Apartments Mid Rise	628.26	628.26	628.26	2,146,860	2,146,860
Elementary School	9,959.98	9,959.98	9959.98	34,325,921	34,325,921
General Light Industry	6,363.00	6,363.00	6363.00	28,177,130	28,177,130
General Office Building	3,473.01	3,473.01	3473.01	11,188,166	11,188,166
Industrial Park	47.82	47.82	47.82	190,191	190,191
Office Park	56,216.24	56,216.24	56216.24	189,935,046	189,935,046
Regional Shopping Center	12,966.30	12,966.30	12966.30	28,044,078	28,044,078
Single Family Housing	13.44	13.44	13.44	45,927	45,927
Single Family Housing	11.52	11.52	11.52	39,366	39,366
User Defined Recreational	0.00	0.00	0.00		
Total	97,532.46	97,532.46	97,532.46	320,927,167	320,927,167

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4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Elementary School	16.60	8.40	6.90	65.00	30.00	5.00	63	25	12
General Light Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Industrial Park	16.60	8.40	6.90	59.00	28.00	13.00	79	19	2
Office Park	16.60	8.40	6.90	33.00	48.00	19.00	82	15	3
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11
Single Family Housing	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Single Family Housing	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
User Defined Recreational	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Apartments Mid Rise	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Elementary School	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
General Light Industry	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
General Office Building	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Industrial Park	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Office Park	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Regional Shopping Center	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Single Family Housing	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
User Defined Recreational	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722

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5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	102,811.1155	102,811.1155	2.2433	0.5177	103,021.4659
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	102,811.1155	102,811.1155	2.2433	0.5177	103,021.4659
NaturalGas Mitigated	2.1382	19.1664	14.3360	0.1166		1.4773	1.4773		1.4773	1.4773	0.0000	21,160.6020	21,160.6020	0.4056	0.3879	21,286.3489
NaturalGas Unmitigated	2.1382	19.1664	14.3360	0.1166		1.4773	1.4773		1.4773	1.4773	0.0000	21,160.6020	21,160.6020	0.4056	0.3879	21,286.3489

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5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	7.66421e+007	0.4133	3.5316	1.5028	0.0225		0.2855	0.2855		0.2855	0.2855	0.0000	4,089.9151	4,089.9151	0.0784	0.0750	4,114.2194
Apartments Mid Rise	6.93842e+006	0.0374	0.3197	0.1361	2.0400e-003		0.0259	0.0259		0.0259	0.0259	0.0000	370.2607	370.2607	7.1000e-003	6.7900e-003	372.4610
Apartments Mid Rise	8.37345e+006	0.0452	0.3858	0.1642	2.4600e-003		0.0312	0.0312		0.0312	0.0312	0.0000	446.8391	446.8391	8.5600e-003	8.1900e-003	449.4945
Elementary School	2.14372e+007	0.1156	1.0508	0.8827	6.3100e-003		0.0799	0.0799		0.0799	0.0799	0.0000	1,143.9711	1,143.9711	0.0219	0.0210	1,150.7692
General Light Industry	2.04687e+008	1.1037	10.0337	8.4283	0.0602		0.7626	0.7626		0.7626	0.7626	0.0000	10,922.8778	10,922.8778	0.2094	0.2003	10,987.7870
General Office Building	5.35615e+006	0.0289	0.2626	0.2206	1.5800e-003		0.0200	0.0200		0.0200	0.0200	0.0000	285.8247	285.8247	5.4800e-003	5.2400e-003	287.5233
Industrial Park	272048	1.4700e-003	0.0133	0.0112	8.0000e-005		1.0100e-003	1.0100e-003		1.0100e-003	1.0100e-003	0.0000	14.5175	14.5175	2.8000e-004	2.7000e-004	14.6038
Office Park	6.86825e+007	0.3704	3.3668	2.8281	0.0202		0.2559	0.2559		0.2559	0.2559	0.0000	3,665.1591	3,665.1591	0.0703	0.0672	3,686.9393
Regional Shopping Center	3.74807e+006	0.0202	0.1837	0.1543	1.1000e-003		0.0140	0.0140		0.0140	0.0140	0.0000	200.0113	200.0113	3.8300e-003	3.6700e-003	201.1999
Single Family Housing	183577	9.9000e-004	8.4600e-003	3.6000e-003	5.0000e-005		6.8000e-004	6.8000e-004		6.8000e-004	6.8000e-004	0.0000	9.7964	9.7964	1.9000e-004	1.8000e-004	9.8546
Single Family Housing	214173	1.1500e-003	9.8700e-003	4.2000e-003	6.0000e-005		8.0000e-004	8.0000e-004		8.0000e-004	8.0000e-004	0.0000	11.4291	11.4291	2.2000e-004	2.1000e-004	11.4970
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		2.1382	19.1664	14.3360	0.1166		1.4773	1.4773		1.4773	1.4773	0.0000	21,160.6020	21,160.6020	0.4056	0.3879	21,286.3489

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5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	7.66421e+007	0.4133	3.5316	1.5028	0.0225		0.2855	0.2855		0.2855	0.2855	0.0000	4,089.9151	4,089.9151	0.0784	0.0750	4,114.2194
Apartments Mid Rise	6.93842e+006	0.0374	0.3197	0.1361	2.0400e-003		0.0259	0.0259		0.0259	0.0259	0.0000	370.2607	370.2607	7.1000e-003	6.7900e-003	372.4610
Apartments Mid Rise	8.37345e+006	0.0452	0.3858	0.1642	2.4600e-003		0.0312	0.0312		0.0312	0.0312	0.0000	446.8391	446.8391	8.5600e-003	8.1900e-003	449.4945
Elementary School	2.14372e+007	0.1156	1.0508	0.8827	6.3100e-003		0.0799	0.0799		0.0799	0.0799	0.0000	1,143.9711	1,143.9711	0.0219	0.0210	1,150.7692
General Light Industry	2.04687e+008	1.1037	10.0337	8.4283	0.0602		0.7626	0.7626		0.7626	0.7626	0.0000	10,922.8778	10,922.8778	0.2094	0.2003	10,987.7870
General Office Building	5.35615e+006	0.0289	0.2626	0.2206	1.5800e-003		0.0200	0.0200		0.0200	0.0200	0.0000	285.8247	285.8247	5.4800e-003	5.2400e-003	287.5233
Industrial Park	272048	1.4700e-003	0.0133	0.0112	8.0000e-005		1.0100e-003	1.0100e-003		1.0100e-003	1.0100e-003	0.0000	14.5175	14.5175	2.8000e-004	2.7000e-004	14.6038
Office Park	6.86825e+007	0.3704	3.3668	2.8281	0.0202		0.2559	0.2559		0.2559	0.2559	0.0000	3,665.1591	3,665.1591	0.0703	0.0672	3,686.9393
Regional Shopping Center	3.74807e+006	0.0202	0.1837	0.1543	1.1000e-003		0.0140	0.0140		0.0140	0.0140	0.0000	200.0113	200.0113	3.8300e-003	3.6700e-003	201.1999
Single Family Housing	183577	9.9000e-004	8.4600e-003	3.6000e-003	5.0000e-005		6.8000e-004	6.8000e-004		6.8000e-004	6.8000e-004	0.0000	9.7964	9.7964	1.9000e-004	1.8000e-004	9.8546
Single Family Housing	214173	1.1500e-003	9.8700e-003	4.2000e-003	6.0000e-005		8.0000e-004	8.0000e-004		8.0000e-004	8.0000e-004	0.0000	11.4291	11.4291	2.2000e-004	2.1000e-004	11.4970
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		2.1382	19.1664	14.3360	0.1166		1.4773	1.4773		1.4773	1.4773	0.0000	21,160.6020	21,160.6020	0.4056	0.3879	21,286.3489

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5.3 Energy by Land Use - Electricity**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	2.39173e+007	6,463.6690	0.1410	0.0326	6,476.8936
Apartments Mid Rise	2.14226e+006	578.9454	0.0126	2.9200e-003	580.1299
Apartments Mid Rise	2.58532e+006	698.6846	0.0152	3.5200e-003	700.1141
Elementary School	1.78643e+007	4,827.8441	0.1053	0.0243	4,837.7218
General Light Industry	6.3945e+007	17,281.1576	0.3771	0.0870	17,316.5147
General Office Building	1.46947e+007	3,971.2452	0.0867	0.0200	3,979.3703
Industrial Park	746368	201.7062	4.4000e-003	1.0200e-003	202.1189
Office Park	2.33097e+008	62,994.5621	1.3745	0.3172	63,123.4483
Regional Shopping Center	2.13235e+007	5,762.6780	0.1257	0.0290	5,774.4684
Single Family Housing	52298.9	14.1338	3.1000e-004	7.0000e-005	14.1627
Single Family Housing	61015.4	16.4894	3.6000e-004	8.0000e-005	16.5232
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000
Total		102,811.1155	2.2433	0.5177	103,021.4659

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5.3 Energy by Land Use - Electricity**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	2.39173e+007	6,463.6690	0.1410	0.0326	6,476.8936
Apartments Mid Rise	2.14226e+006	578.9454	0.0126	2.9200e-003	580.1299
Apartments Mid Rise	2.58532e+006	698.6846	0.0152	3.5200e-003	700.1141
Elementary School	1.78643e+007	4,827.8441	0.1053	0.0243	4,837.7218
General Light Industry	6.3945e+007	17,281.1576	0.3771	0.0870	17,316.5147
General Office Building	1.46947e+007	3,971.2452	0.0867	0.0200	3,979.3703
Industrial Park	746368	201.7062	4.4000e-003	1.0200e-003	202.1189
Office Park	2.33097e+008	62,994.5621	1.3745	0.3172	63,123.4483
Regional Shopping Center	2.13235e+007	5,762.6780	0.1257	0.0290	5,774.4684
Single Family Housing	52298.9	14.1338	3.1000e-004	7.0000e-005	14.1627
Single Family Housing	61015.4	16.4894	3.6000e-004	8.0000e-005	16.5232
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000
Total		102,811.1155	2.2433	0.5177	103,021.4659

6.0 Area Detail

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6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	231.4135	2.5314	106.3461	0.1171		7.0432	7.0432		7.0432	7.0432	745.3392	1,533.725 3	2,279.064 5	2.3207	0.0506	2,352.158 4
Unmitigated	231.4135	2.5314	106.3461	0.1171		7.0432	7.0432		7.0432	7.0432	745.3392	1,533.725 3	2,279.064 5	2.3207	0.0506	2,352.158 4

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6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	22.6842					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	183.8710					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	22.9838	1.8199	44.6064	0.1138		6.7002	6.7002		6.7002	6.7002	745.3392	1,432.2860	2,177.6252	2.2228	0.0506	2,248.2691
Landscaping	1.8745	0.7115	61.7397	3.2800e-003		0.3430	0.3430		0.3430	0.3430	0.0000	101.4394	101.4394	0.0980	0.0000	103.8893
Total	231.4135	2.5314	106.3461	0.1171		7.0432	7.0432		7.0432	7.0432	745.3392	1,533.7253	2,279.0645	2.3208	0.0506	2,352.1584

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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	22.6842					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	183.8710					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	22.9838	1.8199	44.6064	0.1138		6.7002	6.7002		6.7002	6.7002	745.3392	1,432.2860	2,177.6252	2.2228	0.0506	2,248.2691
Landscaping	1.8745	0.7115	61.7397	3.2800e-003		0.3430	0.3430		0.3430	0.3430	0.0000	101.4394	101.4394	0.0980	0.0000	103.8893
Total	231.4135	2.5314	106.3461	0.1171		7.0432	7.0432		7.0432	7.0432	745.3392	1,533.7253	2,279.0645	2.3208	0.0506	2,352.1584

7.0 Water Detail**7.1 Mitigation Measures Water**

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	34,704.19 88	212.9975	5.1769	41,571.84 02
Unmitigated	34,704.19 88	212.9975	5.1769	41,571.84 02

Northside Specific Plan - Baseline Operation - South Coast AQMD Air District, Annual

7.2 Water by Land Use**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	320.623 / 202.132	1,836.8656	10.4854	0.2554	2,175.1164
Apartments Mid Rise	67.4344 / 42.513	386.3353	2.2053	0.0537	457.4772
Elementary School	70.9604 / 182.47	820.0785	2.3297	0.0586	895.7864
General Light Industry	1456.88 / 0	5,588.8398	47.5842	1.1467	7,120.1714
General Office Building	274.343 / 168.146	1,557.2827	8.9715	0.2185	1,846.6792
Industrial Park	18.13 / 0	69.5500	0.5922	0.0143	88.6066
Office Park	4180.55 / 2562.27	23,730.5127	136.7120	3.3293	28,140.4549
Regional Shopping Center	125.058 / 76.6485	709.8817	4.0896	0.0996	841.8020
Single Family Housing	0.847002 / 0.53398	4.8525	0.0277	6.7000e-004	5.7461
User Defined Recreational	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		34,704.1988	212.9975	5.1769	41,571.8402

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7.2 Water by Land Use**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	320.623 / 202.132	1,836.8656	10.4854	0.2554	2,175.1164
Apartments Mid Rise	67.4344 / 42.513	386.3353	2.2053	0.0537	457.4772
Elementary School	70.9604 / 182.47	820.0785	2.3297	0.0586	895.7864
General Light Industry	1456.88 / 0	5,588.8398	47.5842	1.1467	7,120.1714
General Office Building	274.343 / 168.146	1,557.2827	8.9715	0.2185	1,846.6792
Industrial Park	18.13 / 0	69.5500	0.5922	0.0143	88.6066
Office Park	4180.55 / 2562.27	23,730.5127	136.7120	3.3293	28,140.4549
Regional Shopping Center	125.058 / 76.6485	709.8817	4.0896	0.0996	841.8020
Single Family Housing	0.847002 / 0.53398	4.8525	0.0277	6.7000e-004	5.7461
User Defined Recreational	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		34,704.1988	212.9975	5.1769	41,571.8402

8.0 Waste Detail**8.1 Mitigation Measures Waste**

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Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	7,902.158 1	467.0042	0.0000	19,577.26 21
Unmitigated	7,902.158 1	467.0042	0.0000	19,577.26 21

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8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	2263.66	459.5025	27.1558	0.0000	1,138.3981
Apartments Mid Rise	476.1	96.6440	5.7115	0.0000	239.4314
Elementary School	3181.32	645.7792	38.1645	0.0000	1,599.8907
General Light Industry	7812	1,585.7654	93.7161	0.0000	3,928.6667
General Office Building	1435.51	291.3956	17.2210	0.0000	721.9202
Industrial Park	97.22	19.7348	1.1663	0.0000	48.8921
Office Park	21874.9	4,440.4070	262.4205	0.0000	11,000.9204
Regional Shopping Center	1772.74	359.8502	21.2665	0.0000	891.5136
Single Family Housing	15.17	3.0794	0.1820	0.0000	7.6290
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000
Total		7,902.1581	467.0042	0.0000	19,577.2621

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8.2 Waste by Land Use**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	2263.66	459.5025	27.1558	0.0000	1,138.3981
Apartments Mid Rise	476.1	96.6440	5.7115	0.0000	239.4314
Elementary School	3181.32	645.7792	38.1645	0.0000	1,599.8907
General Light Industry	7812	1,585.7654	93.7161	0.0000	3,928.6667
General Office Building	1435.51	291.3956	17.2210	0.0000	721.9202
Industrial Park	97.22	19.7348	1.1663	0.0000	48.8921
Office Park	21874.9	4,440.4070	262.4205	0.0000	11,000.9204
Regional Shopping Center	1772.74	359.8502	21.2665	0.0000	891.5136
Single Family Housing	15.17	3.0794	0.1820	0.0000	7.6290
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000
Total		7,902.1581	467.0042	0.0000	19,577.2621

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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Northside Specific Plan - Baseline Operation - South Coast AQMD Air District, Annual

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

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Northside Specific Plan - Baseline Operation

South Coast AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	1,543.56	1000sqft	35.44	1,543,560.00	0
Office Park	23,521.44	1000sqft	539.98	23,521,400.00	0
Elementary School	2,447.17	1000sqft	56.18	2,447,170.00	0
General Light Industry	6,300.00	1000sqft	144.63	6,300,000.00	0
Industrial Park	78.40	1000sqft	1.80	78,400.00	0
User Defined Recreational	214.10	User Defined Unit	214.10	9,326,196.00	0
Apartments Low Rise	4,921.00	Dwelling Unit	307.56	4,921,000.00	14074
Apartments Mid Rise	469.00	Dwelling Unit	12.34	469,000.00	1341
Apartments Mid Rise	566.00	Dwelling Unit	14.89	566,000.00	1619
Single Family Housing	7.00	Dwelling Unit	2.27	12,600.00	20
Single Family Housing	6.00	Dwelling Unit	1.95	10,800.00	17
Regional Shopping Center	1,688.32	1000sqft	38.76	1,688,320.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10			Operational Year	2040
Utility Company	Riverside Public Utilities				
CO2 Intensity (lb/MW hr)	595.8	CH4 Intensity (lb/MW hr)	0.013	N2O Intensity (lb/MW hr)	0.003

Northside Specific Plan - Baseline Operation - South Coast AQMD Air District, Summer

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.0 Project Characteristics. Operational year 2040. GHG intensity factors adjusted for RPS assuming 60% renewables by December 31, 2030.

Land Use - Per Rick Engineering Traffic Impact Analysis (October 14, 2019). Baseline without project at year 2040 buildout of existing plan.

Construction Phase - Operation analysis only

Off-road Equipment - Operation analysis only

Off-road Equipment - Operation analysis only

Trips and VMT - Operation analysis only

On-road Fugitive Dust - Operation analysis only

Demolition - Operation analysis only

Grading - Operation analysis only

Architectural Coating - Operation analysis only

Vehicle Trips - Trip rates based on Rick Engineering Traffic Analysis, January 2020.1.49. Weekend trips conservatively assumed equal to weekday trips.

Vehicle Emission Factors - CalEEMod default values for 2040.

Vehicle Emission Factors - CalEEMod default values for 2040.

Vehicle Emission Factors - CalEEMod default values for 2040.

Road Dust - CalEEMod default values.

Woodstoves - CalEEMod default values.

Consumer Products - CalEEMod default values.

Area Coating - CalEEMod default values.

Landscape Equipment - CalEEMod default values.

Energy Use - CalEEMod default values.

Water And Wastewater - CalEEMod default values.

Solid Waste - CalEEMod default values.

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - No area source mitigation.

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Energy Mitigation - No energy mitigation.

Water Mitigation - No water mitigation.

Waste Mitigation - No solid waste mitigation.

Operational Off-Road Equipment -

Construction Off-road Equipment Mitigation - Operational analysis only

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	155,000.00	1.00
tblConstructionPhase	PhaseEndDate	2/15/2614	1/1/2020
tblLandUse	LandUseSquareFeet	0.00	9,326,196.00
tblLandUse	LotAcreage	0.00	214.10
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.013
tblProjectCharacteristics	CO2IntensityFactor	1325.65	595.8
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.003
tblTripsAndVMT	VendorTripNumber	7,998.00	0.00
tblTripsAndVMT	WorkerTripNumber	20,478.00	0.00
tblVehicleTrips	ST_TR	7.16	1.49
tblVehicleTrips	ST_TR	6.39	1.11
tblVehicleTrips	ST_TR	0.00	4.07
tblVehicleTrips	ST_TR	1.32	1.01
tblVehicleTrips	ST_TR	2.46	2.25
tblVehicleTrips	ST_TR	2.49	0.61
tblVehicleTrips	ST_TR	1.64	2.39

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tblVehicleTrips	ST_TR	49.97	7.68
tblVehicleTrips	ST_TR	9.91	1.92
tblVehicleTrips	SU_TR	6.07	1.49
tblVehicleTrips	SU_TR	5.86	1.11
tblVehicleTrips	SU_TR	0.00	4.07
tblVehicleTrips	SU_TR	0.68	1.01
tblVehicleTrips	SU_TR	1.05	2.25
tblVehicleTrips	SU_TR	0.73	0.61
tblVehicleTrips	SU_TR	0.76	2.39
tblVehicleTrips	SU_TR	25.24	7.68
tblVehicleTrips	SU_TR	8.62	1.92
tblVehicleTrips	WD_TR	6.59	1.49
tblVehicleTrips	WD_TR	6.65	1.11
tblVehicleTrips	WD_TR	15.43	4.07
tblVehicleTrips	WD_TR	6.97	1.01
tblVehicleTrips	WD_TR	11.03	2.25
tblVehicleTrips	WD_TR	6.83	0.61
tblVehicleTrips	WD_TR	11.42	2.39
tblVehicleTrips	WD_TR	42.70	7.68
tblVehicleTrips	WD_TR	9.52	1.92

2.0 Emissions Summary

Northside Specific Plan - Baseline Operation - South Coast AQMD Air District, Summer

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

[illegible]

Mitigated Construction

[illegible][illegible]

Northside Specific Plan - Baseline Operation - South Coast AQMD Air District, Summer

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2,985.512 1	151.2828	4,062.426 1	9.1299		538.7606	538.7606		538.7606	538.7606	65,727.66 64	127,200.5 421	192,928.2 085	196.8768	4.4611	199,179.5 441
Energy	11.7160	105.0211	78.5534	0.6391		8.0947	8.0947		8.0947	8.0947		127,811.34 76	127,811.34 76	2.4497	2.3432	128,570.8 666
Mobile	82.4317	547.6915	1,089.834 9	6.3369	682.5027	2.4865	684.9892	182.5539	2.3144	184.8683		651,878.2 539	651,878.2 539	22.8798		652,450.2 491
Total	3,079.659 8	803.9953	5,230.814 4	16.1058	682.5027	549.3418	1,231.844 5	182.5539	549.1698	731.7237	65,727.66 64	906,890.1 436	972,617.8 100	222.2063	6.8043	980,200.6 597

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	2,985.512 1	151.2828	4,062.426 1	9.1299		538.7606	538.7606		538.7606	538.7606	65,727.66 64	127,200.5 421	192,928.2 085	196.8768	4.4611	199,179.5 441
Energy	11.7160	105.0211	78.5534	0.6391		8.0947	8.0947		8.0947	8.0947		127,811.34 76	127,811.34 76	2.4497	2.3432	128,570.8 666
Mobile	82.4317	547.6915	1,089.834 9	6.3369	682.5027	2.4865	684.9892	182.5539	2.3144	184.8683		651,878.2 539	651,878.2 539	22.8798		652,450.2 491
Total	3,079.659 8	803.9953	5,230.814 4	16.1058	682.5027	549.3418	1,231.844 5	182.5539	549.1698	731.7237	65,727.66 64	906,890.1 436	972,617.8 100	222.2063	6.8043	980,200.6 597

Northside Specific Plan - Baseline Operation - South Coast AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	1/1/2020	1/1/2020	5	1	

Acres of Grading (Site Preparation Phase): 0**Acres of Grading (Grading Phase): 0****Acres of Paving: 0****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	0	7.00	231	0.29
Building Construction	Forklifts	0	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction	Welders	0	8.00	46	0.45

Trips and VMT

Northside Specific Plan - Baseline Operation - South Coast AQMD Air District, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction**3.2 Building Construction - 2020****Unmitigated Construction On-Site**

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

Northside Specific Plan - Baseline Operation - South Coast AQMD Air District, Summer

3.2 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Mitigated Construction On-Site

[illegible]

Northside Specific Plan - Baseline Operation - South Coast AQMD Air District, Summer

3.2 Building Construction - 2020**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

Northside Specific Plan - Baseline Operation - South Coast AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	82.4317	547.6915	1,089.8349	6.3369	682.5027	2.4865	684.9892	182.5539	2.3144	184.8683		651,878.2539	651,878.2539	22.8798		652,450.2491
Unmitigated	82.4317	547.6915	1,089.8349	6.3369	682.5027	2.4865	684.9892	182.5539	2.3144	184.8683		651,878.2539	651,878.2539	22.8798		652,450.2491

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	7,332.29	7,332.29	7332.29	25,055,549	25,055,549
Apartments Mid Rise	520.59	520.59	520.59	1,778,935	1,778,935
Apartments Mid Rise	628.26	628.26	628.26	2,146,860	2,146,860
Elementary School	9,959.98	9,959.98	9959.98	34,325,921	34,325,921
General Light Industry	6,363.00	6,363.00	6363.00	28,177,130	28,177,130
General Office Building	3,473.01	3,473.01	3473.01	11,188,166	11,188,166
Industrial Park	47.82	47.82	47.82	190,191	190,191
Office Park	56,216.24	56,216.24	56216.24	189,935,046	189,935,046
Regional Shopping Center	12,966.30	12,966.30	12966.30	28,044,078	28,044,078
Single Family Housing	13.44	13.44	13.44	45,927	45,927
Single Family Housing	11.52	11.52	11.52	39,366	39,366
User Defined Recreational	0.00	0.00	0.00		
Total	97,532.46	97,532.46	97,532.46	320,927,167	320,927,167

4.3 Trip Type Information

Northside Specific Plan - Baseline Operation - South Coast AQMD Air District, Summer

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Elementary School	16.60	8.40	6.90	65.00	30.00	5.00	63	25	12
General Light Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Industrial Park	16.60	8.40	6.90	59.00	28.00	13.00	79	19	2
Office Park	16.60	8.40	6.90	33.00	48.00	19.00	82	15	3
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11
Single Family Housing	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Single Family Housing	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
User Defined Recreational	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Apartments Mid Rise	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Elementary School	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
General Light Industry	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
General Office Building	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Industrial Park	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Office Park	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Regional Shopping Center	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Single Family Housing	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
User Defined Recreational	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722

5.0 Energy Detail

Historical Energy Use: N

Northside Specific Plan - Baseline Operation - South Coast AQMD Air District, Summer

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	11.7160	105.0211	78.5534	0.6391		8.0947	8.0947		8.0947	8.0947		127,811.3476	127,811.3476	2.4497	2.3432	128,570.8666
NaturalGas Unmitigated	11.7160	105.0211	78.5534	0.6391		8.0947	8.0947		8.0947	8.0947		127,811.3476	127,811.3476	2.4497	2.3432	128,570.8666

Northside Specific Plan - Baseline Operation - South Coast AQMD Air District, Summer

5.2 Energy by Land Use - NaturalGas**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	209978	2.2645	19.3510	8.2345	0.1235		1.5645	1.5645		1.5645	1.5645		24,703.3407	24,703.3407	0.4735	0.4529	24,850.1403
Apartments Mid Rise	19009.4	0.2050	1.7518	0.7455	0.0112		0.1416	0.1416		0.1416	0.1416		2,236.3976	2,236.3976	0.0429	0.0410	2,249.6874
Apartments Mid Rise	22941	0.2474	2.1142	0.8997	0.0135		0.1709	0.1709		0.1709	0.1709		2,698.9361	2,698.9361	0.0517	0.0495	2,714.9745
Elementary School	58732.1	0.6334	5.7581	4.8368	0.0346		0.4376	0.4376		0.4376	0.4376		6,909.6565	6,909.6565	0.1324	0.1267	6,950.7171
General Light Industry	560786	6.0477	54.9791	46.1824	0.3299		4.1784	4.1784		4.1784	4.1784		65,974.8590	65,974.8590	1.2645	1.2095	66,366.9146
General Office Building	14674.4	0.1583	1.4387	1.2085	8.6300e-003		0.1093	0.1093		0.1093	0.1093		1,726.3991	1,726.3991	0.0331	0.0317	1,736.6582
Industrial Park	745.337	8.0400e-003	0.0731	0.0614	4.4000e-004		5.5500e-003	5.5500e-003		5.5500e-003	5.5500e-003		87.6867	87.6867	1.6800e-003	1.6100e-003	88.2078
Office Park	188171	2.0293	18.4482	15.4965	0.1107		1.4021	1.4021		1.4021	1.4021		22,137.7882	22,137.7882	0.4243	0.4059	22,269.3420
Regional Shopping Center	10268.7	0.1107	1.0067	0.8457	6.0400e-003		0.0765	0.0765		0.0765	0.0765		1,208.0807	1,208.0807	0.0232	0.0222	1,215.2597
Single Family Housing	502.95	5.4200e-003	0.0464	0.0197	3.0000e-004		3.7500e-003	3.7500e-003		3.7500e-003	3.7500e-003		59.1706	59.1706	1.1300e-003	1.0800e-003	59.5223
Single Family Housing	586.775	6.3300e-003	0.0541	0.0230	3.5000e-004		4.3700e-003	4.3700e-003		4.3700e-003	4.3700e-003		69.0324	69.0324	1.3200e-003	1.2700e-003	69.4426
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		11.7160	105.0211	78.5534	0.6391		8.0947	8.0947		8.0947	8.0947		127,811.3476	127,811.3476	2.4497	2.3432	128,570.8666

Northside Specific Plan - Baseline Operation - South Coast AQMD Air District, Summer

5.2 Energy by Land Use - NaturalGas**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	209.978	2.2645	19.3510	8.2345	0.1235		1.5645	1.5645		1.5645	1.5645		24,703.3407	24,703.3407	0.4735	0.4529	24,850.1403
Apartments Mid Rise	19.0094	0.2050	1.7518	0.7455	0.0112		0.1416	0.1416		0.1416	0.1416		2,236.3976	2,236.3976	0.0429	0.0410	2,249.6874
Apartments Mid Rise	22.941	0.2474	2.1142	0.8997	0.0135		0.1709	0.1709		0.1709	0.1709		2,698.9361	2,698.9361	0.0517	0.0495	2,714.9745
Elementary School	58.7321	0.6334	5.7581	4.8368	0.0346		0.4376	0.4376		0.4376	0.4376		6,909.6565	6,909.6565	0.1324	0.1267	6,950.7171
General Light Industry	560.786	6.0477	54.9791	46.1824	0.3299		4.1784	4.1784		4.1784	4.1784		65,974.8590	65,974.8590	1.2645	1.2095	66,366.9146
General Office Building	14.6744	0.1583	1.4387	1.2085	8.6300e-003		0.1093	0.1093		0.1093	0.1093		1,726.3991	1,726.3991	0.0331	0.0317	1,736.6582
Industrial Park	0.745337	8.0400e-003	0.0731	0.0614	4.4000e-004		5.5500e-003	5.5500e-003		5.5500e-003	5.5500e-003		87.6867	87.6867	1.6800e-003	1.6100e-003	88.2078
Office Park	188.171	2.0293	18.4482	15.4965	0.1107		1.4021	1.4021		1.4021	1.4021		22,137.7882	22,137.7882	0.4243	0.4059	22,269.3420
Regional Shopping Center	10.2687	0.1107	1.0067	0.8457	6.0400e-003		0.0765	0.0765		0.0765	0.0765		1,208.0807	1,208.0807	0.0232	0.0222	1,215.2597
Single Family Housing	0.50295	5.4200e-003	0.0464	0.0197	3.0000e-004		3.7500e-003	3.7500e-003		3.7500e-003	3.7500e-003		59.1706	59.1706	1.1300e-003	1.0800e-003	59.5223
Single Family Housing	0.586775	6.3300e-003	0.0541	0.0230	3.5000e-004		4.3700e-003	4.3700e-003		4.3700e-003	4.3700e-003		69.0324	69.0324	1.3200e-003	1.2700e-003	69.4426
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		11.7160	105.0211	78.5534	0.6391		8.0947	8.0947		8.0947	8.0947		127,811.3476	127,811.3476	2.4497	2.3432	128,570.8666

6.0 Area Detail

Northside Specific Plan - Baseline Operation - South Coast AQMD Air District, Summer

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2,985.512 1	151.2828	4,062.426 1	9.1299		538.7606	538.7606		538.7606	538.7606	65,727.66 64	127,200.5 421	192,928.2 085	196.8768	4.4611	199,179.5 441
Unmitigated	2,985.512 1	151.2828	4,062.426 1	9.1299		538.7606	538.7606		538.7606	538.7606	65,727.66 64	127,200.5 421	192,928.2 085	196.8768	4.4611	199,179.5 441

Northside Specific Plan - Baseline Operation - South Coast AQMD Air District, Summer

6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	124.2971					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1,007.5120					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1,838.7066	145.5910	3,568.5083	9.1036		536.0168	536.0168		536.0168	536.0168	65,727.6664	126,306.0000	192,033.6664	196.0126	4.4611	198,263.3975
Landscaping	14.9963	5.6918	493.9179	0.0263		2.7438	2.7438		2.7438	2.7438		894.5421	894.5421	0.8642		916.1466
Total	2,985.5121	151.2828	4,062.4261	9.1299		538.7606	538.7606		538.7606	538.7606	65,727.6664	127,200.5421	192,928.2085	196.8768	4.4611	199,179.5441

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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	124.2971					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1,007.5120					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1,838.7066	145.5910	3,568.5083	9.1036		536.0168	536.0168		536.0168	536.0168	65,727.6664	126,306.000	192,033.6664	196.0126	4.4611	198,263.3975
Landscaping	14.9963	5.6918	493.9179	0.0263		2.7438	2.7438		2.7438	2.7438		894.5421	894.5421	0.8642		916.1466
Total	2,985.5121	151.2828	4,062.4261	9.1299		538.7606	538.7606		538.7606	538.7606	65,727.6664	127,200.5421	192,928.2085	196.8768	4.4611	199,179.5441

7.0 Water Detail**7.1 Mitigation Measures Water****8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

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

Northside Specific Plan - Baseline Operation - South Coast AQMD Air District, Summer

Fire Pumps and Emergency Generators

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

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Northside Specific Plan - Baseline Operation - South Coast AQMD Air District, Winter

Northside Specific Plan - Baseline Operation

South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	1,543.56	1000sqft	35.44	1,543,560.00	0
Office Park	23,521.44	1000sqft	539.98	23,521,400.00	0
Elementary School	2,447.17	1000sqft	56.18	2,447,170.00	0
General Light Industry	6,300.00	1000sqft	144.63	6,300,000.00	0
Industrial Park	78.40	1000sqft	1.80	78,400.00	0
User Defined Recreational	214.10	User Defined Unit	214.10	9,326,196.00	0
Apartments Low Rise	4,921.00	Dwelling Unit	307.56	4,921,000.00	14074
Apartments Mid Rise	469.00	Dwelling Unit	12.34	469,000.00	1341
Apartments Mid Rise	566.00	Dwelling Unit	14.89	566,000.00	1619
Single Family Housing	7.00	Dwelling Unit	2.27	12,600.00	20
Single Family Housing	6.00	Dwelling Unit	1.95	10,800.00	17
Regional Shopping Center	1,688.32	1000sqft	38.76	1,688,320.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10			Operational Year	2040
Utility Company	Riverside Public Utilities				
CO2 Intensity (lb/MW hr)	595.8	CH4 Intensity (lb/MW hr)	0.013	N2O Intensity (lb/MW hr)	0.003

Northside Specific Plan - Baseline Operation - South Coast AQMD Air District, Winter

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.0 Project Characteristics. Operational year 2040. GHG intensity factors adjusted for RPS assuming 60% renewables by December 31, 2030.

Land Use - Per Rick Engineering Traffic Impact Analysis (October 14, 2019). Baseline without project at year 2040 buildout of existing plan.

Construction Phase - Operation analysis only

Off-road Equipment - Operation analysis only

Off-road Equipment - Operation analysis only

Trips and VMT - Operation analysis only

On-road Fugitive Dust - Operation analysis only

Demolition - Operation analysis only

Grading - Operation analysis only

Architectural Coating - Operation analysis only

Vehicle Trips - Trip rates based on Rick Engineering Traffic Analysis, January 2020.1.49. Weekend trips conservatively assumed equal to weekday trips.

Vehicle Emission Factors - CalEEMod default values for 2040.

Vehicle Emission Factors - CalEEMod default values for 2040.

Vehicle Emission Factors - CalEEMod default values for 2040.

Road Dust - CalEEMod default values.

Woodstoves - CalEEMod default values.

Consumer Products - CalEEMod default values.

Area Coating - CalEEMod default values.

Landscape Equipment - CalEEMod default values.

Energy Use - CalEEMod default values.

Water And Wastewater - CalEEMod default values.

Solid Waste - CalEEMod default values.

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - No area source mitigation.

Northside Specific Plan - Baseline Operation - South Coast AQMD Air District, Winter

Energy Mitigation - No energy mitigation.

Water Mitigation - No water mitigation.

Waste Mitigation - No solid waste mitigation.

Operational Off-Road Equipment -

Construction Off-road Equipment Mitigation - Operational analysis only

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	155,000.00	1.00
tblConstructionPhase	PhaseEndDate	2/15/2614	1/1/2020
tblLandUse	LandUseSquareFeet	0.00	9,326,196.00
tblLandUse	LotAcreage	0.00	214.10
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.013
tblProjectCharacteristics	CO2IntensityFactor	1325.65	595.8
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.003
tblTripsAndVMT	VendorTripNumber	7,998.00	0.00
tblTripsAndVMT	WorkerTripNumber	20,478.00	0.00
tblVehicleTrips	ST_TR	7.16	1.49
tblVehicleTrips	ST_TR	6.39	1.11
tblVehicleTrips	ST_TR	0.00	4.07
tblVehicleTrips	ST_TR	1.32	1.01
tblVehicleTrips	ST_TR	2.46	2.25
tblVehicleTrips	ST_TR	2.49	0.61
tblVehicleTrips	ST_TR	1.64	2.39

Northside Specific Plan - Baseline Operation - South Coast AQMD Air District, Winter

tblVehicleTrips	ST_TR	49.97	7.68
tblVehicleTrips	ST_TR	9.91	1.92
tblVehicleTrips	SU_TR	6.07	1.49
tblVehicleTrips	SU_TR	5.86	1.11
tblVehicleTrips	SU_TR	0.00	4.07
tblVehicleTrips	SU_TR	0.68	1.01
tblVehicleTrips	SU_TR	1.05	2.25
tblVehicleTrips	SU_TR	0.73	0.61
tblVehicleTrips	SU_TR	0.76	2.39
tblVehicleTrips	SU_TR	25.24	7.68
tblVehicleTrips	SU_TR	8.62	1.92
tblVehicleTrips	WD_TR	6.59	1.49
tblVehicleTrips	WD_TR	6.65	1.11
tblVehicleTrips	WD_TR	15.43	4.07
tblVehicleTrips	WD_TR	6.97	1.01
tblVehicleTrips	WD_TR	11.03	2.25
tblVehicleTrips	WD_TR	6.83	0.61
tblVehicleTrips	WD_TR	11.42	2.39
tblVehicleTrips	WD_TR	42.70	7.68
tblVehicleTrips	WD_TR	9.52	1.92

2.0 Emissions Summary

Northside Specific Plan - Baseline Operation - South Coast AQMD Air District, Winter

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

[illegible]

Mitigated Construction

[illegible][illegible]

Northside Specific Plan - Baseline Operation - South Coast AQMD Air District, Winter

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2,985.512 1	151.2828	4,062.426 1	9.1299		538.7606	538.7606		538.7606	538.7606	65,727.66 64	127,200.5 421	192,928.2 085	196.8768	4.4611	199,179.5 441
Energy	11.7160	105.0211	78.5534	0.6391		8.0947	8.0947		8.0947	8.0947		127,811.34 76	127,811.34 76	2.4497	2.3432	128,570.8 666
Mobile	78.4871	549.8231	1,019.437 7	6.0129	682.5027	2.4926	684.9953	182.5539	2.3203	184.8742		619,125.2 472	619,125.2 472	23.1879		619,704.9 444
Total	3,075.715 2	806.1270	5,160.417 2	15.7818	682.5027	549.3480	1,231.850 7	182.5539	549.1756	731.7295	65,727.66 64	874,137.1 369	939,864.8 033	222.5144	6.8043	947,455.3 551

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	2,985.512 1	151.2828	4,062.426 1	9.1299		538.7606	538.7606		538.7606	538.7606	65,727.66 64	127,200.5 421	192,928.2 085	196.8768	4.4611	199,179.5 441
Energy	11.7160	105.0211	78.5534	0.6391		8.0947	8.0947		8.0947	8.0947		127,811.34 76	127,811.34 76	2.4497	2.3432	128,570.8 666
Mobile	78.4871	549.8231	1,019.437 7	6.0129	682.5027	2.4926	684.9953	182.5539	2.3203	184.8742		619,125.2 472	619,125.2 472	23.1879		619,704.9 444
Total	3,075.715 2	806.1270	5,160.417 2	15.7818	682.5027	549.3480	1,231.850 7	182.5539	549.1756	731.7295	65,727.66 64	874,137.1 369	939,864.8 033	222.5144	6.8043	947,455.3 551

Northside Specific Plan - Baseline Operation - South Coast AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	1/1/2020	1/1/2020	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	0	7.00	231	0.29
Building Construction	Forklifts	0	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction	Welders	0	8.00	46	0.45

Trips and VMT

Northside Specific Plan - Baseline Operation - South Coast AQMD Air District, Winter

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction**3.2 Building Construction - 2020****Unmitigated Construction On-Site**

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

Northside Specific Plan - Baseline Operation - South Coast AQMD Air District, Winter

3.2 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Mitigated Construction On-Site

[illegible]

Northside Specific Plan - Baseline Operation - South Coast AQMD Air District, Winter

3.2 Building Construction - 2020**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

Northside Specific Plan - Baseline Operation - South Coast AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	78.4871	549.8231	1,019.4377	6.0129	682.5027	2.4926	684.9953	182.5539	2.3203	184.8742		619,125.2472	619,125.2472	23.1879		619,704.9444
Unmitigated	78.4871	549.8231	1,019.4377	6.0129	682.5027	2.4926	684.9953	182.5539	2.3203	184.8742		619,125.2472	619,125.2472	23.1879		619,704.9444

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	7,332.29	7,332.29	7332.29	25,055,549	25,055,549
Apartments Mid Rise	520.59	520.59	520.59	1,778,935	1,778,935
Apartments Mid Rise	628.26	628.26	628.26	2,146,860	2,146,860
Elementary School	9,959.98	9,959.98	9959.98	34,325,921	34,325,921
General Light Industry	6,363.00	6,363.00	6363.00	28,177,130	28,177,130
General Office Building	3,473.01	3,473.01	3473.01	11,188,166	11,188,166
Industrial Park	47.82	47.82	47.82	190,191	190,191
Office Park	56,216.24	56,216.24	56216.24	189,935,046	189,935,046
Regional Shopping Center	12,966.30	12,966.30	12966.30	28,044,078	28,044,078
Single Family Housing	13.44	13.44	13.44	45,927	45,927
Single Family Housing	11.52	11.52	11.52	39,366	39,366
User Defined Recreational	0.00	0.00	0.00		
Total	97,532.46	97,532.46	97,532.46	320,927,167	320,927,167

4.3 Trip Type Information

Northside Specific Plan - Baseline Operation - South Coast AQMD Air District, Winter

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Elementary School	16.60	8.40	6.90	65.00	30.00	5.00	63	25	12
General Light Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Industrial Park	16.60	8.40	6.90	59.00	28.00	13.00	79	19	2
Office Park	16.60	8.40	6.90	33.00	48.00	19.00	82	15	3
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11
Single Family Housing	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Single Family Housing	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
User Defined Recreational	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Apartments Mid Rise	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Elementary School	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
General Light Industry	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
General Office Building	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Industrial Park	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Office Park	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Regional Shopping Center	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Single Family Housing	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
User Defined Recreational	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722

5.0 Energy Detail

Historical Energy Use: N

Northside Specific Plan - Baseline Operation - South Coast AQMD Air District, Winter

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	11.7160	105.0211	78.5534	0.6391		8.0947	8.0947		8.0947	8.0947		127,811.3476	127,811.3476	2.4497	2.3432	128,570.8666
NaturalGas Unmitigated	11.7160	105.0211	78.5534	0.6391		8.0947	8.0947		8.0947	8.0947		127,811.3476	127,811.3476	2.4497	2.3432	128,570.8666

Northside Specific Plan - Baseline Operation - South Coast AQMD Air District, Winter

5.2 Energy by Land Use - NaturalGas**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	209978	2.2645	19.3510	8.2345	0.1235		1.5645	1.5645		1.5645	1.5645		24,703.3407	24,703.3407	0.4735	0.4529	24,850.1403
Apartments Mid Rise	19009.4	0.2050	1.7518	0.7455	0.0112		0.1416	0.1416		0.1416	0.1416		2,236.3976	2,236.3976	0.0429	0.0410	2,249.6874
Apartments Mid Rise	22941	0.2474	2.1142	0.8997	0.0135		0.1709	0.1709		0.1709	0.1709		2,698.9361	2,698.9361	0.0517	0.0495	2,714.9745
Elementary School	58732.1	0.6334	5.7581	4.8368	0.0346		0.4376	0.4376		0.4376	0.4376		6,909.6565	6,909.6565	0.1324	0.1267	6,950.7171
General Light Industry	560786	6.0477	54.9791	46.1824	0.3299		4.1784	4.1784		4.1784	4.1784		65,974.8590	65,974.8590	1.2645	1.2095	66,366.9146
General Office Building	14674.4	0.1583	1.4387	1.2085	8.6300e-003		0.1093	0.1093		0.1093	0.1093		1,726.3991	1,726.3991	0.0331	0.0317	1,736.6582
Industrial Park	745.337	8.0400e-003	0.0731	0.0614	4.4000e-004		5.5500e-003	5.5500e-003		5.5500e-003	5.5500e-003		87.6867	87.6867	1.6800e-003	1.6100e-003	88.2078
Office Park	188171	2.0293	18.4482	15.4965	0.1107		1.4021	1.4021		1.4021	1.4021		22,137.7882	22,137.7882	0.4243	0.4059	22,269.3420
Regional Shopping Center	10268.7	0.1107	1.0067	0.8457	6.0400e-003		0.0765	0.0765		0.0765	0.0765		1,208.0807	1,208.0807	0.0232	0.0222	1,215.2597
Single Family Housing	502.95	5.4200e-003	0.0464	0.0197	3.0000e-004		3.7500e-003	3.7500e-003		3.7500e-003	3.7500e-003		59.1706	59.1706	1.1300e-003	1.0800e-003	59.5223
Single Family Housing	586.775	6.3300e-003	0.0541	0.0230	3.5000e-004		4.3700e-003	4.3700e-003		4.3700e-003	4.3700e-003		69.0324	69.0324	1.3200e-003	1.2700e-003	69.4426
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		11.7160	105.0211	78.5534	0.6391		8.0947	8.0947		8.0947	8.0947		127,811.3476	127,811.3476	2.4497	2.3432	128,570.8666

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5.2 Energy by Land Use - NaturalGas**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	209.978	2.2645	19.3510	8.2345	0.1235		1.5645	1.5645		1.5645	1.5645		24,703.3407	24,703.3407	0.4735	0.4529	24,850.1403
Apartments Mid Rise	19.0094	0.2050	1.7518	0.7455	0.0112		0.1416	0.1416		0.1416	0.1416		2,236.3976	2,236.3976	0.0429	0.0410	2,249.6874
Apartments Mid Rise	22.941	0.2474	2.1142	0.8997	0.0135		0.1709	0.1709		0.1709	0.1709		2,698.9361	2,698.9361	0.0517	0.0495	2,714.9745
Elementary School	58.7321	0.6334	5.7581	4.8368	0.0346		0.4376	0.4376		0.4376	0.4376		6,909.6565	6,909.6565	0.1324	0.1267	6,950.7171
General Light Industry	560.786	6.0477	54.9791	46.1824	0.3299		4.1784	4.1784		4.1784	4.1784		65,974.8590	65,974.8590	1.2645	1.2095	66,366.9146
General Office Building	14.6744	0.1583	1.4387	1.2085	8.6300e-003		0.1093	0.1093		0.1093	0.1093		1,726.3991	1,726.3991	0.0331	0.0317	1,736.6582
Industrial Park	0.745337	8.0400e-003	0.0731	0.0614	4.4000e-004		5.5500e-003	5.5500e-003		5.5500e-003	5.5500e-003		87.6867	87.6867	1.6800e-003	1.6100e-003	88.2078
Office Park	188.171	2.0293	18.4482	15.4965	0.1107		1.4021	1.4021		1.4021	1.4021		22,137.7882	22,137.7882	0.4243	0.4059	22,269.3420
Regional Shopping Center	10.2687	0.1107	1.0067	0.8457	6.0400e-003		0.0765	0.0765		0.0765	0.0765		1,208.0807	1,208.0807	0.0232	0.0222	1,215.2597
Single Family Housing	0.50295	5.4200e-003	0.0464	0.0197	3.0000e-004		3.7500e-003	3.7500e-003		3.7500e-003	3.7500e-003		59.1706	59.1706	1.1300e-003	1.0800e-003	59.5223
Single Family Housing	0.586775	6.3300e-003	0.0541	0.0230	3.5000e-004		4.3700e-003	4.3700e-003		4.3700e-003	4.3700e-003		69.0324	69.0324	1.3200e-003	1.2700e-003	69.4426
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		11.7160	105.0211	78.5534	0.6391		8.0947	8.0947		8.0947	8.0947		127,811.3476	127,811.3476	2.4497	2.3432	128,570.8666

6.0 Area Detail

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6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2,985.512 1	151.2828	4,062.426 1	9.1299		538.7606	538.7606		538.7606	538.7606	65,727.66 64	127,200.5 421	192,928.2 085	196.8768	4.4611	199,179.5 441
Unmitigated	2,985.512 1	151.2828	4,062.426 1	9.1299		538.7606	538.7606		538.7606	538.7606	65,727.66 64	127,200.5 421	192,928.2 085	196.8768	4.4611	199,179.5 441

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6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	124.2971					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1,007.5120					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1,838.7066	145.5910	3,568.5083	9.1036		536.0168	536.0168		536.0168	536.0168	65,727.6664	126,306.0000	192,033.6664	196.0126	4.4611	198,263.3975
Landscaping	14.9963	5.6918	493.9179	0.0263		2.7438	2.7438		2.7438	2.7438		894.5421	894.5421	0.8642		916.1466
Total	2,985.5121	151.2828	4,062.4261	9.1299		538.7606	538.7606		538.7606	538.7606	65,727.6664	127,200.5421	192,928.2085	196.8768	4.4611	199,179.5441

Northside Specific Plan - Baseline Operation - South Coast AQMD Air District, Winter

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	124.2971					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1,007.5120					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1,838.7066	145.5910	3,568.5083	9.1036		536.0168	536.0168		536.0168	536.0168	65,727.6664	126,306.000	192,033.6664	196.0126	4.4611	198,263.3975
Landscaping	14.9963	5.6918	493.9179	0.0263		2.7438	2.7438		2.7438	2.7438		894.5421	894.5421	0.8642		916.1466
Total	2,985.5121	151.2828	4,062.4261	9.1299		538.7606	538.7606		538.7606	538.7606	65,727.6664	127,200.5421	192,928.2085	196.8768	4.4611	199,179.5441

7.0 Water Detail**7.1 Mitigation Measures Water****8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

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

Northside Specific Plan - Baseline Operation - South Coast AQMD Air District, Winter

Fire Pumps and Emergency Generators

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

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

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Northside Specific Plan Construction

South Coast AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Medical Office Building	19.60	1000sqft	0.45	19,600.00	0
Office Park	558.79	1000sqft	12.83	558,790.00	0
Elementary School	123.96	1000sqft	2.85	123,960.00	0
General Light Industry	74.00	1000sqft	1.70	74,000.00	0
Industrial Park	0.00	1000sqft	0.00	0.00	0
User Defined Recreational	11.61	User Defined Unit	11.61	505,731.60	0
Apartments Low Rise	354.50	Dwelling Unit	22.16	354,500.00	1014
Apartments Mid Rise	144.45	Dwelling Unit	3.80	144,450.00	413
Apartments Mid Rise	135.10	Dwelling Unit	3.56	135,100.00	386
Single Family Housing	0.00	Dwelling Unit	0.00	0.00	0
Single Family Housing	0.00	Dwelling Unit	0.00	0.00	0
Regional Shopping Center	106.72	1000sqft	2.45	106,720.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10			Operational Year	2021
Utility Company	Riverside Public Utilities				
CO2 Intensity (lb/MW/hr)	1325.65	CH4 Intensity (lb/MW/hr)	0.029	N2O Intensity (lb/MW/hr)	0.006

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1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Based on Rick Engineering Traffic Impact Analysis (October 14, 2019). Scenario 1 land use buildout quantities divided by 20 to estimate worst-case single year construction activities.

Construction Phase - Default schedule adjusted to 1-year total duration, default total days divided by 6.

Off-road Equipment - Default unit amount multiplied by 6 to account for compressed construction schedule.

Off-road Equipment - Default unit amount multiplied by 6 to account for compressed construction schedule.

Off-road Equipment - Default unit amount multiplied by 6 to account for compressed construction schedule.

Off-road Equipment - Default unit amount multiplied by 6 to account for compressed construction schedule.

Off-road Equipment - Default unit amount multiplied by 6 to account for compressed construction schedule.

Off-road Equipment - Default unit amount multiplied by 6 to account for compressed construction schedule.

Trips and VMT - Default trips for building construction and architectural coatings multiplied by 6 to account for compressed construction schedule.

On-road Fugitive Dust - Default Values

Demolition - Scenario 1

Grading - Default

Architectural Coating - Parking area estimated equal to 10 acres per year.

Vehicle Trips - Construction analysis only

Vehicle Emission Factors - Construction analysis only

Vehicle Emission Factors - Construction analysis only

Vehicle Emission Factors - Construction analysis only

Road Dust - Construction analysis only

Woodstoves - Construction analysis only

Consumer Products - Construction analysis only

Area Coating - Construction analysis only

Landscape Equipment - Construction analysis only

Energy Use - Construction analysis only

Water And Wastewater - Construction analysis only

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Solid Waste - Construction analysis only
 Construction Off-road Equipment Mitigation - SCAQMD Rule 403

Area Mitigation -

Operational Off-Road Equipment - Construction analysis only

Stationary Sources - Emergency Generators and Fire Pumps - Construction analysis only

Stationary Sources - Process Boilers - Construction analysis only

Stationary Sources - User Defined - Construction analysis only

Stationary Sources - Emergency Generators and Fire Pumps EF - Construction analysis only

Stationary Sources - Process Boilers EF - Construction analysis only

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Parking	0.00	435,600.00
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstructionPhase	NumDays	75.00	13.00
tblConstructionPhase	NumDays	1,110.00	185.00
tblConstructionPhase	NumDays	70.00	12.00
tblConstructionPhase	NumDays	110.00	18.00
tblConstructionPhase	NumDays	75.00	13.00
tblConstructionPhase	NumDays	40.00	7.00
tblLandUse	LandUseSquareFeet	0.00	505,731.60
tblLandUse	LotAcreage	0.00	11.61
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	18.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	12.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	18.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	6.00

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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	12.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	12.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	12.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	12.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	18.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	12.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	18.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	12.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	24.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	6.00
tblTripsAndVMT	VendorTripNumber	295.00	1,770.00
tblTripsAndVMT	WorkerTripNumber	105.00	106.00
tblTripsAndVMT	WorkerTripNumber	971.00	5,826.00
tblTripsAndVMT	WorkerTripNumber	194.00	1,164.00

2.0 Emissions Summary

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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					
2020	14.1142	35.4223	38.0789	0.1231	7.9133	1.0091	8.9224	2.3019	0.9451	3.2470	0.0000	11,313.0853	11,313.0853	0.9122	0.0000	11,335.8906
Maximum	14.1142	35.4223	38.0789	0.1231	7.9133	1.0091	8.9224	2.3019	0.9451	3.2470	0.0000	11,313.0853	11,313.0853	0.9122	0.0000	11,335.8906

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					
2020	14.1142	35.4223	38.0789	0.1231	7.4421	1.0091	8.4512	2.0796	0.9451	3.0247	0.0000	11,313.0831	11,313.0831	0.9122	0.0000	11,335.8884
Maximum	14.1142	35.4223	38.0789	0.1231	7.4421	1.0091	8.4512	2.0796	0.9451	3.0247	0.0000	11,313.0831	11,313.0831	0.9122	0.0000	11,335.8884

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	5.96	0.00	5.28	9.66	0.00	6.85	0.00	0.00	0.00	0.00	0.00	0.00

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-21-2020	4-20-2020	11.3664	11.3664
2	4-21-2020	7-20-2020	11.8125	11.8125
3	7-21-2020	9-30-2020	9.3461	9.3461
		Highest	11.8125	11.8125

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	11.3444	0.3127	12.3733	0.0152		0.9087	0.9087		0.9087	0.9087	97.0630	197.1840	294.2470	0.2999	6.5900e-003	303.7067
Energy	0.0813	0.7110	0.4128	4.4400e-003		0.0562	0.0562		0.0562	0.0562	0.0000	7,856.9885	7,856.9885	0.1697	0.0467	7,875.1401
Mobile	4.7104	26.1033	61.8811	0.2230	18.0829	0.1816	18.2644	4.8458	0.1696	5.0154	0.0000	20,593.5502	20,593.5502	1.0282	0.0000	20,619.2540
Waste						0.0000	0.0000		0.0000	0.0000	281.7474	0.0000	281.7474	16.6508	0.0000	698.0173
Water						0.0000	0.0000		0.0000	0.0000	54.4719	2,022.2038	2,076.6757	5.6390	0.1413	2,259.7461
Total	16.1361	27.1270	74.6673	0.2426	18.0829	1.1465	19.2293	4.8458	1.1345	5.9803	433.2823	30,669.9265	31,103.2088	23.7875	0.1945	31,755.8641

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2.2 Overall Operational**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	11.3444	0.3127	12.3733	0.0152		0.9087	0.9087		0.9087	0.9087	97.0630	197.1840	294.2470	0.2999	6.5900e-003	303.7067
Energy	0.0813	0.7110	0.4128	4.4400e-003		0.0562	0.0562		0.0562	0.0562	0.0000	7,856.9885	7,856.9885	0.1697	0.0467	7,875.1401
Mobile	4.7104	26.1033	61.8811	0.2230	18.0829	0.1816	18.2644	4.8458	0.1696	5.0154	0.0000	20,593.5502	20,593.5502	1.0282	0.0000	20,619.2540
Waste						0.0000	0.0000		0.0000	0.0000	281.7474	0.0000	281.7474	16.6508	0.0000	698.0173
Water						0.0000	0.0000		0.0000	0.0000	54.4719	2,022.2038	2,076.6757	5.6390	0.1413	2,259.7461
Total	16.1361	27.1270	74.6673	0.2426	18.0829	1.1465	19.2293	4.8458	1.1345	5.9803	433.2823	30,669.9265	31,103.2088	23.7875	0.1945	31,755.8641

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail**Construction Phase**

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2020	1/16/2020	5	12	
2	Site Preparation	Site Preparation	1/17/2020	1/27/2020	5	7	
3	Grading	Grading	1/28/2020	2/20/2020	5	18	
4	Building Construction	Building Construction	2/21/2020	11/5/2020	5	185	
5	Paving	Paving	11/6/2020	11/24/2020	5	13	
6	Architectural Coating	Architectural Coating	11/24/2020	12/10/2020	5	13	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 270

Acres of Paving: 0

Residential Indoor: 1,283,951; Residential Outdoor: 427,984; Non-Residential Indoor: 2,083,202; Non-Residential Outdoor: 694,401; Striped Parking Area: 435,600 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	6	8.00	81	0.73
Demolition	Excavators	18	8.00	158	0.38
Demolition	Rubber Tired Dozers	12	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	18	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	24	8.00	97	0.37
Grading	Excavators	12	8.00	158	0.38
Grading	Graders	6	8.00	187	0.41
Grading	Rubber Tired Dozers	6	8.00	247	0.40
Grading	Scrapers	12	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	12	8.00	97	0.37
Building Construction	Cranes	6	7.00	231	0.29
Building Construction	Forklifts	18	8.00	89	0.20
Building Construction	Generator Sets	6	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	18	7.00	97	0.37
Building Construction	Welders	6	8.00	46	0.45
Paving	Pavers	12	8.00	130	0.42
Paving	Paving Equipment	12	8.00	132	0.36
Paving	Rollers	12	8.00	80	0.38
Architectural Coating	Air Compressors	6	6.00	78	0.48

Trips and VMT

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Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	36	90.00	0.00	84.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	42	106.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	48	120.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	54	5,826.00	1,770.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	36	90.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	6	1,164.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2020**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					9.0500e-003	0.0000	9.0500e-003	1.3700e-003	0.0000	1.3700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1192	1.1952	0.7831	1.4000e-003		0.0597	0.0597		0.0555	0.0555	0.0000	122.3950	122.3950	0.0346	0.0000	123.2588
Total	0.1192	1.1952	0.7831	1.4000e-003	9.0500e-003	0.0597	0.0688	1.3700e-003	0.0555	0.0569	0.0000	122.3950	122.3950	0.0346	0.0000	123.2588

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3.2 Demolition - 2020**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.2000e-004	0.0118	2.3500e-003	3.0000e-005	7.2000e-004	4.0000e-005	7.6000e-004	2.0000e-004	4.0000e-005	2.3000e-004	0.0000	3.1695	3.1695	2.2000e-004	0.0000	3.1750
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4100e-003	1.8500e-003	0.0205	6.0000e-005	5.9200e-003	5.0000e-005	5.9700e-003	1.5700e-003	4.0000e-005	1.6200e-003	0.0000	5.3334	5.3334	1.5000e-004	0.0000	5.3372
Total	2.7300e-003	0.0136	0.0228	9.0000e-005	6.6400e-003	9.0000e-005	6.7300e-003	1.7700e-003	8.0000e-005	1.8500e-003	0.0000	8.5029	8.5029	3.7000e-004	0.0000	8.5122

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					4.0700e-003	0.0000	4.0700e-003	6.2000e-004	0.0000	6.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1192	1.1952	0.7831	1.4000e-003		0.0597	0.0597		0.0555	0.0555	0.0000	122.3948	122.3948	0.0346	0.0000	123.2586
Total	0.1192	1.1952	0.7831	1.4000e-003	4.0700e-003	0.0597	0.0638	6.2000e-004	0.0555	0.0561	0.0000	122.3948	122.3948	0.0346	0.0000	123.2586

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3.2 Demolition - 2020**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.2000e-004	0.0118	2.3500e-003	3.0000e-005	7.2000e-004	4.0000e-005	7.6000e-004	2.0000e-004	4.0000e-005	2.3000e-004	0.0000	3.1695	3.1695	2.2000e-004	0.0000	3.1750
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4100e-003	1.8500e-003	0.0205	6.0000e-005	5.9200e-003	5.0000e-005	5.9700e-003	1.5700e-003	4.0000e-005	1.6200e-003	0.0000	5.3334	5.3334	1.5000e-004	0.0000	5.3372
Total	2.7300e-003	0.0136	0.0228	9.0000e-005	6.6400e-003	9.0000e-005	6.7300e-003	1.7700e-003	8.0000e-005	1.8500e-003	0.0000	8.5029	8.5029	3.7000e-004	0.0000	8.5122

3.3 Site Preparation - 2020**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3794	0.0000	0.3794	0.2085	0.0000	0.2085	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0856	0.8908	0.4518	8.0000e-004		0.0462	0.0462		0.0425	0.0425	0.0000	70.2044	70.2044	0.0227	0.0000	70.7721
Total	0.0856	0.8908	0.4518	8.0000e-004	0.3794	0.0462	0.4255	0.2085	0.0425	0.2510	0.0000	70.2044	70.2044	0.0227	0.0000	70.7721

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3.3 Site Preparation - 2020**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6600e-003	1.2700e-003	0.0141	4.0000e-005	4.0700e-003	3.0000e-005	4.1000e-003	1.0800e-003	3.0000e-005	1.1100e-003	0.0000	3.6642	3.6642	1.1000e-004	0.0000	3.6669
Total	1.6600e-003	1.2700e-003	0.0141	4.0000e-005	4.0700e-003	3.0000e-005	4.1000e-003	1.0800e-003	3.0000e-005	1.1100e-003	0.0000	3.6642	3.6642	1.1000e-004	0.0000	3.6669

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					0.1707	0.0000	0.1707	0.0938	0.0000	0.0938	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0856	0.8908	0.4518	8.0000e-004		0.0462	0.0462		0.0425	0.0425	0.0000	70.2043	70.2043	0.0227	0.0000	70.7720
Total	0.0856	0.8908	0.4518	8.0000e-004	0.1707	0.0462	0.2169	0.0938	0.0425	0.1363	0.0000	70.2043	70.2043	0.0227	0.0000	70.7720

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3.3 Site Preparation - 2020**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6600e-003	1.2700e-003	0.0141	4.0000e-005	4.0700e-003	3.0000e-005	4.1000e-003	1.0800e-003	3.0000e-005	1.1100e-003	0.0000	3.6642	3.6642	1.1000e-004	0.0000	3.6669
Total	1.6600e-003	1.2700e-003	0.0141	4.0000e-005	4.0700e-003	3.0000e-005	4.1000e-003	1.0800e-003	3.0000e-005	1.1100e-003	0.0000	3.6642	3.6642	1.1000e-004	0.0000	3.6669

3.4 Grading - 2020**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.4684	0.0000	0.4684	0.1942	0.0000	0.1942	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2403	2.7107	1.7258	3.3500e-003		0.1174	0.1174		0.1080	0.1080	0.0000	294.2152	294.2152	0.0952	0.0000	296.5941
Total	0.2403	2.7107	1.7258	3.3500e-003	0.4684	0.1174	0.5858	0.1942	0.1080	0.3022	0.0000	294.2152	294.2152	0.0952	0.0000	296.5941

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3.4 Grading - 2020**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.8200e-003	3.7000e-003	0.0409	1.2000e-004	0.0119	9.0000e-005	0.0119	3.1500e-003	8.0000e-005	3.2300e-003	0.0000	10.6668	10.6668	3.1000e-004	0.0000	10.6745
Total	4.8200e-003	3.7000e-003	0.0409	1.2000e-004	0.0119	9.0000e-005	0.0119	3.1500e-003	8.0000e-005	3.2300e-003	0.0000	10.6668	10.6668	3.1000e-004	0.0000	10.6745

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					0.2108	0.0000	0.2108	0.0874	0.0000	0.0874	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2403	2.7107	1.7257	3.3500e-003		0.1174	0.1174		0.1080	0.1080	0.0000	294.2148	294.2148	0.0952	0.0000	296.5937
Total	0.2403	2.7107	1.7257	3.3500e-003	0.2108	0.1174	0.3282	0.0874	0.1080	0.1954	0.0000	294.2148	294.2148	0.0952	0.0000	296.5937

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3.4 Grading - 2020**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.8200e-003	3.7000e-003	0.0409	1.2000e-004	0.0119	9.0000e-005	0.0119	3.1500e-003	8.0000e-005	3.2300e-003	0.0000	10.6668	10.6668	3.1000e-004	0.0000	10.6745
Total	4.8200e-003	3.7000e-003	0.0409	1.2000e-004	0.0119	9.0000e-005	0.0119	3.1500e-003	8.0000e-005	3.2300e-003	0.0000	10.6668	10.6668	3.1000e-004	0.0000	10.6745

3.5 Building Construction - 2020**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.1765	10.6483	9.3509	0.0149		0.6200	0.6200		0.5829	0.5829	0.0000	1,285.4354	1,285.4354	0.3136	0.0000	1,293.2754
Total	1.1765	10.6483	9.3509	0.0149		0.6200	0.6200		0.5829	0.5829	0.0000	1,285.4354	1,285.4354	0.3136	0.0000	1,293.2754

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3.5 Building Construction - 2020**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.5485	17.4721	4.3280	0.0416	1.0320	0.0857	1.1177	0.2978	0.0819	0.3797	0.0000	4,026.847 4	4,026.847 4	0.2643	0.0000	4,033.455 9
Worker	2.4058	1.8445	20.4101	0.0589	5.9125	0.0457	5.9582	1.5702	0.0421	1.6123	0.0000	5,322.581 6	5,322.581 6	0.1527	0.0000	5,326.399 9
Total	2.9543	19.3167	24.7380	0.1005	6.9445	0.1313	7.0759	1.8680	0.1240	1.9920	0.0000	9,349.428 9	9,349.428 9	0.4171	0.0000	9,359.855 8

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	1.1765	10.6482	9.3509	0.0149		0.6200	0.6200		0.5829	0.5829	0.0000	1,285.433 9	1,285.433 9	0.3136	0.0000	1,293.273 9
Total	1.1765	10.6482	9.3509	0.0149		0.6200	0.6200		0.5829	0.5829	0.0000	1,285.433 9	1,285.433 9	0.3136	0.0000	1,293.273 9

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3.5 Building Construction - 2020**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.5485	17.4721	4.3280	0.0416	1.0320	0.0857	1.1177	0.2978	0.0819	0.3797	0.0000	4,026.847 4	4,026.847 4	0.2643	0.0000	4,033.455 9
Worker	2.4058	1.8445	20.4101	0.0589	5.9125	0.0457	5.9582	1.5702	0.0421	1.6123	0.0000	5,322.581 6	5,322.581 6	0.1527	0.0000	5,326.399 9
Total	2.9543	19.3167	24.7380	0.1005	6.9445	0.1313	7.0759	1.8680	0.1240	1.9920	0.0000	9,349.428 9	9,349.428 9	0.4171	0.0000	9,359.855 8

3.6 Paving - 2020**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0529	0.5486	0.5714	8.9000e-004		0.0294	0.0294		0.0270	0.0270	0.0000	78.1101	78.1101	0.0253	0.0000	78.7416
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0529	0.5486	0.5714	8.9000e-004		0.0294	0.0294		0.0270	0.0270	0.0000	78.1101	78.1101	0.0253	0.0000	78.7416

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3.6 Paving - 2020**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6100e-003	2.0000e-003	0.0222	6.0000e-005	6.4200e-003	5.0000e-005	6.4700e-003	1.7000e-003	5.0000e-005	1.7500e-003	0.0000	5.7779	5.7779	1.7000e-004	0.0000	5.7820
Total	2.6100e-003	2.0000e-003	0.0222	6.0000e-005	6.4200e-003	5.0000e-005	6.4700e-003	1.7000e-003	5.0000e-005	1.7500e-003	0.0000	5.7779	5.7779	1.7000e-004	0.0000	5.7820

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	0.0529	0.5486	0.5714	8.9000e-004		0.0294	0.0294		0.0270	0.0270	0.0000	78.1100	78.1100	0.0253	0.0000	78.7415
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0529	0.5486	0.5714	8.9000e-004		0.0294	0.0294		0.0270	0.0270	0.0000	78.1100	78.1100	0.0253	0.0000	78.7415

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3.6 Paving - 2020**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6100e-003	2.0000e-003	0.0222	6.0000e-005	6.4200e-003	5.0000e-005	6.4700e-003	1.7000e-003	5.0000e-005	1.7500e-003	0.0000	5.7779	5.7779	1.7000e-004	0.0000	5.7820
Total	2.6100e-003	2.0000e-003	0.0222	6.0000e-005	6.4200e-003	5.0000e-005	6.4700e-003	1.7000e-003	5.0000e-005	1.7500e-003	0.0000	5.7779	5.7779	1.7000e-004	0.0000	5.7820

3.7 Architectural Coating - 2020**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	9.4303					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.4400e-003	0.0657	0.0714	1.2000e-004		4.3300e-003	4.3300e-003		4.3300e-003	4.3300e-003	0.0000	9.9577	9.9577	7.7000e-004	0.0000	9.9770
Total	9.4397	0.0657	0.0714	1.2000e-004		4.3300e-003	4.3300e-003		4.3300e-003	4.3300e-003	0.0000	9.9577	9.9577	7.7000e-004	0.0000	9.9770

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3.7 Architectural Coating - 2020**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0338	0.0259	0.2866	8.3000e-004	0.0830	6.4000e-004	0.0837	0.0221	5.9000e-004	0.0226	0.0000	74.7268	74.7268	2.1400e-003	0.0000	74.7804
Total	0.0338	0.0259	0.2866	8.3000e-004	0.0830	6.4000e-004	0.0837	0.0221	5.9000e-004	0.0226	0.0000	74.7268	74.7268	2.1400e-003	0.0000	74.7804

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	9.4303					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.4400e-003	0.0657	0.0714	1.2000e-004		4.3300e-003	4.3300e-003		4.3300e-003	4.3300e-003	0.0000	9.9577	9.9577	7.7000e-004	0.0000	9.9770
Total	9.4397	0.0657	0.0714	1.2000e-004		4.3300e-003	4.3300e-003		4.3300e-003	4.3300e-003	0.0000	9.9577	9.9577	7.7000e-004	0.0000	9.9770

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3.7 Architectural Coating - 2020**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0338	0.0259	0.2866	8.3000e-004	0.0830	6.4000e-004	0.0837	0.0221	5.9000e-004	0.0226	0.0000	74.7268	74.7268	2.1400e-003	0.0000	74.7804
Total	0.0338	0.0259	0.2866	8.3000e-004	0.0830	6.4000e-004	0.0837	0.0221	5.9000e-004	0.0226	0.0000	74.7268	74.7268	2.1400e-003	0.0000	74.7804

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	4.7104	26.1033	61.8811	0.2230	18.0829	0.1816	18.2644	4.8458	0.1696	5.0154	0.0000	20,593.5502	20,593.5502	1.0282	0.0000	20,619.2540
Unmitigated	4.7104	26.1033	61.8811	0.2230	18.0829	0.1816	18.2644	4.8458	0.1696	5.0154	0.0000	20,593.5502	20,593.5502	1.0282	0.0000	20,619.2540

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	2,336.16	2,538.22	2151.82	7,991,649	7,991,649
Apartments Mid Rise	960.59	923.04	846.48	3,208,449	3,208,449
Apartments Mid Rise	898.42	863.29	791.69	3,000,772	3,000,772
Elementary School	1,912.70	0.00	0.00	4,708,506	4,708,506
General Light Industry	515.78	97.68	50.32	1,725,067	1,725,067
Industrial Park	0.00	0.00	0.00		
Medical Office Building	708.15	175.62	30.38	1,388,358	1,388,358
Office Park	6,381.38	916.42	424.68	16,047,628	16,047,628
Regional Shopping Center	4,556.94	5,332.80	2693.61	9,519,953	9,519,953
Single Family Housing	0.00	0.00	0.00		
Single Family Housing	0.00	0.00	0.00		
User Defined Recreational	0.00	0.00	0.00		
Total	18,270.12	10,847.05	6,988.97	47,590,382	47,590,382

4.3 Trip Type Information

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Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Elementary School	16.60	8.40	6.90	65.00	30.00	5.00	63	25	12
General Light Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
Industrial Park	16.60	8.40	6.90	59.00	28.00	13.00	79	19	2
Medical Office Building	16.60	8.40	6.90	29.60	51.40	19.00	60	30	10
Office Park	16.60	8.40	6.90	33.00	48.00	19.00	82	15	3
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11
Single Family Housing	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Single Family Housing	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
User Defined Recreational	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.548858	0.043235	0.200706	0.120309	0.016131	0.005851	0.021034	0.033479	0.002070	0.001877	0.004817	0.000707	0.000925
Apartments Mid Rise	0.548858	0.043235	0.200706	0.120309	0.016131	0.005851	0.021034	0.033479	0.002070	0.001877	0.004817	0.000707	0.000925
Elementary School	0.548858	0.043235	0.200706	0.120309	0.016131	0.005851	0.021034	0.033479	0.002070	0.001877	0.004817	0.000707	0.000925
General Light Industry	0.548858	0.043235	0.200706	0.120309	0.016131	0.005851	0.021034	0.033479	0.002070	0.001877	0.004817	0.000707	0.000925
Industrial Park	0.548858	0.043235	0.200706	0.120309	0.016131	0.005851	0.021034	0.033479	0.002070	0.001877	0.004817	0.000707	0.000925
Medical Office Building	0.548858	0.043235	0.200706	0.120309	0.016131	0.005851	0.021034	0.033479	0.002070	0.001877	0.004817	0.000707	0.000925
Office Park	0.548858	0.043235	0.200706	0.120309	0.016131	0.005851	0.021034	0.033479	0.002070	0.001877	0.004817	0.000707	0.000925
Regional Shopping Center	0.548858	0.043235	0.200706	0.120309	0.016131	0.005851	0.021034	0.033479	0.002070	0.001877	0.004817	0.000707	0.000925
Single Family Housing	0.548858	0.043235	0.200706	0.120309	0.016131	0.005851	0.021034	0.033479	0.002070	0.001877	0.004817	0.000707	0.000925
User Defined Recreational	0.548858	0.043235	0.200706	0.120309	0.016131	0.005851	0.021034	0.033479	0.002070	0.001877	0.004817	0.000707	0.000925

5.0 Energy Detail

Historical Energy Use: N

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5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	7,052.0706	7,052.0706	0.1543	0.0319	7,065.4390
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	7,052.0706	7,052.0706	0.1543	0.0319	7,065.4390
NaturalGas Mitigated	0.0813	0.7110	0.4128	4.4400e-003		0.0562	0.0562		0.0562	0.0562	0.0000	804.9179	804.9179	0.0154	0.0148	809.7011
NaturalGas Unmitigated	0.0813	0.7110	0.4128	4.4400e-003		0.0562	0.0562		0.0562	0.0562	0.0000	804.9179	804.9179	0.0154	0.0148	809.7011

Northside Specific Plan Construction - South Coast AQMD Air District, Annual

5.2 Energy by Land Use - NaturalGas**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	5.52116e+006	0.0298	0.2544	0.1083	1.6200e-003		0.0206	0.0206		0.0206	0.0206	0.0000	294.6301	294.6301	5.6500e-003	5.4000e-003	296.3810
Apartments Mid Rise	1.99868e+006	0.0108	0.0921	0.0392	5.9000e-004		7.4500e-003	7.4500e-003		7.4500e-003	7.4500e-003	0.0000	106.6572	106.6572	2.0400e-003	1.9600e-003	107.2910
Apartments Mid Rise	2.137e+006	0.0115	0.0985	0.0419	6.3000e-004		7.9600e-003	7.9600e-003		7.9600e-003	7.9600e-003	0.0000	114.0387	114.0387	2.1900e-003	2.0900e-003	114.7164
Elementary School	1.08589e+006	5.8600e-003	0.0532	0.0447	3.2000e-004		4.0500e-003	4.0500e-003		4.0500e-003	4.0500e-003	0.0000	57.9472	57.9472	1.1100e-003	1.0600e-003	58.2916
General Light Industry	2.40426e+006	0.0130	0.1179	0.0990	7.1000e-004		8.9600e-003	8.9600e-003		8.9600e-003	8.9600e-003	0.0000	128.3005	128.3005	2.4600e-003	2.3500e-003	129.0629
Industrial Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Medical Office Building	68012	3.7000e-004	3.3300e-003	2.8000e-003	2.0000e-005		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004	0.0000	3.6294	3.6294	7.0000e-005	7.0000e-005	3.6510
Office Park	1.63167e+006	8.8000e-003	0.0800	0.0672	4.8000e-004		6.0800e-003	6.0800e-003		6.0800e-003	6.0800e-003	0.0000	87.0720	87.0720	1.6700e-003	1.6000e-003	87.5894
Regional Shopping Center	236918	1.2800e-003	0.0116	9.7600e-003	7.0000e-005		8.8000e-004	8.8000e-004		8.8000e-004	8.8000e-004	0.0000	12.6429	12.6429	2.4000e-004	2.3000e-004	12.7180
Single Family Housing	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0813	0.7110	0.4128	4.4400e-003		0.0562	0.0562		0.0562	0.0562	0.0000	804.9179	804.9179	0.0154	0.0148	809.7012

Northside Specific Plan Construction - South Coast AQMD Air District, Annual

5.2 Energy by Land Use - NaturalGas**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	5.52116e+006	0.0298	0.2544	0.1083	1.6200e-003		0.0206	0.0206		0.0206	0.0206	0.0000	294.6301	294.6301	5.6500e-003	5.4000e-003	296.3810
Apartments Mid Rise	1.99868e+006	0.0108	0.0921	0.0392	5.9000e-004		7.4500e-003	7.4500e-003		7.4500e-003	7.4500e-003	0.0000	106.6572	106.6572	2.0400e-003	1.9600e-003	107.2910
Apartments Mid Rise	2.137e+006	0.0115	0.0985	0.0419	6.3000e-004		7.9600e-003	7.9600e-003		7.9600e-003	7.9600e-003	0.0000	114.0387	114.0387	2.1900e-003	2.0900e-003	114.7164
Elementary School	1.08589e+006	5.8600e-003	0.0532	0.0447	3.2000e-004		4.0500e-003	4.0500e-003		4.0500e-003	4.0500e-003	0.0000	57.9472	57.9472	1.1100e-003	1.0600e-003	58.2916
General Light Industry	2.40426e+006	0.0130	0.1179	0.0990	7.1000e-004		8.9600e-003	8.9600e-003		8.9600e-003	8.9600e-003	0.0000	128.3005	128.3005	2.4600e-003	2.3500e-003	129.0629
Industrial Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Medical Office Building	68012	3.7000e-004	3.3300e-003	2.8000e-003	2.0000e-005		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004	0.0000	3.6294	3.6294	7.0000e-005	7.0000e-005	3.6510
Office Park	1.63167e+006	8.8000e-003	0.0800	0.0672	4.8000e-004		6.0800e-003	6.0800e-003		6.0800e-003	6.0800e-003	0.0000	87.0720	87.0720	1.6700e-003	1.6000e-003	87.5894
Regional Shopping Center	236918	1.2800e-003	0.0116	9.7600e-003	7.0000e-005		8.8000e-004	8.8000e-004		8.8000e-004	8.8000e-004	0.0000	12.6429	12.6429	2.4000e-004	2.3000e-004	12.7180
Single Family Housing	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0813	0.7110	0.4128	4.4400e-003		0.0562	0.0562		0.0562	0.0562	0.0000	804.9179	804.9179	0.0154	0.0148	809.7012

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5.3 Energy by Land Use - Electricity**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	1.72296e+006	1,036.0253	0.0227	4.6900e-003	1,037.9893
Apartments Mid Rise	617098	371.0637	8.1200e-003	1.6800e-003	371.7671
Apartments Mid Rise	659806	396.7443	8.6800e-003	1.8000e-003	397.4964
Elementary School	904908	544.1255	0.0119	2.4600e-003	545.1569
General Light Industry	751100	451.6400	9.8800e-003	2.0400e-003	452.4961
Industrial Park	0	0.0000	0.0000	0.0000	0.0000
Medical Office Building	186592	112.1987	2.4500e-003	5.1000e-004	112.4113
Office Park	5.53761e+006	3,329.7904	0.0728	0.0151	3,336.1026
Regional Shopping Center	1.34787e+006	810.4828	0.0177	3.6700e-003	812.0192
Single Family Housing	0	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000
Total		7,052.0706	0.1543	0.0319	7,065.4390

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5.3 Energy by Land Use - Electricity**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	1.72296e+006	1,036.0253	0.0227	4.6900e-003	1,037.9893
Apartments Mid Rise	617098	371.0637	8.1200e-003	1.6800e-003	371.7671
Apartments Mid Rise	659806	396.7443	8.6800e-003	1.8000e-003	397.4964
Elementary School	904908	544.1255	0.0119	2.4600e-003	545.1569
General Light Industry	751100	451.6400	9.8800e-003	2.0400e-003	452.4961
Industrial Park	0	0.0000	0.0000	0.0000	0.0000
Medical Office Building	186592	112.1987	2.4500e-003	5.1000e-004	112.4113
Office Park	5.53761e+006	3,329.7904	0.0728	0.0151	3,336.1026
Regional Shopping Center	1.34787e+006	810.4828	0.0177	3.6700e-003	812.0192
Single Family Housing	0	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000
Total		7,052.0706	0.1543	0.0319	7,065.4390

6.0 Area Detail**6.1 Mitigation Measures Area**

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Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	11.3444	0.3127	12.3733	0.0152		0.9087	0.9087		0.9087	0.9087	97.0630	197.1840	294.2470	0.2999	6.5900e-003	303.7067
Unmitigated	11.3444	0.3127	12.3733	0.0152		0.9087	0.9087		0.9087	0.9087	97.0630	197.1840	294.2470	0.2999	6.5900e-003	303.7067

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6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.8421					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	7.3096					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	2.9931	0.2370	5.8089	0.0148		0.8725	0.8725		0.8725	0.8725	97.0630	186.4809	283.5439	0.2895	6.5900e-003	292.7434
Landscaping	0.1996	0.0758	6.5644	3.5000e-004		0.0362	0.0362		0.0362	0.0362	0.0000	10.7031	10.7031	0.0104	0.0000	10.9634
Total	11.3444	0.3127	12.3733	0.0152		0.9087	0.9087		0.9087	0.9087	97.0630	197.1840	294.2470	0.2999	6.5900e-003	303.7067

Northside Specific Plan Construction - South Coast AQMD Air District, Annual

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	0.8421					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	7.3096					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	2.9931	0.2370	5.8089	0.0148		0.8725	0.8725		0.8725	0.8725	97.0630	186.4809	283.5439	0.2895	6.5900e-003	292.7434
Landscaping	0.1996	0.0758	6.5644	3.5000e-004		0.0362	0.0362		0.0362	0.0362	0.0000	10.7031	10.7031	0.0104	0.0000	10.9634
Total	11.3444	0.3127	12.3733	0.0152		0.9087	0.9087		0.9087	0.9087	97.0630	197.1840	294.2470	0.2999	6.5900e-003	303.7067

7.0 Water Detail**7.1 Mitigation Measures Water**

Northside Specific Plan Construction - South Coast AQMD Air District, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	2,076.675 7	5.6390	0.1413	2,259.746 1
Unmitigated	2,076.675 7	5.6390	0.1413	2,259.746 1

Northside Specific Plan Construction - South Coast AQMD Air District, Annual

7.2 Water by Land Use**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	23.0971 / 14.5612	285.4446	0.7587	0.0190	310.0831
Apartments Mid Rise	18.2138 / 11.4826	225.0946	0.5983	0.0150	244.5239
Elementary School	3.59446 / 9.24289	91.0306	0.1191	3.1700e-003	94.9533
General Light Industry	17.1125 / 0	139.4129	0.5605	0.0138	157.5307
Industrial Park	0 / 0	0.0000	0.0000	0.0000	0.0000
Medical Office Building	2.45942 / 0.468461	23.1661	0.0806	1.9900e-003	25.7759
Office Park	99.3158 / 60.871	1,215.7590	3.2621	0.0818	1,321.6805
Regional Shopping Center	7.90502 / 4.84501	96.7680	0.2597	6.5100e-003	105.1988
Single Family Housing	0 / 0	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		2,076.6757	5.6390	0.1413	2,259.7461

Northside Specific Plan Construction - South Coast AQMD Air District, Annual

7.2 Water by Land Use**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	23.0971 / 14.5612	285.4446	0.7587	0.0190	310.0831
Apartments Mid Rise	18.2138 / 11.4826	225.0946	0.5983	0.0150	244.5239
Elementary School	3.59446 / 9.24289	91.0306	0.1191	3.1700e-003	94.9533
General Light Industry	17.1125 / 0	139.4129	0.5605	0.0138	157.5307
Industrial Park	0 / 0	0.0000	0.0000	0.0000	0.0000
Medical Office Building	2.45942 / 0.468461	23.1661	0.0806	1.9900e-003	25.7759
Office Park	99.3158 / 60.871	1,215.7590	3.2621	0.0818	1,321.6805
Regional Shopping Center	7.90502 / 4.84501	96.7680	0.2597	6.5100e-003	105.1988
Single Family Housing	0 / 0	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		2,076.6757	5.6390	0.1413	2,259.7461

8.0 Waste Detail**8.1 Mitigation Measures Waste**

Northside Specific Plan Construction - South Coast AQMD Air District, Annual

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	281.7474	16.6508	0.0000	698.0173
Unmitigated	281.7474	16.6508	0.0000	698.0173

Northside Specific Plan Construction - South Coast AQMD Air District, Annual

8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	163.07	33.1017	1.9563	0.0000	82.0082
Apartments Mid Rise	128.59	26.1026	1.5426	0.0000	64.6681
Elementary School	161.15	32.7120	1.9332	0.0000	81.0426
General Light Industry	91.76	18.6265	1.1008	0.0000	46.1462
Industrial Park	0	0.0000	0.0000	0.0000	0.0000
Medical Office Building	211.68	42.9691	2.5394	0.0000	106.4542
Office Park	519.67	105.4883	6.2342	0.0000	261.3428
Regional Shopping Center	112.06	22.7472	1.3443	0.0000	56.3551
Single Family Housing	0	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000
Total		281.7474	16.6508	0.0000	698.0172

Northside Specific Plan Construction - South Coast AQMD Air District, Annual

8.2 Waste by Land Use**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	163.07	33.1017	1.9563	0.0000	82.0082
Apartments Mid Rise	128.59	26.1026	1.5426	0.0000	64.6681
Elementary School	161.15	32.7120	1.9332	0.0000	81.0426
General Light Industry	91.76	18.6265	1.1008	0.0000	46.1462
Industrial Park	0	0.0000	0.0000	0.0000	0.0000
Medical Office Building	211.68	42.9691	2.5394	0.0000	106.4542
Office Park	519.67	105.4883	6.2342	0.0000	261.3428
Regional Shopping Center	112.06	22.7472	1.3443	0.0000	56.3551
Single Family Housing	0	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000
Total		281.7474	16.6508	0.0000	698.0172

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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Northside Specific Plan Construction - South Coast AQMD Air District, Annual

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Northside Specific Plan Construction - South Coast AQMD Air District, Summer

Northside Specific Plan Construction

South Coast AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Medical Office Building	19.60	1000sqft	0.45	19,600.00	0
Office Park	558.79	1000sqft	12.83	558,790.00	0
Elementary School	123.96	1000sqft	2.85	123,960.00	0
General Light Industry	74.00	1000sqft	1.70	74,000.00	0
Industrial Park	0.00	1000sqft	0.00	0.00	0
User Defined Recreational	11.61	User Defined Unit	11.61	505,731.60	0
Apartments Low Rise	354.50	Dwelling Unit	22.16	354,500.00	1014
Apartments Mid Rise	144.45	Dwelling Unit	3.80	144,450.00	413
Apartments Mid Rise	135.10	Dwelling Unit	3.56	135,100.00	386
Single Family Housing	0.00	Dwelling Unit	0.00	0.00	0
Single Family Housing	0.00	Dwelling Unit	0.00	0.00	0
Regional Shopping Center	106.72	1000sqft	2.45	106,720.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10			Operational Year	2021
Utility Company	Riverside Public Utilities				
CO2 Intensity (lb/MW hr)	1325.65	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

Northside Specific Plan Construction - South Coast AQMD Air District, Winter

Northside Specific Plan Construction

South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Medical Office Building	19.60	1000sqft	0.45	19,600.00	0
Office Park	558.79	1000sqft	12.83	558,790.00	0
Elementary School	123.96	1000sqft	2.85	123,960.00	0
General Light Industry	74.00	1000sqft	1.70	74,000.00	0
Industrial Park	0.00	1000sqft	0.00	0.00	0
User Defined Recreational	11.61	User Defined Unit	11.61	505,731.60	0
Apartments Low Rise	354.50	Dwelling Unit	22.16	354,500.00	1014
Apartments Mid Rise	144.45	Dwelling Unit	3.80	144,450.00	413
Apartments Mid Rise	135.10	Dwelling Unit	3.56	135,100.00	386
Single Family Housing	0.00	Dwelling Unit	0.00	0.00	0
Single Family Housing	0.00	Dwelling Unit	0.00	0.00	0
Regional Shopping Center	106.72	1000sqft	2.45	106,720.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10	Operational Year	2021		
Utility Company	Riverside Public Utilities				
CO2 Intensity (lb/MW hr)	1325.65	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

Northside Specific Plan Construction - South Coast AQMD Air District, Winter

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Based on Rick Engineering Traffic Impact Analysis (October 14, 2019). Scenario 1 land use buildout quantities divided by 20 to estimate worst-case single year construction activities.

Construction Phase - Default schedule adjusted to 1-year total duration, default total days divided by 6.

Off-road Equipment - Default unit amount multiplied by 6 to account for compressed construction schedule.

Off-road Equipment - Default unit amount multiplied by 6 to account for compressed construction schedule.

Off-road Equipment - Default unit amount multiplied by 6 to account for compressed construction schedule.

Off-road Equipment - Default unit amount multiplied by 6 to account for compressed construction schedule.

Off-road Equipment - Default unit amount multiplied by 6 to account for compressed construction schedule.

Off-road Equipment - Default unit amount multiplied by 6 to account for compressed construction schedule.

Trips and VMT - Default trips for building construction and architectural coatings multiplied by 6 to account for compressed construction schedule.

On-road Fugitive Dust - Default Values

Demolition - Scenario 1

Grading - Default

Architectural Coating - Parking area estimated equal to 10 acres per year.

Vehicle Trips - Construction analysis only

Vehicle Emission Factors - Construction analysis only

Vehicle Emission Factors - Construction analysis only

Vehicle Emission Factors - Construction analysis only

Road Dust - Construction analysis only

Woodstoves - Construction analysis only

Consumer Products - Construction analysis only

Area Coating - Construction analysis only

Landscape Equipment - Construction analysis only

Energy Use - Construction analysis only

Water And Wastewater - Construction analysis only

Northside Specific Plan Construction - South Coast AQMD Air District, Winter

Solid Waste - Construction analysis only
 Construction Off-road Equipment Mitigation - SCAQMD Rule 403

Area Mitigation -

Operational Off-Road Equipment - Construction analysis only

Stationary Sources - Emergency Generators and Fire Pumps - Construction analysis only

Stationary Sources - Process Boilers - Construction analysis only

Stationary Sources - User Defined - Construction analysis only

Stationary Sources - Emergency Generators and Fire Pumps EF - Construction analysis only

Stationary Sources - Process Boilers EF - Construction analysis only

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Parking	0.00	435,600.00
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstructionPhase	NumDays	75.00	13.00
tblConstructionPhase	NumDays	1,110.00	185.00
tblConstructionPhase	NumDays	70.00	12.00
tblConstructionPhase	NumDays	110.00	18.00
tblConstructionPhase	NumDays	75.00	13.00
tblConstructionPhase	NumDays	40.00	7.00
tblLandUse	LandUseSquareFeet	0.00	505,731.60
tblLandUse	LotAcreage	0.00	11.61
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	18.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	12.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	18.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	6.00

Northside Specific Plan Construction - South Coast AQMD Air District, Winter

tbloffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	6.00
tbloffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	12.00
tbloffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	12.00
tbloffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	12.00
tbloffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	12.00
tbloffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	6.00
tbloffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	18.00
tbloffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	12.00
tbloffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	18.00
tbloffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	12.00
tbloffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	24.00
tbloffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	6.00
tblTripsAndVMT	VendorTripNumber	295.00	1,770.00
tblTripsAndVMT	WorkerTripNumber	105.00	106.00
tblTripsAndVMT	WorkerTripNumber	971.00	5,826.00
tblTripsAndVMT	WorkerTripNumber	194.00	1,164.00

2.0 Emissions Summary

Northside Specific Plan Construction - South Coast AQMD Air District, Winter

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					
2020	1,466.596 1	320.0601	364.8484	1.2298	109.5824	13.1935	122.7758	59.8983	12.1380	72.0363	0.0000	124,850.6 073	124,850.6 073	11.6914	0.0000	125,070.6 352
Maximum	1,466.596 1	320.0601	364.8484	1.2298	109.5824	13.1935	122.7758	59.8983	12.1380	72.0363	0.0000	124,850.6 073	124,850.6 073	11.6914	0.0000	125,070.6 352

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					
2020	1,466.596 1	320.0601	364.8484	1.2298	76.4493	13.1935	84.5795	27.1271	12.1380	39.2651	0.0000	124,850.6 073	124,850.6 073	11.6914	0.0000	125,070.6 352
Maximum	1,466.596 1	320.0601	364.8484	1.2298	76.4493	13.1935	84.5795	27.1271	12.1380	39.2651	0.0000	124,850.6 073	124,850.6 073	11.6914	0.0000	125,070.6 352

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	30.24	0.00	31.11	54.71	0.00	45.49	0.00	0.00	0.00	0.00	0.00	0.00

Northside Specific Plan Construction - South Coast AQMD Air District, Winter

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	285.7117	19.5630	517.2288	1.1883		70.0927	70.0927		70.0927	70.0927	8,559.4900	16,539.1854	25,098.6754	25.6178	0.5809	25,912.2256
Energy	0.4457	3.8958	2.2619	0.0243		0.3079	0.3079		0.3079	0.3079		4,861.7541	4,861.7541	0.0932	0.0891	4,890.6451
Mobile	32.6767	174.0303	413.9215	1.4925	125.0972	1.2392	126.3364	33.4720	1.1574	34.6294		151,909.6667	151,909.6667	7.7514		152,103.4503
Total	318.8341	197.4891	933.4122	2.7051	125.0972	71.6399	196.7371	33.4720	71.5581	105.0301	8,559.4900	173,310.6062	181,870.0962	33.4623	0.6700	182,906.3210

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	285.7117	19.5630	517.2288	1.1883		70.0927	70.0927		70.0927	70.0927	8,559.4900	16,539.1854	25,098.6754	25.6178	0.5809	25,912.2256
Energy	0.4457	3.8958	2.2619	0.0243		0.3079	0.3079		0.3079	0.3079		4,861.7541	4,861.7541	0.0932	0.0891	4,890.6451
Mobile	32.6767	174.0303	413.9215	1.4925	125.0972	1.2392	126.3364	33.4720	1.1574	34.6294		151,909.6667	151,909.6667	7.7514		152,103.4503
Total	318.8341	197.4891	933.4122	2.7051	125.0972	71.6399	196.7371	33.4720	71.5581	105.0301	8,559.4900	173,310.6062	181,870.0962	33.4623	0.6700	182,906.3210

Northside Specific Plan Construction - South Coast AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2020	1/16/2020	5	12	
2	Site Preparation	Site Preparation	1/17/2020	1/27/2020	5	7	
3	Grading	Grading	1/28/2020	2/20/2020	5	18	
4	Building Construction	Building Construction	2/21/2020	11/5/2020	5	185	
5	Paving	Paving	11/6/2020	11/24/2020	5	13	
6	Architectural Coating	Architectural Coating	11/24/2020	12/10/2020	5	13	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 270

Acres of Paving: 0

Residential Indoor: 1,283,951; Residential Outdoor: 427,984; Non-Residential Indoor: 2,083,202; Non-Residential Outdoor: 694,401; Striped Parking Area: 435,600 (Architectural Coating – sqft)

OffRoad Equipment

Northside Specific Plan Construction - South Coast AQMD Air District, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	6	8.00	81	0.73
Demolition	Excavators	18	8.00	158	0.38
Demolition	Rubber Tired Dozers	12	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	18	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	24	8.00	97	0.37
Grading	Excavators	12	8.00	158	0.38
Grading	Graders	6	8.00	187	0.41
Grading	Rubber Tired Dozers	6	8.00	247	0.40
Grading	Scrapers	12	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	12	8.00	97	0.37
Building Construction	Cranes	6	7.00	231	0.29
Building Construction	Forklifts	18	8.00	89	0.20
Building Construction	Generator Sets	6	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	18	7.00	97	0.37
Building Construction	Welders	6	8.00	46	0.45
Paving	Pavers	12	8.00	130	0.42
Paving	Paving Equipment	12	8.00	132	0.36
Paving	Rollers	12	8.00	80	0.38
Architectural Coating	Air Compressors	6	6.00	78	0.48

Trips and VMT

Northside Specific Plan Construction - South Coast AQMD Air District, Winter

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	36	90.00	0.00	84.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	42	106.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	48	120.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	54	5,826.00	1,770.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	36	90.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	6	1,164.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2020**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.5090	0.0000	1.5090	0.2285	0.0000	0.2285			0.0000			0.0000
Off-Road	19.8727	199.2061	130.5192	0.2329		9.9522	9.9522		9.2511	9.2511		22,486.2295	22,486.2295	6.3477		22,644.9217
Total	19.8727	199.2061	130.5192	0.2329	1.5090	9.9522	11.4612	0.2285	9.2511	9.4796		22,486.2295	22,486.2295	6.3477		22,644.9217

Northside Specific Plan Construction - South Coast AQMD Air District, Winter

3.2 Demolition - 2020**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0547	1.9295	0.4080	5.3300e-003	0.1223	6.2400e-003	0.1286	0.0335	5.9700e-003	0.0395		576.0286	576.0286	0.0411		577.0559
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.4441	0.2997	3.3128	9.6700e-003	1.0060	7.6300e-003	1.0136	0.2668	7.0300e-003	0.2738		963.3285	963.3285	0.0276		964.0191
Total	0.4988	2.2292	3.7208	0.0150	1.1283	0.0139	1.1422	0.3003	0.0130	0.3133		1,539.3571	1,539.3571	0.0687		1,541.0750

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.6791	0.0000	0.6791	0.1028	0.0000	0.1028			0.0000			0.0000
Off-Road	19.8727	199.2061	130.5192	0.2329		9.9522	9.9522		9.2511	9.2511	0.0000	22,486.2295	22,486.2295	6.3477		22,644.9216
Total	19.8727	199.2061	130.5192	0.2329	0.6791	9.9522	10.6312	0.1028	9.2511	9.3539	0.0000	22,486.2295	22,486.2295	6.3477		22,644.9216

Northside Specific Plan Construction - South Coast AQMD Air District, Winter

3.2 Demolition - 2020**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0547	1.9295	0.4080	5.3300e-003	0.1223	6.2400e-003	0.1286	0.0335	5.9700e-003	0.0395		576.0286	576.0286	0.0411		577.0559
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.4441	0.2997	3.3128	9.6700e-003	1.0060	7.6300e-003	1.0136	0.2668	7.0300e-003	0.2738		963.3285	963.3285	0.0276		964.0191
Total	0.4988	2.2292	3.7208	0.0150	1.1283	0.0139	1.1422	0.3003	0.0130	0.3133		1,539.3571	1,539.3571	0.0687		1,541.0750

3.3 Site Preparation - 2020**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					108.3976	0.0000	108.3976	59.5841	0.0000	59.5841			0.0000			0.0000
Off-Road	24.4588	254.5040	129.0817	0.2281		13.1845	13.1845		12.1297	12.1297		22,110.6094	22,110.6094	7.1510		22,289.3848
Total	24.4588	254.5040	129.0817	0.2281	108.3976	13.1845	121.5820	59.5841	12.1297	71.7138		22,110.6094	22,110.6094	7.1510		22,289.3848

Northside Specific Plan Construction - South Coast AQMD Air District, Winter

3.3 Site Preparation - 2020**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.5231	0.3530	3.9017	0.0114	1.1848	8.9900e-003	1.1938	0.3142	8.2800e-003	0.3225		1,134.5869	1,134.5869	0.0325		1,135.4003
Total	0.5231	0.3530	3.9017	0.0114	1.1848	8.9900e-003	1.1938	0.3142	8.2800e-003	0.3225		1,134.5869	1,134.5869	0.0325		1,135.4003

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					48.7789	0.0000	48.7789	26.8128	0.0000	26.8128			0.0000			0.0000
Off-Road	24.4588	254.5040	129.0817	0.2281		13.1845	13.1845		12.1297	12.1297	0.0000	22,110.6093	22,110.6093	7.1510		22,289.3848
Total	24.4588	254.5040	129.0817	0.2281	48.7789	13.1845	61.9634	26.8128	12.1297	38.9426	0.0000	22,110.6093	22,110.6093	7.1510		22,289.3848

Northside Specific Plan Construction - South Coast AQMD Air District, Winter

3.3 Site Preparation - 2020**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.5231	0.3530	3.9017	0.0114	1.1848	8.9900e-003	1.1938	0.3142	8.2800e-003	0.3225		1,134.5869	1,134.5869	0.0325		1,135.4003
Total	0.5231	0.3530	3.9017	0.0114	1.1848	8.9900e-003	1.1938	0.3142	8.2800e-003	0.3225		1,134.5869	1,134.5869	0.0325		1,135.4003

3.4 Grading - 2020**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					52.0400	0.0000	52.0400	21.5790	0.0000	21.5790			0.0000			0.0000
Off-Road	26.7006	301.1851	191.7497	0.3720		13.0434	13.0434		11.9999	11.9999		36,035.1916	36,035.1916	11.6545		36,326.5544
Total	26.7006	301.1851	191.7497	0.3720	52.0400	13.0434	65.0834	21.5790	11.9999	33.5789		36,035.1916	36,035.1916	11.6545		36,326.5544

Northside Specific Plan Construction - South Coast AQMD Air District, Winter

3.4 Grading - 2020**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.5922	0.3996	4.4171	0.0129	1.3413	0.0102	1.3515	0.3557	9.3700e-003	0.3651		1,284.4379	1,284.4379	0.0368		1,285.3589
Total	0.5922	0.3996	4.4171	0.0129	1.3413	0.0102	1.3515	0.3557	9.3700e-003	0.3651		1,284.4379	1,284.4379	0.0368		1,285.3589

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					23.4180	0.0000	23.4180	9.7106	0.0000	9.7106			0.0000			0.0000
Off-Road	26.7006	301.1851	191.7497	0.3720		13.0434	13.0434		11.9999	11.9999	0.0000	36,035.1916	36,035.1916	11.6545		36,326.5544
Total	26.7006	301.1851	191.7497	0.3720	23.4180	13.0434	36.4614	9.7106	11.9999	21.7105	0.0000	36,035.1916	36,035.1916	11.6545		36,326.5544

Northside Specific Plan Construction - South Coast AQMD Air District, Winter

3.4 Grading - 2020**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.5922	0.3996	4.4171	0.0129	1.3413	0.0102	1.3515	0.3557	9.3700e-003	0.3651		1,284.4379	1,284.4379	0.0368		1,285.3589
Total	0.5922	0.3996	4.4171	0.0129	1.3413	0.0102	1.3515	0.3557	9.3700e-003	0.3651		1,284.4379	1,284.4379	0.0368		1,285.3589

3.5 Building Construction - 2020**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	12.7191	115.1162	101.0910	0.1615		6.7023	6.7023		6.3020	6.3020		15,318.3783	15,318.3783	3.7371		15,411.8069
Total	12.7191	115.1162	101.0910	0.1615		6.7023	6.7023		6.3020	6.3020		15,318.3783	15,318.3783	3.7371		15,411.8069

Northside Specific Plan Construction - South Coast AQMD Air District, Winter

3.5 Building Construction - 2020**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	6.0889	185.5428	49.3097	0.4424	11.3283	0.9340	12.2623	3.2613	0.8934	4.1547		47,172.76 68	47,172.76 68	3.2756		47,254.65 61
Worker	28.7490	19.4011	214.4477	0.6259	65.1210	0.4940	65.6149	17.2704	0.4550	17.7254		62,359.46 22	62,359.46 22	1.7884		62,404.17 22
Total	34.8379	204.9439	263.7574	1.0683	76.4493	1.4279	77.8772	20.5317	1.3484	21.8801		109,532.2 290	109,532.2 290	5.0640		109,658.8 283

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	12.7191	115.1162	101.0910	0.1615		6.7023	6.7023		6.3020	6.3020	0.0000	15,318.37 83	15,318.37 83	3.7371		15,411.806 8
Total	12.7191	115.1162	101.0910	0.1615		6.7023	6.7023		6.3020	6.3020	0.0000	15,318.37 83	15,318.37 83	3.7371		15,411.80 68

Northside Specific Plan Construction - South Coast AQMD Air District, Winter

3.5 Building Construction - 2020**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	6.0889	185.5428	49.3097	0.4424	11.3283	0.9340	12.2623	3.2613	0.8934	4.1547		47,172.76 68	47,172.76 68	3.2756		47,254.65 61
Worker	28.7490	19.4011	214.4477	0.6259	65.1210	0.4940	65.6149	17.2704	0.4550	17.7254		62,359.46 22	62,359.46 22	1.7884		62,404.17 22
Total	34.8379	204.9439	263.7574	1.0683	76.4493	1.4279	77.8772	20.5317	1.3484	21.8801		109,532.2 290	109,532.2 290	5.0640		109,658.8 283

3.6 Paving - 2020**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	8.1393	84.3934	87.9125	0.1368		4.5168	4.5168		4.1554	4.1554		13,246.40 06	13,246.40 06	4.2842		13,353.50 45
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	8.1393	84.3934	87.9125	0.1368		4.5168	4.5168		4.1554	4.1554		13,246.40 06	13,246.40 06	4.2842		13,353.50 45

Northside Specific Plan Construction - South Coast AQMD Air District, Winter

3.6 Paving - 2020**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.4441	0.2997	3.3128	9.6700e-003	1.0060	7.6300e-003	1.0136	0.2668	7.0300e-003	0.2738		963.3285	963.3285	0.0276		964.0191
Total	0.4441	0.2997	3.3128	9.6700e-003	1.0060	7.6300e-003	1.0136	0.2668	7.0300e-003	0.2738		963.3285	963.3285	0.0276		964.0191

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	8.1393	84.3934	87.9125	0.1368		4.5168	4.5168		4.1554	4.1554	0.0000	13,246.4006	13,246.4006	4.2842		13,353.5045
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	8.1393	84.3934	87.9125	0.1368		4.5168	4.5168		4.1554	4.1554	0.0000	13,246.4006	13,246.4006	4.2842		13,353.5045

Northside Specific Plan Construction - South Coast AQMD Air District, Winter

3.6 Paving - 2020**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.4441	0.2997	3.3128	9.6700e-003	1.0060	7.6300e-003	1.0136	0.2668	7.0300e-003	0.2738		963.3285	963.3285	0.0276		964.0191
Total	0.4441	0.2997	3.3128	9.6700e-003	1.0060	7.6300e-003	1.0136	0.2668	7.0300e-003	0.2738		963.3285	963.3285	0.0276		964.0191

3.7 Architectural Coating - 2020**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	1,450.8158					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	1.4531	10.1030	10.9885	0.0178		0.6656	0.6656		0.6656	0.6656		1,688.6883	1,688.6883	0.1308		1,691.9569
Total	1,452.2688	10.1030	10.9885	0.0178		0.6656	0.6656		0.6656	0.6656		1,688.6883	1,688.6883	0.1308		1,691.9569

Northside Specific Plan Construction - South Coast AQMD Air District, Winter

3.7 Architectural Coating - 2020**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	5.7439	3.8762	42.8454	0.1251	13.0108	0.0987	13.1095	3.4505	0.0909	3.5414		12,459.0481	12,459.0481	0.3573		12,467.9809
Total	5.7439	3.8762	42.8454	0.1251	13.0108	0.0987	13.1095	3.4505	0.0909	3.5414		12,459.0481	12,459.0481	0.3573		12,467.9809

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	1,450.8158					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	1.4531	10.1030	10.9885	0.0178		0.6656	0.6656		0.6656	0.6656	0.0000	1,688.6883	1,688.6883	0.1308		1,691.9569
Total	1,452.2688	10.1030	10.9885	0.0178		0.6656	0.6656		0.6656	0.6656	0.0000	1,688.6883	1,688.6883	0.1308		1,691.9569

Northside Specific Plan Construction - South Coast AQMD Air District, Winter

3.7 Architectural Coating - 2020**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	5.7439	3.8762	42.8454	0.1251	13.0108	0.0987	13.1095	3.4505	0.0909	3.5414		12,459.0481	12,459.0481	0.3573		12,467.9809
Total	5.7439	3.8762	42.8454	0.1251	13.0108	0.0987	13.1095	3.4505	0.0909	3.5414		12,459.0481	12,459.0481	0.3573		12,467.9809

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

Northside Specific Plan Construction - South Coast AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	32.6767	174.0303	413.9215	1.4925	125.0972	1.2392	126.3364	33.4720	1.1574	34.6294		151,909.6667	151,909.6667	7.7514		152,103.4503
Unmitigated	32.6767	174.0303	413.9215	1.4925	125.0972	1.2392	126.3364	33.4720	1.1574	34.6294		151,909.6667	151,909.6667	7.7514		152,103.4503

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	2,336.16	2,538.22	2151.82	7,991,649	7,991,649
Apartments Mid Rise	960.59	923.04	846.48	3,208,449	3,208,449
Apartments Mid Rise	898.42	863.29	791.69	3,000,772	3,000,772
Elementary School	1,912.70	0.00	0.00	4,708,506	4,708,506
General Light Industry	515.78	97.68	50.32	1,725,067	1,725,067
Industrial Park	0.00	0.00	0.00		
Medical Office Building	708.15	175.62	30.38	1,388,358	1,388,358
Office Park	6,381.38	916.42	424.68	16,047,628	16,047,628
Regional Shopping Center	4,556.94	5,332.80	2693.61	9,519,953	9,519,953
Single Family Housing	0.00	0.00	0.00		
Single Family Housing	0.00	0.00	0.00		
User Defined Recreational	0.00	0.00	0.00		
Total	18,270.12	10,847.05	6,988.97	47,590,382	47,590,382

4.3 Trip Type Information

Northside Specific Plan Construction - South Coast AQMD Air District, Winter

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Elementary School	16.60	8.40	6.90	65.00	30.00	5.00	63	25	12
General Light Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
Industrial Park	16.60	8.40	6.90	59.00	28.00	13.00	79	19	2
Medical Office Building	16.60	8.40	6.90	29.60	51.40	19.00	60	30	10
Office Park	16.60	8.40	6.90	33.00	48.00	19.00	82	15	3
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11
Single Family Housing	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Single Family Housing	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
User Defined Recreational	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.548858	0.043235	0.200706	0.120309	0.016131	0.005851	0.021034	0.033479	0.002070	0.001877	0.004817	0.000707	0.000925
Apartments Mid Rise	0.548858	0.043235	0.200706	0.120309	0.016131	0.005851	0.021034	0.033479	0.002070	0.001877	0.004817	0.000707	0.000925
Elementary School	0.548858	0.043235	0.200706	0.120309	0.016131	0.005851	0.021034	0.033479	0.002070	0.001877	0.004817	0.000707	0.000925
General Light Industry	0.548858	0.043235	0.200706	0.120309	0.016131	0.005851	0.021034	0.033479	0.002070	0.001877	0.004817	0.000707	0.000925
Industrial Park	0.548858	0.043235	0.200706	0.120309	0.016131	0.005851	0.021034	0.033479	0.002070	0.001877	0.004817	0.000707	0.000925
Medical Office Building	0.548858	0.043235	0.200706	0.120309	0.016131	0.005851	0.021034	0.033479	0.002070	0.001877	0.004817	0.000707	0.000925
Office Park	0.548858	0.043235	0.200706	0.120309	0.016131	0.005851	0.021034	0.033479	0.002070	0.001877	0.004817	0.000707	0.000925
Regional Shopping Center	0.548858	0.043235	0.200706	0.120309	0.016131	0.005851	0.021034	0.033479	0.002070	0.001877	0.004817	0.000707	0.000925
Single Family Housing	0.548858	0.043235	0.200706	0.120309	0.016131	0.005851	0.021034	0.033479	0.002070	0.001877	0.004817	0.000707	0.000925
User Defined Recreational	0.548858	0.043235	0.200706	0.120309	0.016131	0.005851	0.021034	0.033479	0.002070	0.001877	0.004817	0.000707	0.000925

5.0 Energy Detail

Historical Energy Use: N

Northside Specific Plan Construction - South Coast AQMD Air District, Winter

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.4457	3.8958	2.2619	0.0243		0.3079	0.3079		0.3079	0.3079		4,861.754 1	4,861.754 1	0.0932	0.0891	4,890.645 1
NaturalGas Unmitigated	0.4457	3.8958	2.2619	0.0243		0.3079	0.3079		0.3079	0.3079		4,861.754 1	4,861.754 1	0.0932	0.0891	4,890.645 1

Northside Specific Plan Construction - South Coast AQMD Air District, Winter

5.2 Energy by Land Use - NaturalGas**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	15126.5	0.1631	1.3940	0.5932	8.9000e-003		0.1127	0.1127		0.1127	0.1127		1,779.5843	1,779.5843	0.0341	0.0326	1,790.1595
Apartments Mid Rise	5475.84	0.0591	0.5046	0.2147	3.2200e-003		0.0408	0.0408		0.0408	0.0408		644.2160	644.2160	0.0124	0.0118	648.0443
Apartments Mid Rise	5854.81	0.0631	0.5396	0.2296	3.4400e-003		0.0436	0.0436		0.0436	0.0436		688.8009	688.8009	0.0132	0.0126	692.8941
Elementary School	2975.04	0.0321	0.2917	0.2450	1.7500e-003		0.0222	0.0222		0.0222	0.0222		350.0047	350.0047	6.7100e-003	6.4200e-003	352.0846
General Light Industry	6587.01	0.0710	0.6458	0.5425	3.8700e-003		0.0491	0.0491		0.0491	0.0491		774.9428	774.9428	0.0149	0.0142	779.5479
Industrial Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Medical Office Building	186.334	2.0100e-003	0.0183	0.0154	1.1000e-004		1.3900e-003	1.3900e-003		1.3900e-003	1.3900e-003		21.9217	21.9217	4.2000e-004	4.0000e-004	22.0520
Office Park	4470.32	0.0482	0.4383	0.3681	2.6300e-003		0.0333	0.0333		0.0333	0.0333		525.9200	525.9200	0.0101	9.6400e-003	529.0453
Regional Shopping Center	649.092	7.0000e-003	0.0636	0.0535	3.8000e-004		4.8400e-003	4.8400e-003		4.8400e-003	4.8400e-003		76.3637	76.3637	1.4600e-003	1.4000e-003	76.8175
Single Family Housing	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.4457	3.8959	2.2619	0.0243		0.3079	0.3079		0.3079	0.3079		4,861.7541	4,861.7541	0.0932	0.0891	4,890.6451

Northside Specific Plan Construction - South Coast AQMD Air District, Winter

5.2 Energy by Land Use - NaturalGas**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	15.1265	0.1631	1.3940	0.5932	8.9000e-003		0.1127	0.1127		0.1127	0.1127		1,779.5843	1,779.5843	0.0341	0.0326	1,790.1595
Apartments Mid Rise	5.85481	0.0631	0.5396	0.2296	3.4400e-003		0.0436	0.0436		0.0436	0.0436		688.8009	688.8009	0.0132	0.0126	692.8941
Apartments Mid Rise	5.47584	0.0591	0.5046	0.2147	3.2200e-003		0.0408	0.0408		0.0408	0.0408		644.2160	644.2160	0.0124	0.0118	648.0443
Elementary School	2.97504	0.0321	0.2917	0.2450	1.7500e-003		0.0222	0.0222		0.0222	0.0222		350.0047	350.0047	6.7100e-003	6.4200e-003	352.0846
General Light Industry	6.58701	0.0710	0.6458	0.5425	3.8700e-003		0.0491	0.0491		0.0491	0.0491		774.9428	774.9428	0.0149	0.0142	779.5479
Industrial Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Medical Office Building	0.186334	2.0100e-003	0.0183	0.0154	1.1000e-004		1.3900e-003	1.3900e-003		1.3900e-003	1.3900e-003		21.9217	21.9217	4.2000e-004	4.0000e-004	22.0520
Office Park	4.47032	0.0482	0.4383	0.3681	2.6300e-003		0.0333	0.0333		0.0333	0.0333		525.9200	525.9200	0.0101	9.6400e-003	529.0453
Regional Shopping Center	0.649092	7.0000e-003	0.0636	0.0535	3.8000e-004		4.8400e-003	4.8400e-003		4.8400e-003	4.8400e-003		76.3637	76.3637	1.4600e-003	1.4000e-003	76.8175
Single Family Housing	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.4457	3.8959	2.2619	0.0243		0.3079	0.3079		0.3079	0.3079		4,861.7541	4,861.7541	0.0932	0.0891	4,890.6451

6.0 Area Detail**6.1 Mitigation Measures Area**

Northside Specific Plan Construction - South Coast AQMD Air District, Winter

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	285.7117	19.5630	517.2288	1.1883		70.0927	70.0927		70.0927	70.0927	8,559.4900	16,539.1854	25,098.6754	25.6178	0.5809	25,912.2256
Unmitigated	285.7117	19.5630	517.2288	1.1883		70.0927	70.0927		70.0927	70.0927	8,559.4900	16,539.1854	25,098.6754	25.6178	0.5809	25,912.2256

Northside Specific Plan Construction - South Coast AQMD Air District, Winter

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	4.6141					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	40.0525					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	239.4482	18.9570	464.7135	1.1855		69.8034	69.8034		69.8034	69.8034	8,559.4900	16,444.8000	25,004.2900	25.5260	0.5809	25,815.5453
Landscaping	1.5969	0.6060	52.5153	2.7700e-003		0.2893	0.2893		0.2893	0.2893		94.3854	94.3854	0.0918		96.6803
Total	285.7117	19.5630	517.2288	1.1883		70.0927	70.0927		70.0927	70.0927	8,559.4900	16,539.1854	25,098.6754	25.6178	0.5809	25,912.2256

Northside Specific Plan Construction - South Coast AQMD Air District, Winter

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	4.6141					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	40.0525					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	239.4482	18.9570	464.7135	1.1855		69.8034	69.8034		69.8034	69.8034	8,559.4900	16,444.8000	25,004.2900	25.5260	0.5809	25,815.5453
Landscaping	1.5969	0.6060	52.5153	2.7700e-003		0.2893	0.2893		0.2893	0.2893		94.3854	94.3854	0.0918		96.6803
Total	285.7117	19.5630	517.2288	1.1883		70.0927	70.0927		70.0927	70.0927	8,559.4900	16,539.1854	25,098.6754	25.6178	0.5809	25,912.2256

7.0 Water Detail**7.1 Mitigation Measures Water****8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

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

Northside Specific Plan Construction - South Coast AQMD Air District, Winter

Fire Pumps and Emergency Generators

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

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Northside Specific Plan Construction - South Coast AQMD Air District, Summer

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Based on Rick Engineering Traffic Impact Analysis (October 14, 2019). Scenario 1 land use buildout quantities divided by 20 to estimate worst-case single year construction activities.

Construction Phase - Default schedule adjusted to 1-year total duration, default total days divided by 6.

Off-road Equipment - Default unit amount multiplied by 6 to account for compressed construction schedule.

Off-road Equipment - Default unit amount multiplied by 6 to account for compressed construction schedule.

Off-road Equipment - Default unit amount multiplied by 6 to account for compressed construction schedule.

Off-road Equipment - Default unit amount multiplied by 6 to account for compressed construction schedule.

Off-road Equipment - Default unit amount multiplied by 6 to account for compressed construction schedule.

Off-road Equipment - Default unit amount multiplied by 6 to account for compressed construction schedule.

Trips and VMT - Default trips for building construction and architectural coatings multiplied by 6 to account for compressed construction schedule.

On-road Fugitive Dust - Default Values

Demolition - Scenario 1

Grading - Default

Architectural Coating - Parking area estimated equal to 10 acres per year.

Vehicle Trips - Construction analysis only

Vehicle Emission Factors - Construction analysis only

Vehicle Emission Factors - Construction analysis only

Vehicle Emission Factors - Construction analysis only

Road Dust - Construction analysis only

Woodstoves - Construction analysis only

Consumer Products - Construction analysis only

Area Coating - Construction analysis only

Landscape Equipment - Construction analysis only

Energy Use - Construction analysis only

Water And Wastewater - Construction analysis only

Northside Specific Plan Construction - South Coast AQMD Air District, Summer

Solid Waste - Construction analysis only
 Construction Off-road Equipment Mitigation - SCAQMD Rule 403

Area Mitigation -

Operational Off-Road Equipment - Construction analysis only

Stationary Sources - Emergency Generators and Fire Pumps - Construction analysis only

Stationary Sources - Process Boilers - Construction analysis only

Stationary Sources - User Defined - Construction analysis only

Stationary Sources - Emergency Generators and Fire Pumps EF - Construction analysis only

Stationary Sources - Process Boilers EF - Construction analysis only

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Parking	0.00	435,600.00
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstructionPhase	NumDays	75.00	13.00
tblConstructionPhase	NumDays	1,110.00	185.00
tblConstructionPhase	NumDays	70.00	12.00
tblConstructionPhase	NumDays	110.00	18.00
tblConstructionPhase	NumDays	75.00	13.00
tblConstructionPhase	NumDays	40.00	7.00
tblLandUse	LandUseSquareFeet	0.00	505,731.60
tblLandUse	LotAcreage	0.00	11.61
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	18.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	12.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	18.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	6.00

Northside Specific Plan Construction - South Coast AQMD Air District, Summer

tbloffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	6.00
tbloffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	12.00
tbloffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	12.00
tbloffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	12.00
tbloffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	12.00
tbloffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	6.00
tbloffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	18.00
tbloffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	12.00
tbloffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	18.00
tbloffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	12.00
tbloffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	24.00
tbloffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	6.00
tbITripsAndVMT	VendorTripNumber	295.00	1,770.00
tbITripsAndVMT	WorkerTripNumber	105.00	106.00
tbITripsAndVMT	WorkerTripNumber	971.00	5,826.00
tbITripsAndVMT	WorkerTripNumber	194.00	1,164.00

2.0 Emissions Summary

Northside Specific Plan Construction - South Coast AQMD Air District, Summer

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					
2020	1,466.0817	318.5701	383.4958	1.2863	109.5824	13.1935	122.7758	59.8983	12.1380	72.0363	0.0000	130,569.5158	130,569.5158	11.6940	0.0000	130,787.1153
Maximum	1,466.0817	318.5701	383.4958	1.2863	109.5824	13.1935	122.7758	59.8983	12.1380	72.0363	0.0000	130,569.5158	130,569.5158	11.6940	0.0000	130,787.1153

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					
2020	1,466.0817	318.5701	383.4958	1.2863	76.4493	13.1935	84.5657	27.1271	12.1380	39.2651	0.0000	130,569.5158	130,569.5158	11.6940	0.0000	130,787.1153
Maximum	1,466.0817	318.5701	383.4958	1.2863	76.4493	13.1935	84.5657	27.1271	12.1380	39.2651	0.0000	130,569.5158	130,569.5158	11.6940	0.0000	130,787.1153

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	30.24	0.00	31.12	54.71	0.00	45.49	0.00	0.00	0.00	0.00	0.00	0.00

Northside Specific Plan Construction - South Coast AQMD Air District, Summer

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	285.7117	19.5630	517.2288	1.1883		70.0927	70.0927		70.0927	70.0927	8,559.4900	16,539.1854	25,098.6754	25.6178	0.5809	25,912.2256
Energy	0.4457	3.8958	2.2619	0.0243		0.3079	0.3079		0.3079	0.3079		4,861.7541	4,861.7541	0.0932	0.0891	4,890.6451
Mobile	34.3783	170.7593	440.6076	1.5776	125.0972	1.2313	126.3285	33.4720	1.1498	34.6218		160,471.4636	160,471.4636	7.7456		160,665.1022
Total	320.5356	194.2181	960.0983	2.7902	125.0972	71.6319	196.7291	33.4720	71.5504	105.0225	8,559.4900	181,872.4031	190,431.8931	33.4565	0.6700	191,467.9729

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	285.7117	19.5630	517.2288	1.1883		70.0927	70.0927		70.0927	70.0927	8,559.4900	16,539.1854	25,098.6754	25.6178	0.5809	25,912.2256
Energy	0.4457	3.8958	2.2619	0.0243		0.3079	0.3079		0.3079	0.3079		4,861.7541	4,861.7541	0.0932	0.0891	4,890.6451
Mobile	34.3783	170.7593	440.6076	1.5776	125.0972	1.2313	126.3285	33.4720	1.1498	34.6218		160,471.4636	160,471.4636	7.7456		160,665.1022
Total	320.5356	194.2181	960.0983	2.7902	125.0972	71.6319	196.7291	33.4720	71.5504	105.0225	8,559.4900	181,872.4031	190,431.8931	33.4565	0.6700	191,467.9729

Northside Specific Plan Construction - South Coast AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2020	1/16/2020	5	12	
2	Site Preparation	Site Preparation	1/17/2020	1/27/2020	5	7	
3	Grading	Grading	1/28/2020	2/20/2020	5	18	
4	Building Construction	Building Construction	2/21/2020	11/5/2020	5	185	
5	Paving	Paving	11/6/2020	11/24/2020	5	13	
6	Architectural Coating	Architectural Coating	11/24/2020	12/10/2020	5	13	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 270

Acres of Paving: 0

Residential Indoor: 1,283,951; Residential Outdoor: 427,984; Non-Residential Indoor: 2,083,202; Non-Residential Outdoor: 694,401; Striped Parking Area: 435,600 (Architectural Coating – sqft)

OffRoad Equipment

Northside Specific Plan Construction - South Coast AQMD Air District, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	6	8.00	81	0.73
Demolition	Excavators	18	8.00	158	0.38
Demolition	Rubber Tired Dozers	12	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	18	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	24	8.00	97	0.37
Grading	Excavators	12	8.00	158	0.38
Grading	Graders	6	8.00	187	0.41
Grading	Rubber Tired Dozers	6	8.00	247	0.40
Grading	Scrapers	12	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	12	8.00	97	0.37
Building Construction	Cranes	6	7.00	231	0.29
Building Construction	Forklifts	18	8.00	89	0.20
Building Construction	Generator Sets	6	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	18	7.00	97	0.37
Building Construction	Welders	6	8.00	46	0.45
Paving	Pavers	12	8.00	130	0.42
Paving	Paving Equipment	12	8.00	132	0.36
Paving	Rollers	12	8.00	80	0.38
Architectural Coating	Air Compressors	6	6.00	78	0.48

Trips and VMT

Northside Specific Plan Construction - South Coast AQMD Air District, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	36	90.00	0.00	84.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	42	106.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	48	120.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	54	5,826.00	1,770.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	36	90.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	6	1,164.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2020**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.5090	0.0000	1.5090	0.2285	0.0000	0.2285			0.0000			0.0000
Off-Road	19.8727	199.2061	130.5192	0.2329		9.9522	9.9522		9.2511	9.2511		22,486.2295	22,486.2295	6.3477		22,644.9217
Total	19.8727	199.2061	130.5192	0.2329	1.5090	9.9522	11.4612	0.2285	9.2511	9.4796		22,486.2295	22,486.2295	6.3477		22,644.9217

Northside Specific Plan Construction - South Coast AQMD Air District, Summer

3.2 Demolition - 2020**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0532	1.9050	0.3791	5.4300e-003	0.1223	6.1400e-003	0.1285	0.0335	5.8800e-003	0.0394		586.8305	586.8305	0.0394		587.8149
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.4072	0.2737	3.6794	0.0103	1.0060	7.6300e-003	1.0136	0.2668	7.0300e-003	0.2738		1,029.9757	1,029.9757	0.0296		1,030.7160
Total	0.4604	2.1787	4.0584	0.0158	1.1283	0.0138	1.1421	0.3003	0.0129	0.3132		1,616.8062	1,616.8062	0.0690		1,618.5309

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.6791	0.0000	0.6791	0.1028	0.0000	0.1028			0.0000			0.0000
Off-Road	19.8727	199.2061	130.5192	0.2329		9.9522	9.9522		9.2511	9.2511	0.0000	22,486.2295	22,486.2295	6.3477		22,644.9216
Total	19.8727	199.2061	130.5192	0.2329	0.6791	9.9522	10.6312	0.1028	9.2511	9.3539	0.0000	22,486.2295	22,486.2295	6.3477		22,644.9216

Northside Specific Plan Construction - South Coast AQMD Air District, Summer

3.2 Demolition - 2020**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0532	1.9050	0.3791	5.4300e-003	0.1223	6.1400e-003	0.1285	0.0335	5.8800e-003	0.0394		586.8305	586.8305	0.0394		587.8149
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.4072	0.2737	3.6794	0.0103	1.0060	7.6300e-003	1.0136	0.2668	7.0300e-003	0.2738		1,029.9757	1,029.9757	0.0296		1,030.7160
Total	0.4604	2.1787	4.0584	0.0158	1.1283	0.0138	1.1421	0.3003	0.0129	0.3132		1,616.8062	1,616.8062	0.0690		1,618.5309

3.3 Site Preparation - 2020**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					108.3976	0.0000	108.3976	59.5841	0.0000	59.5841			0.0000			0.0000
Off-Road	24.4588	254.5040	129.0817	0.2281		13.1845	13.1845		12.1297	12.1297		22,110.6094	22,110.6094	7.1510		22,289.3848
Total	24.4588	254.5040	129.0817	0.2281	108.3976	13.1845	121.5820	59.5841	12.1297	71.7138		22,110.6094	22,110.6094	7.1510		22,289.3848

Northside Specific Plan Construction - South Coast AQMD Air District, Summer

3.3 Site Preparation - 2020**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.4796	0.3224	4.3335	0.0122	1.1848	8.9900e-003	1.1938	0.3142	8.2800e-003	0.3225		1,213.0825	1,213.0825	0.0349		1,213.9544
Total	0.4796	0.3224	4.3335	0.0122	1.1848	8.9900e-003	1.1938	0.3142	8.2800e-003	0.3225		1,213.0825	1,213.0825	0.0349		1,213.9544

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					48.7789	0.0000	48.7789	26.8128	0.0000	26.8128			0.0000			0.0000
Off-Road	24.4588	254.5040	129.0817	0.2281		13.1845	13.1845		12.1297	12.1297	0.0000	22,110.6093	22,110.6093	7.1510		22,289.3848
Total	24.4588	254.5040	129.0817	0.2281	48.7789	13.1845	61.9634	26.8128	12.1297	38.9426	0.0000	22,110.6093	22,110.6093	7.1510		22,289.3848

Northside Specific Plan Construction - South Coast AQMD Air District, Summer

3.3 Site Preparation - 2020**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.4796	0.3224	4.3335	0.0122	1.1848	8.9900e-003	1.1938	0.3142	8.2800e-003	0.3225		1,213.0825	1,213.0825	0.0349		1,213.9544
Total	0.4796	0.3224	4.3335	0.0122	1.1848	8.9900e-003	1.1938	0.3142	8.2800e-003	0.3225		1,213.0825	1,213.0825	0.0349		1,213.9544

3.4 Grading - 2020**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					52.0400	0.0000	52.0400	21.5790	0.0000	21.5790			0.0000			0.0000
Off-Road	26.7006	301.1851	191.7497	0.3720		13.0434	13.0434		11.9999	11.9999		36,035.1916	36,035.1916	11.6545		36,326.5544
Total	26.7006	301.1851	191.7497	0.3720	52.0400	13.0434	65.0834	21.5790	11.9999	33.5789		36,035.1916	36,035.1916	11.6545		36,326.5544

Northside Specific Plan Construction - South Coast AQMD Air District, Summer

3.4 Grading - 2020**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.5429	0.3650	4.9058	0.0138	1.3413	0.0102	1.3515	0.3557	9.3700e-003	0.3651		1,373.3010	1,373.3010	0.0395		1,374.2880
Total	0.5429	0.3650	4.9058	0.0138	1.3413	0.0102	1.3515	0.3557	9.3700e-003	0.3651		1,373.3010	1,373.3010	0.0395		1,374.2880

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					23.4180	0.0000	23.4180	9.7106	0.0000	9.7106			0.0000			0.0000
Off-Road	26.7006	301.1851	191.7497	0.3720		13.0434	13.0434		11.9999	11.9999	0.0000	36,035.1916	36,035.1916	11.6545		36,326.5544
Total	26.7006	301.1851	191.7497	0.3720	23.4180	13.0434	36.4614	9.7106	11.9999	21.7105	0.0000	36,035.1916	36,035.1916	11.6545		36,326.5544

Northside Specific Plan Construction - South Coast AQMD Air District, Summer

3.4 Grading - 2020**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.5429	0.3650	4.9058	0.0138	1.3413	0.0102	1.3515	0.3557	9.3700e-003	0.3651		1,373.3010	1,373.3010	0.0395		1,374.2880
Total	0.5429	0.3650	4.9058	0.0138	1.3413	0.0102	1.3515	0.3557	9.3700e-003	0.3651		1,373.3010	1,373.3010	0.0395		1,374.2880

3.5 Building Construction - 2020**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	12.7191	115.1162	101.0910	0.1615		6.7023	6.7023		6.3020	6.3020		15,318.3783	15,318.3783	3.7371		15,411.8069
Total	12.7191	115.1162	101.0910	0.1615		6.7023	6.7023		6.3020	6.3020		15,318.3783	15,318.3783	3.7371		15,411.8069

Northside Specific Plan Construction - South Coast AQMD Air District, Summer

3.5 Building Construction - 2020**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.8129	185.7352	44.2275	0.4554	11.3283	0.9202	12.2485	3.2613	0.8802	4.1416		48,577.37 66	48,577.37 66	3.0499		48,653.62 45
Worker	26.3592	17.7187	238.1774	0.6694	65.1210	0.4940	65.6149	17.2704	0.4550	17.7254		66,673.76 10	66,673.76 10	1.9169		66,721.68 40
Total	32.1721	203.4539	282.4048	1.1248	76.4493	1.4141	77.8634	20.5317	1.3352	21.8669		115,251.1 375	115,251.1 375	4.9668		115,375.3 085

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	12.7191	115.1162	101.0910	0.1615		6.7023	6.7023		6.3020	6.3020	0.0000	15,318.37 83	15,318.37 83	3.7371		15,411.806 8
Total	12.7191	115.1162	101.0910	0.1615		6.7023	6.7023		6.3020	6.3020	0.0000	15,318.37 83	15,318.37 83	3.7371		15,411.80 68

Northside Specific Plan Construction - South Coast AQMD Air District, Summer

3.5 Building Construction - 2020**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.8129	185.7352	44.2275	0.4554	11.3283	0.9202	12.2485	3.2613	0.8802	4.1416		48,577.37 66	48,577.37 66	3.0499		48,653.62 45
Worker	26.3592	17.7187	238.1774	0.6694	65.1210	0.4940	65.6149	17.2704	0.4550	17.7254		66,673.76 10	66,673.76 10	1.9169		66,721.68 40
Total	32.1721	203.4539	282.4048	1.1248	76.4493	1.4141	77.8634	20.5317	1.3352	21.8669		115,251.1 375	115,251.1 375	4.9668		115,375.3 085

3.6 Paving - 2020**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	8.1393	84.3934	87.9125	0.1368		4.5168	4.5168		4.1554	4.1554		13,246.40 06	13,246.40 06	4.2842		13,353.50 45
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	8.1393	84.3934	87.9125	0.1368		4.5168	4.5168		4.1554	4.1554		13,246.40 06	13,246.40 06	4.2842		13,353.50 45

Northside Specific Plan Construction - South Coast AQMD Air District, Summer

3.6 Paving - 2020**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.4072	0.2737	3.6794	0.0103	1.0060	7.6300e-003	1.0136	0.2668	7.0300e-003	0.2738		1,029.9757	1,029.9757	0.0296		1,030.7160
Total	0.4072	0.2737	3.6794	0.0103	1.0060	7.6300e-003	1.0136	0.2668	7.0300e-003	0.2738		1,029.9757	1,029.9757	0.0296		1,030.7160

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	8.1393	84.3934	87.9125	0.1368		4.5168	4.5168		4.1554	4.1554	0.0000	13,246.4006	13,246.4006	4.2842		13,353.5045
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	8.1393	84.3934	87.9125	0.1368		4.5168	4.5168		4.1554	4.1554	0.0000	13,246.4006	13,246.4006	4.2842		13,353.5045

Northside Specific Plan Construction - South Coast AQMD Air District, Summer

3.6 Paving - 2020**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.4072	0.2737	3.6794	0.0103	1.0060	7.6300e-003	1.0136	0.2668	7.0300e-003	0.2738		1,029.9757	1,029.9757	0.0296		1,030.7160
Total	0.4072	0.2737	3.6794	0.0103	1.0060	7.6300e-003	1.0136	0.2668	7.0300e-003	0.2738		1,029.9757	1,029.9757	0.0296		1,030.7160

3.7 Architectural Coating - 2020**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	1,450.8158					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	1.4531	10.1030	10.9885	0.0178		0.6656	0.6656		0.6656	0.6656		1,688.6883	1,688.6883	0.1308		1,691.9569
Total	1,452.2688	10.1030	10.9885	0.0178		0.6656	0.6656		0.6656	0.6656		1,688.6883	1,688.6883	0.1308		1,691.9569

Northside Specific Plan Construction - South Coast AQMD Air District, Summer

3.7 Architectural Coating - 2020**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	5.2664	3.5401	47.5864	0.1337	13.0108	0.0987	13.1095	3.4505	0.0909	3.5414		13,321.01 92	13,321.01 92	0.3830		13,330.59 39
Total	5.2664	3.5401	47.5864	0.1337	13.0108	0.0987	13.1095	3.4505	0.0909	3.5414		13,321.01 92	13,321.01 92	0.3830		13,330.59 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	1,450.815 8					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	1.4531	10.1030	10.9885	0.0178		0.6656	0.6656		0.6656	0.6656	0.0000	1,688.688 3	1,688.688 3	0.1308		1,691.956 9
Total	1,452.268 8	10.1030	10.9885	0.0178		0.6656	0.6656		0.6656	0.6656	0.0000	1,688.688 3	1,688.688 3	0.1308		1,691.956 9

Northside Specific Plan Construction - South Coast AQMD Air District, Summer

3.7 Architectural Coating - 2020**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	5.2664	3.5401	47.5864	0.1337	13.0108	0.0987	13.1095	3.4505	0.0909	3.5414		13,321.01 92	13,321.01 92	0.3830		13,330.59 39
Total	5.2664	3.5401	47.5864	0.1337	13.0108	0.0987	13.1095	3.4505	0.0909	3.5414		13,321.01 92	13,321.01 92	0.3830		13,330.59 39

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

Northside Specific Plan Construction - South Coast AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	34.3783	170.7593	440.6076	1.5776	125.0972	1.2313	126.3285	33.4720	1.1498	34.6218		160,471.4636	160,471.4636	7.7456		160,665.1022
Unmitigated	34.3783	170.7593	440.6076	1.5776	125.0972	1.2313	126.3285	33.4720	1.1498	34.6218		160,471.4636	160,471.4636	7.7456		160,665.1022

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	2,336.16	2,538.22	2151.82	7,991,649	7,991,649
Apartments Mid Rise	960.59	923.04	846.48	3,208,449	3,208,449
Apartments Mid Rise	898.42	863.29	791.69	3,000,772	3,000,772
Elementary School	1,912.70	0.00	0.00	4,708,506	4,708,506
General Light Industry	515.78	97.68	50.32	1,725,067	1,725,067
Industrial Park	0.00	0.00	0.00		
Medical Office Building	708.15	175.62	30.38	1,388,358	1,388,358
Office Park	6,381.38	916.42	424.68	16,047,628	16,047,628
Regional Shopping Center	4,556.94	5,332.80	2693.61	9,519,953	9,519,953
Single Family Housing	0.00	0.00	0.00		
Single Family Housing	0.00	0.00	0.00		
User Defined Recreational	0.00	0.00	0.00		
Total	18,270.12	10,847.05	6,988.97	47,590,382	47,590,382

4.3 Trip Type Information

Northside Specific Plan Construction - South Coast AQMD Air District, Summer

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Elementary School	16.60	8.40	6.90	65.00	30.00	5.00	63	25	12
General Light Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
Industrial Park	16.60	8.40	6.90	59.00	28.00	13.00	79	19	2
Medical Office Building	16.60	8.40	6.90	29.60	51.40	19.00	60	30	10
Office Park	16.60	8.40	6.90	33.00	48.00	19.00	82	15	3
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11
Single Family Housing	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Single Family Housing	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
User Defined Recreational	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.548858	0.043235	0.200706	0.120309	0.016131	0.005851	0.021034	0.033479	0.002070	0.001877	0.004817	0.000707	0.000925
Apartments Mid Rise	0.548858	0.043235	0.200706	0.120309	0.016131	0.005851	0.021034	0.033479	0.002070	0.001877	0.004817	0.000707	0.000925
Elementary School	0.548858	0.043235	0.200706	0.120309	0.016131	0.005851	0.021034	0.033479	0.002070	0.001877	0.004817	0.000707	0.000925
General Light Industry	0.548858	0.043235	0.200706	0.120309	0.016131	0.005851	0.021034	0.033479	0.002070	0.001877	0.004817	0.000707	0.000925
Industrial Park	0.548858	0.043235	0.200706	0.120309	0.016131	0.005851	0.021034	0.033479	0.002070	0.001877	0.004817	0.000707	0.000925
Medical Office Building	0.548858	0.043235	0.200706	0.120309	0.016131	0.005851	0.021034	0.033479	0.002070	0.001877	0.004817	0.000707	0.000925
Office Park	0.548858	0.043235	0.200706	0.120309	0.016131	0.005851	0.021034	0.033479	0.002070	0.001877	0.004817	0.000707	0.000925
Regional Shopping Center	0.548858	0.043235	0.200706	0.120309	0.016131	0.005851	0.021034	0.033479	0.002070	0.001877	0.004817	0.000707	0.000925
Single Family Housing	0.548858	0.043235	0.200706	0.120309	0.016131	0.005851	0.021034	0.033479	0.002070	0.001877	0.004817	0.000707	0.000925
User Defined Recreational	0.548858	0.043235	0.200706	0.120309	0.016131	0.005851	0.021034	0.033479	0.002070	0.001877	0.004817	0.000707	0.000925

5.0 Energy Detail

Historical Energy Use: N

Northside Specific Plan Construction - South Coast AQMD Air District, Summer

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.4457	3.8958	2.2619	0.0243		0.3079	0.3079		0.3079	0.3079		4,861.754 1	4,861.754 1	0.0932	0.0891	4,890.645 1
NaturalGas Unmitigated	0.4457	3.8958	2.2619	0.0243		0.3079	0.3079		0.3079	0.3079		4,861.754 1	4,861.754 1	0.0932	0.0891	4,890.645 1

Northside Specific Plan Construction - South Coast AQMD Air District, Summer

5.2 Energy by Land Use - NaturalGas**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	15126.5	0.1631	1.3940	0.5932	8.9000e-003		0.1127	0.1127		0.1127	0.1127		1,779.5843	1,779.5843	0.0341	0.0326	1,790.1595
Apartments Mid Rise	5475.84	0.0591	0.5046	0.2147	3.2200e-003		0.0408	0.0408		0.0408	0.0408		644.2160	644.2160	0.0124	0.0118	648.0443
Apartments Mid Rise	5854.81	0.0631	0.5396	0.2296	3.4400e-003		0.0436	0.0436		0.0436	0.0436		688.8009	688.8009	0.0132	0.0126	692.8941
Elementary School	2975.04	0.0321	0.2917	0.2450	1.7500e-003		0.0222	0.0222		0.0222	0.0222		350.0047	350.0047	6.7100e-003	6.4200e-003	352.0846
General Light Industry	6587.01	0.0710	0.6458	0.5425	3.8700e-003		0.0491	0.0491		0.0491	0.0491		774.9428	774.9428	0.0149	0.0142	779.5479
Industrial Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Medical Office Building	186.334	2.0100e-003	0.0183	0.0154	1.1000e-004		1.3900e-003	1.3900e-003		1.3900e-003	1.3900e-003		21.9217	21.9217	4.2000e-004	4.0000e-004	22.0520
Office Park	4470.32	0.0482	0.4383	0.3681	2.6300e-003		0.0333	0.0333		0.0333	0.0333		525.9200	525.9200	0.0101	9.6400e-003	529.0453
Regional Shopping Center	649.092	7.0000e-003	0.0636	0.0535	3.8000e-004		4.8400e-003	4.8400e-003		4.8400e-003	4.8400e-003		76.3637	76.3637	1.4600e-003	1.4000e-003	76.8175
Single Family Housing	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.4457	3.8959	2.2619	0.0243		0.3079	0.3079		0.3079	0.3079		4,861.7541	4,861.7541	0.0932	0.0891	4,890.6451

Northside Specific Plan Construction - South Coast AQMD Air District, Summer

5.2 Energy by Land Use - NaturalGas**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	15.1265	0.1631	1.3940	0.5932	8.9000e-003		0.1127	0.1127		0.1127	0.1127		1,779.5843	1,779.5843	0.0341	0.0326	1,790.1595
Apartments Mid Rise	5.85481	0.0631	0.5396	0.2296	3.4400e-003		0.0436	0.0436		0.0436	0.0436		688.8009	688.8009	0.0132	0.0126	692.8941
Apartments Mid Rise	5.47584	0.0591	0.5046	0.2147	3.2200e-003		0.0408	0.0408		0.0408	0.0408		644.2160	644.2160	0.0124	0.0118	648.0443
Elementary School	2.97504	0.0321	0.2917	0.2450	1.7500e-003		0.0222	0.0222		0.0222	0.0222		350.0047	350.0047	6.7100e-003	6.4200e-003	352.0846
General Light Industry	6.58701	0.0710	0.6458	0.5425	3.8700e-003		0.0491	0.0491		0.0491	0.0491		774.9428	774.9428	0.0149	0.0142	779.5479
Industrial Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Medical Office Building	0.186334	2.0100e-003	0.0183	0.0154	1.1000e-004		1.3900e-003	1.3900e-003		1.3900e-003	1.3900e-003		21.9217	21.9217	4.2000e-004	4.0000e-004	22.0520
Office Park	4.47032	0.0482	0.4383	0.3681	2.6300e-003		0.0333	0.0333		0.0333	0.0333		525.9200	525.9200	0.0101	9.6400e-003	529.0453
Regional Shopping Center	0.649092	7.0000e-003	0.0636	0.0535	3.8000e-004		4.8400e-003	4.8400e-003		4.8400e-003	4.8400e-003		76.3637	76.3637	1.4600e-003	1.4000e-003	76.8175
Single Family Housing	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.4457	3.8959	2.2619	0.0243		0.3079	0.3079		0.3079	0.3079		4,861.7541	4,861.7541	0.0932	0.0891	4,890.6451

6.0 Area Detail**6.1 Mitigation Measures Area**

Northside Specific Plan Construction - South Coast AQMD Air District, Summer

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	285.7117	19.5630	517.2288	1.1883		70.0927	70.0927		70.0927	70.0927	8,559.4900	16,539.1854	25,098.6754	25.6178	0.5809	25,912.2256
Unmitigated	285.7117	19.5630	517.2288	1.1883		70.0927	70.0927		70.0927	70.0927	8,559.4900	16,539.1854	25,098.6754	25.6178	0.5809	25,912.2256

Northside Specific Plan Construction - South Coast AQMD Air District, Summer

6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.6141					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	40.0525					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	239.4482	18.9570	464.7135	1.1855		69.8034	69.8034		69.8034	69.8034	8,559.4900	16,444.8000	25,004.2900	25.5260	0.5809	25,815.5453
Landscaping	1.5969	0.6060	52.5153	2.7700e-003		0.2893	0.2893		0.2893	0.2893		94.3854	94.3854	0.0918		96.6803
Total	285.7117	19.5630	517.2288	1.1883		70.0927	70.0927		70.0927	70.0927	8,559.4900	16,539.1854	25,098.6754	25.6178	0.5809	25,912.2256

Northside Specific Plan Construction - South Coast AQMD Air District, Summer

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	4.6141					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	40.0525					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	239.4482	18.9570	464.7135	1.1855		69.8034	69.8034		69.8034	69.8034	8,559.4900	16,444.8000	25,004.2900	25.5260	0.5809	25,815.5453
Landscaping	1.5969	0.6060	52.5153	2.7700e-003		0.2893	0.2893		0.2893	0.2893		94.3854	94.3854	0.0918		96.6803
Total	285.7117	19.5630	517.2288	1.1883		70.0927	70.0927		70.0927	70.0927	8,559.4900	16,539.1854	25,098.6754	25.6178	0.5809	25,912.2256

7.0 Water Detail**7.1 Mitigation Measures Water****8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

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

Northside Specific Plan Construction - South Coast AQMD Air District, Summer

Fire Pumps and Emergency Generators

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

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Northside Specific Plan - Scenario 1 Operation - South Coast AQMD Air District, Annual

Northside Specific Plan - Scenario 1 Operation

South Coast AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	392.04	1000sqft	9.00	392,040.00	0
Office Park	11,175.70	1000sqft	256.56	11,175,700.00	0
Elementary School	2,479.16	1000sqft	56.91	2,479,160.00	0
General Light Industry	1,480.00	1000sqft	33.98	1,480,000.00	0
User Defined Recreational	232.13	User Defined Unit	232.13	10,111,582.80	0
Apartments Low Rise	7,090.00	Dwelling Unit	443.13	7,090,000.00	20277
Apartments Mid Rise	2,889.00	Dwelling Unit	76.03	2,889,000.00	8263
Apartments Mid Rise	2,702.00	Dwelling Unit	71.11	2,702,000.00	7728
Regional Shopping Center	2,134.36	1000sqft	49.00	2,134,360.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10			Operational Year	2040
Utility Company	Riverside Public Utilities				
CO2 Intensity (lb/MW hr)	595.8	CH4 Intensity (lb/MW hr)	0.013	N2O Intensity (lb/MW hr)	0.003

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.0 Project Characteristics. Operational year 2040. GHG intensity factors adjusted for RPS assuming 60% renewables by December 31, 2030.

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Land Use - Per Rick Engineering Traffic Impact Analysis (October 14, 2019). Scenario 1 at year 2040 buildout.

Construction Phase - Operation analysis only

Off-road Equipment - Operation analysis only

Off-road Equipment - Operation analysis only

Trips and VMT - Operation analysis only

On-road Fugitive Dust - Operation analysis only

Demolition - Operation analysis only

Grading - Operation analysis only

Architectural Coating - Operation analysis only

Vehicle Trips - Trip rates based on Rick Engineering Traffic Analysis, January 2020.1.49. Weekend trips conservatively assumed equal to weekday trips.

Vehicle Emission Factors - CalEEMod default values for 2040.

Vehicle Emission Factors - CalEEMod default values for 2040.

Vehicle Emission Factors - CalEEMod default values for 2040.

Road Dust - CalEEMod default values.

Woodstoves - CalEEMod default values.

Consumer Products - CalEEMod default values.

Area Coating - CalEEMod default values.

Landscape Equipment - CalEEMod default values.

Energy Use - CalEEMod default values.

Water And Wastewater - CalEEMod default values.

Solid Waste - CalEEMod default values.

Construction Off-road Equipment Mitigation - Operational analysis only

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - No area source mitigation.

Energy Mitigation - No energy mitigation.

Water Mitigation - No water mitigation.

Waste Mitigation - No solid waste mitigation.

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Operational Off-Road Equipment -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	155,000.00	1.00
tblLandUse	LandUseSquareFeet	0.00	10,111,582.80
tblLandUse	LotAcreage	0.00	232.13
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.013
tblProjectCharacteristics	CO2IntensityFactor	1325.65	595.8
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.003
tblTripsAndVMT	VendorTripNumber	5,908.00	0.00
tblTripsAndVMT	WorkerTripNumber	19,425.00	0.00

2.0 Emissions Summary

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2.1 Overall Construction

Unmitigated Construction

[illegible]

Mitigated Construction

[illegible][illegible]

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

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	226.7841	6.2438	246.5805	0.3032		18.1731	18.1731		18.1731	18.1731	1,940.8348	3,943.6804	5,884.5152	5.9924	0.1317	6,073.5812
Energy	1.6267	14.2198	8.2561	0.0887		1.1239	1.1239		1.1239	1.1239	0.0000	79,487.5837	79,487.5837	1.6917	0.6143	79,712.9417
Mobile	17.8158	130.0175	235.5205	1.3849	151.5288	0.5648	152.0936	40.5921	0.5257	41.1178	0.0000	129,366.4150	129,366.4150	4.7497	0.0000	129,485.1580
Waste						0.0000	0.0000		0.0000	0.0000	4,849.5455	0.0000	4,849.5455	286.5999	0.0000	12,014.5436
Water						0.0000	0.0000		0.0000	0.0000	1,095.9317	18,349.2552	19,445.1869	112.9631	2.7502	23,088.8358
Total	246.2265	150.4811	490.3570	1.7769	151.5288	19.8617	171.3905	40.5921	19.8227	60.4148	7,886.3120	231,146.9342	239,033.2462	411.9968	3.4963	250,375.0602

Northside Specific Plan - Scenario 1 Operation - South Coast AQMD Air District, Annual

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	226.7841	6.2438	246.5805	0.3032		18.1731	18.1731		18.1731	18.1731	1,940.8348	3,943.6804	5,884.5152	5.9924	0.1317	6,073.5812
Energy	1.6267	14.2198	8.2561	0.0887		1.1239	1.1239		1.1239	1.1239	0.0000	79,487.5837	79,487.5837	1.6917	0.6143	79,712.9417
Mobile	17.8158	130.0175	235.5205	1.3849	151.5288	0.5648	152.0936	40.5921	0.5257	41.1178	0.0000	129,366.4150	129,366.4150	4.7497	0.0000	129,485.1580
Waste						0.0000	0.0000		0.0000	0.0000	4,849.5455	0.0000	4,849.5455	286.5999	0.0000	12,014.5436
Water						0.0000	0.0000		0.0000	0.0000	1,095.9317	18,349.2552	19,445.1869	112.9631	2.7502	23,088.8358
Total	246.2265	150.4811	490.3570	1.7769	151.5288	19.8617	171.3905	40.5921	19.8227	60.4148	7,886.3120	231,146.9342	239,033.2462	411.9968	3.4963	250,375.0602

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	1/1/2020	1/1/2020	5	1	

Acres of Grading (Site Preparation Phase): 0

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Acres of Grading (Grading Phase): 0**Acres of Paving: 0****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	0	7.00	231	0.29
Building Construction	Forklifts	0	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction	Welders	0	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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3.2 Building Construction - 2020

Unmitigated Construction On-Site

[illegible]

Unmitigated Construction Off-Site

[illegible]

Northside Specific Plan - Scenario 1 Operation - South Coast AQMD Air District, Annual

3.2 Building Construction - 2020**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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.0 Operational Detail - Mobile

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4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	17.8158	130.0175	235.5205	1.3849	151.5288	0.5648	152.0936	40.5921	0.5257	41.1178	0.0000	129,366.4 150	129,366.4 150	4.7497	0.0000	129,485.1 580
Unmitigated	17.8158	130.0175	235.5205	1.3849	151.5288	0.5648	152.0936	40.5921	0.5257	41.1178	0.0000	129,366.4 150	129,366.4 150	4.7497	0.0000	129,485.1 580

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	18,575.80	18,575.80	18,575.80	63,476,331	63,476,331
Apartments Mid Rise	5,633.55	5,633.55	5,633.55	19,250,696	19,250,696
Apartments Mid Rise	5,268.90	5,268.90	5,268.90	18,004,632	18,004,632
Elementary School	17,725.99	17,725.99	17,725.99	61,090,579	61,090,579
General Light Industry	2,619.60	2,619.60	2,619.60	11,600,316	11,600,316
General Office Building	1,364.30	1,364.30	1,364.30	4,395,037	4,395,037
Office Park	46,937.94	46,937.94	46,937.94	158,586,905	158,586,905
Regional Shopping Center	28,813.86	28,813.86	28,813.86	62,319,883	62,319,883
User Defined Recreational	0.00	0.00	0.00		
Total	126,939.94	126,939.94	126,939.94	398,724,379	398,724,379

4.3 Trip Type Information

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Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Elementary School	16.60	8.40	6.90	65.00	30.00	5.00	63	25	12
General Light Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Office Park	16.60	8.40	6.90	33.00	48.00	19.00	82	15	3
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11
User Defined Recreational	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Apartments Mid Rise	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Elementary School	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
General Light Industry	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
General Office Building	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Office Park	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Regional Shopping Center	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
User Defined Recreational	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	63,389.2570	63,389.2570	1.3831	0.3192	63,518.9506
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	63,389.2570	63,389.2570	1.3831	0.3192	63,518.9506
NaturalGas Mitigated	1.6267	14.2198	8.2561	0.0887		1.1239	1.1239		1.1239	1.1239	0.0000	16,098.3267	16,098.3267	0.3086	0.2951	16,193.9910
NaturalGas Unmitigated	1.6267	14.2198	8.2561	0.0887		1.1239	1.1239		1.1239	1.1239	0.0000	16,098.3267	16,098.3267	0.3086	0.2951	16,193.9910

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5.2 Energy by Land Use - NaturalGas**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	1.10423e+008	0.5954	5.0881	2.1652	0.0325		0.4114	0.4114		0.4114	0.4114	0.0000	5,892.6027	5,892.6027	0.1129	0.1080	5,927.6195
Apartments Mid Rise	3.99736e+007	0.2155	1.8419	0.7838	0.0118		0.1489	0.1489		0.1489	0.1489	0.0000	2,133.1438	2,133.1438	0.0409	0.0391	2,145.8200
Apartments Mid Rise	4.27401e+007	0.2305	1.9694	0.8380	0.0126		0.1592	0.1592		0.1592	0.1592	0.0000	2,280.7744	2,280.7744	0.0437	0.0418	2,294.3279
Elementary School	2.17174e+007	0.1171	1.0646	0.8943	6.3900e-003		0.0809	0.0809		0.0809	0.0809	0.0000	1,158.9254	1,158.9254	0.0222	0.0213	1,165.8123
General Light Industry	4.80852e+007	0.2593	2.3571	1.9800	0.0141		0.1791	0.1791		0.1791	0.1791	0.0000	2,566.0094	2,566.0094	0.0492	0.0470	2,581.2579
General Office Building	1.36038e+006	7.3400e-003	0.0667	0.0560	4.0000e-004		5.0700e-003	5.0700e-003		5.0700e-003	5.0700e-003	0.0000	72.5950	72.5950	1.3900e-003	1.3300e-003	73.0264
Office Park	3.2633e+007	0.1760	1.5997	1.3437	9.6000e-003		0.1216	0.1216		0.1216	0.1216	0.0000	1,741.4235	1,741.4235	0.0334	0.0319	1,751.7719
Regional Shopping Center	4.73828e+006	0.0256	0.2323	0.1951	1.3900e-003		0.0177	0.0177		0.0177	0.0177	0.0000	252.8526	252.8526	4.8500e-003	4.6400e-003	254.3552
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		1.6267	14.2198	8.2561	0.0887		1.1239	1.1239		1.1239	1.1239	0.0000	16,098.3267	16,098.3267	0.3086	0.2951	16,193.9910

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5.2 Energy by Land Use - NaturalGas**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	1.10423e+008	0.5954	5.0881	2.1652	0.0325		0.4114	0.4114		0.4114	0.4114	0.0000	5,892.6027	5,892.6027	0.1129	0.1080	5,927.6195
Apartments Mid Rise	3.99736e+007	0.2155	1.8419	0.7838	0.0118		0.1489	0.1489		0.1489	0.1489	0.0000	2,133.1438	2,133.1438	0.0409	0.0391	2,145.8200
Apartments Mid Rise	4.27401e+007	0.2305	1.9694	0.8380	0.0126		0.1592	0.1592		0.1592	0.1592	0.0000	2,280.7744	2,280.7744	0.0437	0.0418	2,294.3279
Elementary School	2.17174e+007	0.1171	1.0646	0.8943	6.3900e-003		0.0809	0.0809		0.0809	0.0809	0.0000	1,158.9254	1,158.9254	0.0222	0.0213	1,165.8123
General Light Industry	4.80852e+007	0.2593	2.3571	1.9800	0.0141		0.1791	0.1791		0.1791	0.1791	0.0000	2,566.0094	2,566.0094	0.0492	0.0470	2,581.2579
General Office Building	1.36038e+006	7.3400e-003	0.0667	0.0560	4.0000e-004		5.0700e-003	5.0700e-003		5.0700e-003	5.0700e-003	0.0000	72.5950	72.5950	1.3900e-003	1.3300e-003	73.0264
Office Park	3.2633e+007	0.1760	1.5997	1.3437	9.6000e-003		0.1216	0.1216		0.1216	0.1216	0.0000	1,741.4235	1,741.4235	0.0334	0.0319	1,751.7719
Regional Shopping Center	4.73828e+006	0.0256	0.2323	0.1951	1.3900e-003		0.0177	0.0177		0.0177	0.0177	0.0000	252.8526	252.8526	4.8500e-003	4.6400e-003	254.3552
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		1.6267	14.2198	8.2561	0.0887		1.1239	1.1239		1.1239	1.1239	0.0000	16,098.3267	16,098.3267	0.3086	0.2951	16,193.9910

Northside Specific Plan - Scenario 1 Operation - South Coast AQMD Air District, Annual

5.3 Energy by Land Use - Electricity**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	3.44592e+007	9,312.6220	0.2032	0.0469	9,331.6756
Apartments Mid Rise	1.2342e+007	3,335.4168	0.0728	0.0168	3,342.2410
Apartments Mid Rise	1.31961e+007	3,566.2543	0.0778	0.0180	3,573.5508
Elementary School	1.80979e+007	4,890.9549	0.1067	0.0246	4,900.9617
General Light Industry	1.5022e+007	4,059.7005	0.0886	0.0204	4,068.0066
General Office Building	3.73222e+006	1,008.6339	0.0220	5.0800e-003	1,010.6976
Office Park	1.10751e+008	29,930.5453	0.6531	0.1507	29,991.7828
Regional Shopping Center	2.6957e+007	7,285.1293	0.1590	0.0367	7,300.0346
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000
Total		63,389.2569	1.3831	0.3192	63,518.9506

Northside Specific Plan - Scenario 1 Operation - South Coast AQMD Air District, Annual

5.3 Energy by Land Use - Electricity**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	3.44592e+007	9,312.6220	0.2032	0.0469	9,331.6756
Apartments Mid Rise	1.2342e+007	3,335.4168	0.0728	0.0168	3,342.2410
Apartments Mid Rise	1.31961e+007	3,566.2543	0.0778	0.0180	3,573.5508
Elementary School	1.80979e+007	4,890.9549	0.1067	0.0246	4,900.9617
General Light Industry	1.5022e+007	4,059.7005	0.0886	0.0204	4,068.0066
General Office Building	3.73222e+006	1,008.6339	0.0220	5.0800e-003	1,010.6976
Office Park	1.10751e+008	29,930.5453	0.6531	0.1507	29,991.7828
Regional Shopping Center	2.6957e+007	7,285.1293	0.1590	0.0367	7,300.0346
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000
Total		63,389.2569	1.3831	0.3192	63,518.9506

6.0 Area Detail**6.1 Mitigation Measures Area**

Northside Specific Plan - Scenario 1 Operation - South Coast AQMD Air District, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	226.7841	6.2438	246.5805	0.3032		18.1731	18.1731		18.1731	18.1731	1,940.834 8	3,943.680 4	5,884.515 2	5.9924	0.1317	6,073.581 2
Unmitigated	226.7841	6.2438	246.5805	0.3032		18.1731	18.1731		18.1731	18.1731	1,940.834 8	3,943.680 4	5,884.515 2	5.9924	0.1317	6,073.581 2

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	16.8401					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	146.1800					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	59.8490	4.7389	116.1532	0.2963		17.4471	17.4471		17.4471	17.4471	1,940.834 8	3,729.617 9	5,670.452 7	5.7879	0.1317	5,854.406 9
Landscaping	3.9150	1.5049	130.4272	6.9200e-003		0.7260	0.7260		0.7260	0.7260	0.0000	214.0625	214.0625	0.2045	0.0000	219.1743
Total	226.7841	6.2438	246.5805	0.3032		18.1731	18.1731		18.1731	18.1731	1,940.834 8	3,943.680 4	5,884.515 2	5.9924	0.1317	6,073.581 2

Northside Specific Plan - Scenario 1 Operation - South Coast AQMD Air District, Annual

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	16.8401					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	146.1800					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	59.8490	4.7389	116.1532	0.2963		17.4471	17.4471		17.4471	17.4471	1,940.8348	3,729.6179	5,670.4527	5.7879	0.1317	5,854.4069
Landscaping	3.9150	1.5049	130.4272	6.9200e-003		0.7260	0.7260		0.7260	0.7260	0.0000	214.0625	214.0625	0.2045	0.0000	219.1743
Total	226.7841	6.2438	246.5805	0.3032		18.1731	18.1731		18.1731	18.1731	1,940.8348	3,943.6804	5,884.5152	5.9924	0.1317	6,073.5812

7.0 Water Detail**7.1 Mitigation Measures Water**

Northside Specific Plan - Scenario 1 Operation - South Coast AQMD Air District, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	19,445.18 69	112.9631	2.7502	23,088.83 58
Unmitigated	19,445.18 69	112.9631	2.7502	23,088.83 58

Northside Specific Plan - Scenario 1 Operation - South Coast AQMD Air District, Annual

7.2 Water by Land Use**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	461.942 / 291.224	2,646.490 0	15.1069	0.3680	3,133.829 6
Apartments Mid Rise	364.276 / 229.652	2,086.957 1	11.9130	0.2902	2,471.2611
Elementary School	71.888 / 184.855	830.7988	2.3601	0.0594	907.4963
General Light Industry	342.25 / 0	1,312.933 8	11.1785	0.2694	1,672.675 2
General Office Building	69.6787 / 42.7063	395.5254	2.2786	0.0555	469.0275
Office Park	1986.3 / 1217.41	11,275.055 5	64.9559	1.5819	13,370.34 71
Regional Shopping Center	158.097 / 96.8984	897.4264	5.1701	0.1259	1,064.199 0
User Defined Recreational	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		19,445.18 69	112.9631	2.7502	23,088.83 58

Northside Specific Plan - Scenario 1 Operation - South Coast AQMD Air District, Annual

7.2 Water by Land Use**Mitigated**

	Indoor/Outdoor Use	Total CO ₂	CH ₄	N ₂ O	CO ₂ e
Land Use	Mgal	MT/yr			
Apartments Low Rise	461.942 / 291.224	2,646.490 0	15.1069	0.3680	3,133.829 6
Apartments Mid Rise	364.276 / 229.652	2,086.957 1	11.9130	0.2902	2,471.2611
Elementary School	71.888 / 184.855	830.7988	2.3601	0.0594	907.4963
General Light Industry	342.25 / 0	1,312.933 8	11.1785	0.2694	1,672.675 2
General Office Building	69.6787 / 42.7063	395.5254	2.2786	0.0555	469.0275
Office Park	1986.3 / 1217.41	11,275.055 5	64.9559	1.5819	13,370.34 71
Regional Shopping Center	158.097 / 96.8984	897.4264	5.1701	0.1259	1,064.199 0
User Defined Recreational	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		19,445.18 69	112.9631	2.7502	23,088.83 58

8.0 Waste Detail**8.1 Mitigation Measures Waste**

Northside Specific Plan - Scenario 1 Operation - South Coast AQMD Air District, Annual

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	4,849.5455	286.5999	0.0000	12,014.5436
Unmitigated	4,849.5455	286.5999	0.0000	12,014.5436

Northside Specific Plan - Scenario 1 Operation - South Coast AQMD Air District, Annual

8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	3261.4	662.0347	39.1251	0.0000	1,640.1630
Apartments Mid Rise	2571.86	522.0643	30.8531	0.0000	1,293.3923
Elementary School	3222.91	654.2216	38.6634	0.0000	1,620.8063
General Light Industry	1835.2	372.5290	22.0158	0.0000	922.9249
General Office Building	364.6	74.0105	4.3739	0.0000	183.3579
Office Park	10393.4	2,109.7663	124.6836	0.0000	5,226.8566
Regional Shopping Center	2241.08	454.9190	26.8849	0.0000	1,127.0425
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000
Total		4,849.5455	286.5999	0.0000	12,014.5436

Northside Specific Plan - Scenario 1 Operation - South Coast AQMD Air District, Annual

8.2 Waste by Land Use**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	3261.4	662.0347	39.1251	0.0000	1,640.1630
Apartments Mid Rise	2571.86	522.0643	30.8531	0.0000	1,293.3923
Elementary School	3222.91	654.2216	38.6634	0.0000	1,620.8063
General Light Industry	1835.2	372.5290	22.0158	0.0000	922.9249
General Office Building	364.6	74.0105	4.3739	0.0000	183.3579
Office Park	10393.4	2,109.7663	124.6836	0.0000	5,226.8566
Regional Shopping Center	2241.08	454.9190	26.8849	0.0000	1,127.0425
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000
Total		4,849.5455	286.5999	0.0000	12,014.5436

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

Northside Specific Plan - Scenario 1 Operation - South Coast AQMD Air District, Annual

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

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Northside Specific Plan - Scenario 1 Operation - South Coast AQMD Air District, Summer

Northside Specific Plan - Scenario 1 Operation

South Coast AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	392.04	1000sqft	9.00	392,040.00	0
Office Park	11,175.70	1000sqft	256.56	11,175,700.00	0
Elementary School	2,479.16	1000sqft	56.91	2,479,160.00	0
General Light Industry	1,480.00	1000sqft	33.98	1,480,000.00	0
User Defined Recreational	232.13	User Defined Unit	232.13	10,111,582.80	0
Apartments Low Rise	7,090.00	Dwelling Unit	443.13	7,090,000.00	20277
Apartments Mid Rise	2,889.00	Dwelling Unit	76.03	2,889,000.00	8263
Apartments Mid Rise	2,702.00	Dwelling Unit	71.11	2,702,000.00	7728
Regional Shopping Center	2,134.36	1000sqft	49.00	2,134,360.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10			Operational Year	2040
Utility Company	Riverside Public Utilities				
CO2 Intensity (lb/MWhr)	595.8	CH4 Intensity (lb/MWhr)	0.013	N2O Intensity (lb/MWhr)	0.003

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.0 Project Characteristics. Operational year 2040. GHG intensity factors adjusted for RPS assuming 60% renewables by December 31, 2030.

Northside Specific Plan - Scenario 1 Operation - South Coast AQMD Air District, Summer

Land Use - Per Rick Engineering Traffic Impact Analysis (October 14, 2019). Scenario 1 at year 2040 buildout.

Construction Phase - Operation analysis only

Off-road Equipment - Operation analysis only

Off-road Equipment - Operation analysis only

Trips and VMT - Operation analysis only

On-road Fugitive Dust - Operation analysis only

Demolition - Operation analysis only

Grading - Operation analysis only

Architectural Coating - Operation analysis only

Vehicle Trips - Trip rates based on Rick Engineering Traffic Analysis, January 2020.1.49. Weekend trips conservatively assumed equal to weekday trips.

Vehicle Emission Factors - CalEEMod default values for 2040.

Vehicle Emission Factors - CalEEMod default values for 2040.

Vehicle Emission Factors - CalEEMod default values for 2040.

Road Dust - CalEEMod default values.

Woodstoves - CalEEMod default values.

Consumer Products - CalEEMod default values.

Area Coating - CalEEMod default values.

Landscape Equipment - CalEEMod default values.

Energy Use - CalEEMod default values.

Water And Wastewater - CalEEMod default values.

Solid Waste - CalEEMod default values.

Construction Off-road Equipment Mitigation - Operational analysis only

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - No area source mitigation.

Energy Mitigation - No energy mitigation.

Water Mitigation - No water mitigation.

Waste Mitigation - No solid waste mitigation.

Northside Specific Plan - Scenario 1 Operation - South Coast AQMD Air District, Summer

Operational Off-Road Equipment -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	155,000.00	1.00
tblLandUse	LandUseSquareFeet	0.00	10,111,582.80
tblLandUse	LotAcreage	0.00	232.13
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.013
tblProjectCharacteristics	CO2IntensityFactor	1325.65	595.8
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.003
tblTripsAndVMT	VendorTripNumber	5,908.00	0.00
tblTripsAndVMT	WorkerTripNumber	19,425.00	0.00

2.0 Emissions Summary

Northside Specific Plan - Scenario 1 Operation - South Coast AQMD Air District, Summer

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

[illegible]

Mitigated Construction

[illegible][illegible]

Northside Specific Plan - Scenario 1 Operation - South Coast AQMD Air District, Summer

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	5,712.502 1	391.1524	10,335.67 71	23.7607		1,401.575 6	1,401.575 6		1,401.575 6	1,401.5756	171,152.3 330	330,783.7 077	501,936.0 407	512.2125	11.6166	518,203.1 012
Energy	8.9132	77.9165	45.2387	0.4862		6.1582	6.1582		6.1582	6.1582		97,234.89 12	97,234.89 12	1.8637	1.7826	97,812.70 95
Mobile	104.8683	701.6294	1,362.597 1	7.9016	847.9509	3.1034	851.0543	226.8075	2.8886	229.6961		812,963.7 052	812,963.7 052	28.6875		813,680.8 925
Total	5,826.283 6	1,170.698 3	11,743.51 29	32.1486	847.9509	1,410.837 2	2,258.788 0	226.8075	1,410.622 3	1,637.4298	171,152.3 330	1,240,982. 3041	1,412,134. 6371	542.7636	13.3993	1,429,696. 7033

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	5,712.502 1	391.1524	10,335.67 71	23.7607		1,401.575 6	1,401.575 6		1,401.575 6	1,401.5756	171,152.3 330	330,783.7 077	501,936.0 407	512.2125	11.6166	518,203.1 012
Energy	8.9132	77.9165	45.2387	0.4862		6.1582	6.1582		6.1582	6.1582		97,234.89 12	97,234.89 12	1.8637	1.7826	97,812.70 95
Mobile	104.8683	701.6294	1,362.597 1	7.9016	847.9509	3.1034	851.0543	226.8075	2.8886	229.6961		812,963.7 052	812,963.7 052	28.6875		813,680.8 925
Total	5,826.283 6	1,170.698 3	11,743.51 29	32.1486	847.9509	1,410.837 2	2,258.788 0	226.8075	1,410.622 3	1,637.4298	171,152.3 330	1,240,982. 3041	1,412,134. 6371	542.7636	13.3993	1,429,696. 7033

Northside Specific Plan - Scenario 1 Operation - South Coast AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	1/1/2020	1/1/2020	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	0	7.00	231	0.29
Building Construction	Forklifts	0	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction	Welders	0	8.00	46	0.45

Trips and VMT

Northside Specific Plan - Scenario 1 Operation - South Coast AQMD Air District, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction**3.2 Building Construction - 2020****Unmitigated Construction On-Site**

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

Northside Specific Plan - Scenario 1 Operation - South Coast AQMD Air District, Summer

3.2 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Mitigated Construction On-Site

[illegible]

Northside Specific Plan - Scenario 1 Operation - South Coast AQMD Air District, Summer

3.2 Building Construction - 2020**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

Northside Specific Plan - Scenario 1 Operation - South Coast AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	104.8683	701.6294	1,362.5971	7.9016	847.9509	3.1034	851.0543	226.8075	2.8886	229.6961		812,963.7052	812,963.7052	28.6875		813,680.8925
Unmitigated	104.8683	701.6294	1,362.5971	7.9016	847.9509	3.1034	851.0543	226.8075	2.8886	229.6961		812,963.7052	812,963.7052	28.6875		813,680.8925

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	18,575.80	18,575.80	18,575.80	63,476,331	63,476,331
Apartments Mid Rise	5,633.55	5,633.55	5,633.55	19,250,696	19,250,696
Apartments Mid Rise	5,268.90	5,268.90	5,268.90	18,004,632	18,004,632
Elementary School	17,725.99	17,725.99	17,725.99	61,090,579	61,090,579
General Light Industry	2,619.60	2,619.60	2,619.60	11,600,316	11,600,316
General Office Building	1,364.30	1,364.30	1,364.30	4,395,037	4,395,037
Office Park	46,937.94	46,937.94	46,937.94	158,586,905	158,586,905
Regional Shopping Center	28,813.86	28,813.86	28,813.86	62,319,883	62,319,883
User Defined Recreational	0.00	0.00	0.00		
Total	126,939.94	126,939.94	126,939.94	398,724,379	398,724,379

4.3 Trip Type Information

Northside Specific Plan - Scenario 1 Operation - South Coast AQMD Air District, Summer

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Elementary School	16.60	8.40	6.90	65.00	30.00	5.00	63	25	12
General Light Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Office Park	16.60	8.40	6.90	33.00	48.00	19.00	82	15	3
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11
User Defined Recreational	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Apartments Mid Rise	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Elementary School	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
General Light Industry	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
General Office Building	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Office Park	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Regional Shopping Center	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
User Defined Recreational	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Northside Specific Plan - Scenario 1 Operation - South Coast AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	8.9132	77.9165	45.2387	0.4862		6.1582	6.1582		6.1582	6.1582		97,234.89 12	97,234.89 12	1.8637	1.7826	97,812.70 95
NaturalGas Unmitigated	8.9132	77.9165	45.2387	0.4862		6.1582	6.1582		6.1582	6.1582		97,234.89 12	97,234.89 12	1.8637	1.7826	97,812.70 95

Northside Specific Plan - Scenario 1 Operation - South Coast AQMD Air District, Summer

5.2 Energy by Land Use - NaturalGas**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	302529	3.2626	27.8802	11.8639	0.1780		2.2541	2.2541		2.2541	2.2541		35,591.6857	35,591.6857	0.6822	0.6525	35,803.1893
Apartments Mid Rise	109517	1.1811	10.0927	4.2948	0.0644		0.8160	0.8160		0.8160	0.8160		12,884.3204	12,884.3204	0.2470	0.2362	12,960.8855
Apartments Mid Rise	117096	1.2628	10.7912	4.5920	0.0689		0.8725	0.8725		0.8725	0.8725		13,776.0184	13,776.0184	0.2640	0.2526	13,857.8824
Elementary School	59499.8	0.6417	5.8333	4.9000	0.0350		0.4433	0.4433		0.4433	0.4433		6,999.9812	6,999.9812	0.1342	0.1283	7,041.5786
General Light Industry	131740	1.4207	12.9157	10.8492	0.0775		0.9816	0.9816		0.9816	0.9816		15,498.8558	15,498.8558	0.2971	0.2842	15,590.9577
General Office Building	3727.07	0.0402	0.3654	0.3069	2.1900e-003		0.0278	0.0278		0.0278	0.0278		438.4783	438.4783	8.4000e-003	8.0400e-003	441.0839
Office Park	89405.6	0.9642	8.7653	7.3628	0.0526		0.6662	0.6662		0.6662	0.6662		10,518.3059	10,518.3059	0.2016	0.1928	10,580.8109
Regional Shopping Center	12981.6	0.1400	1.2727	1.0691	7.6400e-003		0.0967	0.0967		0.0967	0.0967		1,527.2455	1,527.2455	0.0293	0.0280	1,536.3212
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		8.9132	77.9165	45.2387	0.4862		6.1582	6.1582		6.1582	6.1582		97,234.8912	97,234.8912	1.8637	1.7826	97,812.7095

Northside Specific Plan - Scenario 1 Operation - South Coast AQMD Air District, Summer

5.2 Energy by Land Use - NaturalGas**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	302.529	3.2626	27.8802	11.8639	0.1780		2.2541	2.2541		2.2541	2.2541		35,591.6857	35,591.6857	0.6822	0.6525	35,803.1893
Apartments Mid Rise	109.517	1.1811	10.0927	4.2948	0.0644		0.8160	0.8160		0.8160	0.8160		12,884.3204	12,884.3204	0.2470	0.2362	12,960.8855
Apartments Mid Rise	117.096	1.2628	10.7912	4.5920	0.0689		0.8725	0.8725		0.8725	0.8725		13,776.0184	13,776.0184	0.2640	0.2526	13,857.8824
Elementary School	59.4998	0.6417	5.8333	4.9000	0.0350		0.4433	0.4433		0.4433	0.4433		6,999.9812	6,999.9812	0.1342	0.1283	7,041.5786
General Light Industry	131.74	1.4207	12.9157	10.8492	0.0775		0.9816	0.9816		0.9816	0.9816		15,498.8558	15,498.8558	0.2971	0.2842	15,590.9577
General Office Building	3.72707	0.0402	0.3654	0.3069	2.1900e-003		0.0278	0.0278		0.0278	0.0278		438.4783	438.4783	8.4000e-003	8.0400e-003	441.0839
Office Park	89.4056	0.9642	8.7653	7.3628	0.0526		0.6662	0.6662		0.6662	0.6662		10,518.3059	10,518.3059	0.2016	0.1928	10,580.8109
Regional Shopping Center	12.9816	0.1400	1.2727	1.0691	7.6400e-003		0.0967	0.0967		0.0967	0.0967		1,527.2455	1,527.2455	0.0293	0.0280	1,536.3212
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		8.9132	77.9165	45.2387	0.4862		6.1582	6.1582		6.1582	6.1582		97,234.8912	97,234.8912	1.8637	1.7826	97,812.7095

6.0 Area Detail**6.1 Mitigation Measures Area**

Northside Specific Plan - Scenario 1 Operation - South Coast AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5,712.502 1	391.1524	10,335.67 71	23.7607		1,401.575 6	1,401.575 6		1,401.575 6	1,401.5756	171,152.3 330	330,783.7 077	501,936.0 407	512.2125	11.6166	518,203.1 012
Unmitigated	5,712.502 1	391.1524	10,335.67 71	23.7607		1,401.575 6	1,401.575 6		1,401.575 6	1,401.5756	171,152.3 330	330,783.7 077	501,936.0 407	512.2125	11.6166	518,203.1 012

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	92.2747					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	800.9861					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	4,787.921 8	379.1133	9,292.259 2	23.7054		1,395.767 4	1,395.767 4		1,395.767 4	1,395.7674	171,152.3 330	328,896.0 000	500,048.3 330	510.4093	11.6166	516,270.3 147
Landscaping	31.3196	12.0391	1,043.417 9	0.0554		5.8082	5.8082		5.8082	5.8082		1,887.707 7	1,887.707 7	1.8032		1,932.786 5
Total	5,712.502 1	391.1524	10,335.67 71	23.7607		1,401.575 5	1,401.575 5		1,401.575 5	1,401.5755	171,152.3 330	330,783.7 077	501,936.0 407	512.2125	11.6166	518,203.1 013

Northside Specific Plan - Scenario 1 Operation - South Coast AQMD Air District, Summer

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	92.2747					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	800.9861					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	4,787.9218	379.1133	9,292.2592	23.7054		1,395.7674	1,395.7674		1,395.7674	1,395.7674	171,152.3330	328,896.0000	500,048.3330	510.4093	11.6166	516,270.3147
Landscaping	31.3196	12.0391	1,043.4179	0.0554		5.8082	5.8082		5.8082	5.8082		1,887.7077	1,887.7077	1.8032		1,932.7865
Total	5,712.5021	391.1524	10,335.6771	23.7607		1,401.5755	1,401.5755		1,401.5755	1,401.5755	171,152.3330	330,783.7077	501,936.0407	512.2125	11.6166	518,203.1013

7.0 Water Detail**7.1 Mitigation Measures Water****8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

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

Northside Specific Plan - Scenario 1 Operation - South Coast AQMD Air District, Summer

Fire Pumps and Emergency Generators

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

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Northside Specific Plan - Scenario 1 Operation - South Coast AQMD Air District, Winter

Northside Specific Plan - Scenario 1 Operation

South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	392.04	1000sqft	9.00	392,040.00	0
Office Park	11,175.70	1000sqft	256.56	11,175,700.00	0
Elementary School	2,479.16	1000sqft	56.91	2,479,160.00	0
General Light Industry	1,480.00	1000sqft	33.98	1,480,000.00	0
User Defined Recreational	232.13	User Defined Unit	232.13	10,111,582.80	0
Apartments Low Rise	7,090.00	Dwelling Unit	443.13	7,090,000.00	20277
Apartments Mid Rise	2,889.00	Dwelling Unit	76.03	2,889,000.00	8263
Apartments Mid Rise	2,702.00	Dwelling Unit	71.11	2,702,000.00	7728
Regional Shopping Center	2,134.36	1000sqft	49.00	2,134,360.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10			Operational Year	2040
Utility Company	Riverside Public Utilities				
CO2 Intensity (lb/MWhr)	595.8	CH4 Intensity (lb/MWhr)	0.013	N2O Intensity (lb/MWhr)	0.003

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.0 Project Characteristics. Operational year 2040. GHG intensity factors adjusted for RPS assuming 60% renewables by December 31, 2030.

Northside Specific Plan - Scenario 1 Operation - South Coast AQMD Air District, Winter

Land Use - Per Rick Engineering Traffic Impact Analysis (October 14, 2019). Scenario 1 at year 2040 buildout.

Construction Phase - Operation analysis only

Off-road Equipment - Operation analysis only

Off-road Equipment - Operation analysis only

Trips and VMT - Operation analysis only

On-road Fugitive Dust - Operation analysis only

Demolition - Operation analysis only

Grading - Operation analysis only

Architectural Coating - Operation analysis only

Vehicle Trips - Trip rates based on Rick Engineering Traffic Analysis, January 2020.1.49. Weekend trips conservatively assumed equal to weekday trips.

Vehicle Emission Factors - CalEEMod default values for 2040.

Vehicle Emission Factors - CalEEMod default values for 2040.

Vehicle Emission Factors - CalEEMod default values for 2040.

Road Dust - CalEEMod default values.

Woodstoves - CalEEMod default values.

Consumer Products - CalEEMod default values.

Area Coating - CalEEMod default values.

Landscape Equipment - CalEEMod default values.

Energy Use - CalEEMod default values.

Water And Wastewater - CalEEMod default values.

Solid Waste - CalEEMod default values.

Construction Off-road Equipment Mitigation - Operational analysis only

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - No area source mitigation.

Energy Mitigation - No energy mitigation.

Water Mitigation - No water mitigation.

Waste Mitigation - No solid waste mitigation.

Northside Specific Plan - Scenario 1 Operation - South Coast AQMD Air District, Winter

Operational Off-Road Equipment -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	155,000.00	1.00
tblLandUse	LandUseSquareFeet	0.00	10,111,582.80
tblLandUse	LotAcreage	0.00	232.13
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.013
tblProjectCharacteristics	CO2IntensityFactor	1325.65	595.8
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.003
tblTripsAndVMT	VendorTripNumber	5,908.00	0.00
tblTripsAndVMT	WorkerTripNumber	19,425.00	0.00

2.0 Emissions Summary

Northside Specific Plan - Scenario 1 Operation - South Coast AQMD Air District, Winter

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

[illegible]

Mitigated Construction

[illegible][illegible]

Northside Specific Plan - Scenario 1 Operation - South Coast AQMD Air District, Winter

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	5,712.502 1	391.1524	10,335.67 71	23.7607		1,401.575 6	1,401.575 6		1,401.575 6	1,401.5756	171,152.3 330	330,783.7 077	501,936.0 407	512.2125	11.6166	518,203.1 012
Energy	8.9132	77.9165	45.2387	0.4862		6.1582	6.1582		6.1582	6.1582		97,234.89 12	97,234.89 12	1.8637	1.7826	97,812.70 95
Mobile	99.7596	703.7935	1,276.686 1	7.4961	847.9509	3.1114	851.0623	226.8075	2.8962	229.7037		771,935.1 328	771,935.1 328	29.1033		772,662.7 163
Total	5,821.175 0	1,172.862 4	11,657.60 19	31.7430	847.9509	1,410.845 2	2,258.796 0	226.8075	1,410.630 0	1,637.4375	171,152.3 330	1,199,953. 7317	1,371,106. 0647	543.1795	13.3993	1,388,678. 5271

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	5,712.502 1	391.1524	10,335.67 71	23.7607		1,401.575 6	1,401.575 6		1,401.575 6	1,401.5756	171,152.3 330	330,783.7 077	501,936.0 407	512.2125	11.6166	518,203.1 012
Energy	8.9132	77.9165	45.2387	0.4862		6.1582	6.1582		6.1582	6.1582		97,234.89 12	97,234.89 12	1.8637	1.7826	97,812.70 95
Mobile	99.7596	703.7935	1,276.686 1	7.4961	847.9509	3.1114	851.0623	226.8075	2.8962	229.7037		771,935.1 328	771,935.1 328	29.1033		772,662.7 163
Total	5,821.175 0	1,172.862 4	11,657.60 19	31.7430	847.9509	1,410.845 2	2,258.796 0	226.8075	1,410.630 0	1,637.4375	171,152.3 330	1,199,953. 7317	1,371,106. 0647	543.1795	13.3993	1,388,678. 5271

Northside Specific Plan - Scenario 1 Operation - South Coast AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	1/1/2020	1/1/2020	5	1	

Acres of Grading (Site Preparation Phase): 0**Acres of Grading (Grading Phase): 0****Acres of Paving: 0****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	0	7.00	231	0.29
Building Construction	Forklifts	0	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction	Welders	0	8.00	46	0.45

Trips and VMT

Northside Specific Plan - Scenario 1 Operation - South Coast AQMD Air District, Winter

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction**3.2 Building Construction - 2020****Unmitigated Construction On-Site**

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

Northside Specific Plan - Scenario 1 Operation - South Coast AQMD Air District, Winter

3.2 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Mitigated Construction On-Site

[illegible]

Northside Specific Plan - Scenario 1 Operation - South Coast AQMD Air District, Winter

3.2 Building Construction - 2020**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

Northside Specific Plan - Scenario 1 Operation - South Coast AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	99.7596	703.7935	1,276.6861	7.4961	847.9509	3.1114	851.0623	226.8075	2.8962	229.7037		771,935.1328	771,935.1328	29.1033		772,662.7163
Unmitigated	99.7596	703.7935	1,276.6861	7.4961	847.9509	3.1114	851.0623	226.8075	2.8962	229.7037		771,935.1328	771,935.1328	29.1033		772,662.7163

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	18,575.80	18,575.80	18,575.80	63,476,331	63,476,331
Apartments Mid Rise	5,633.55	5,633.55	5,633.55	19,250,696	19,250,696
Apartments Mid Rise	5,268.90	5,268.90	5,268.90	18,004,632	18,004,632
Elementary School	17,725.99	17,725.99	17,725.99	61,090,579	61,090,579
General Light Industry	2,619.60	2,619.60	2,619.60	11,600,316	11,600,316
General Office Building	1,364.30	1,364.30	1,364.30	4,395,037	4,395,037
Office Park	46,937.94	46,937.94	46,937.94	158,586,905	158,586,905
Regional Shopping Center	28,813.86	28,813.86	28,813.86	62,319,883	62,319,883
User Defined Recreational	0.00	0.00	0.00		
Total	126,939.94	126,939.94	126,939.94	398,724,379	398,724,379

4.3 Trip Type Information

Northside Specific Plan - Scenario 1 Operation - South Coast AQMD Air District, Winter

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Elementary School	16.60	8.40	6.90	65.00	30.00	5.00	63	25	12
General Light Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Office Park	16.60	8.40	6.90	33.00	48.00	19.00	82	15	3
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11
User Defined Recreational	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Apartments Mid Rise	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Elementary School	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
General Light Industry	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
General Office Building	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Office Park	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Regional Shopping Center	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
User Defined Recreational	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Northside Specific Plan - Scenario 1 Operation - South Coast AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	8.9132	77.9165	45.2387	0.4862		6.1582	6.1582		6.1582	6.1582		97,234.89 12	97,234.89 12	1.8637	1.7826	97,812.70 95
NaturalGas Unmitigated	8.9132	77.9165	45.2387	0.4862		6.1582	6.1582		6.1582	6.1582		97,234.89 12	97,234.89 12	1.8637	1.7826	97,812.70 95

Northside Specific Plan - Scenario 1 Operation - South Coast AQMD Air District, Winter

5.2 Energy by Land Use - NaturalGas**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	302529	3.2626	27.8802	11.8639	0.1780		2.2541	2.2541		2.2541	2.2541		35,591.6857	35,591.6857	0.6822	0.6525	35,803.1893
Apartments Mid Rise	109517	1.1811	10.0927	4.2948	0.0644		0.8160	0.8160		0.8160	0.8160		12,884.3204	12,884.3204	0.2470	0.2362	12,960.8855
Apartments Mid Rise	117096	1.2628	10.7912	4.5920	0.0689		0.8725	0.8725		0.8725	0.8725		13,776.0184	13,776.0184	0.2640	0.2526	13,857.8824
Elementary School	59499.8	0.6417	5.8333	4.9000	0.0350		0.4433	0.4433		0.4433	0.4433		6,999.9812	6,999.9812	0.1342	0.1283	7,041.5786
General Light Industry	131740	1.4207	12.9157	10.8492	0.0775		0.9816	0.9816		0.9816	0.9816		15,498.8558	15,498.8558	0.2971	0.2842	15,590.9577
General Office Building	3727.07	0.0402	0.3654	0.3069	2.1900e-003		0.0278	0.0278		0.0278	0.0278		438.4783	438.4783	8.4000e-003	8.0400e-003	441.0839
Office Park	89405.6	0.9642	8.7653	7.3628	0.0526		0.6662	0.6662		0.6662	0.6662		10,518.3059	10,518.3059	0.2016	0.1928	10,580.8109
Regional Shopping Center	12981.6	0.1400	1.2727	1.0691	7.6400e-003		0.0967	0.0967		0.0967	0.0967		1,527.2455	1,527.2455	0.0293	0.0280	1,536.3212
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		8.9132	77.9165	45.2387	0.4862		6.1582	6.1582		6.1582	6.1582		97,234.8912	97,234.8912	1.8637	1.7826	97,812.7095

Northside Specific Plan - Scenario 1 Operation - South Coast AQMD Air District, Winter

5.2 Energy by Land Use - NaturalGas**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	302.529	3.2626	27.8802	11.8639	0.1780		2.2541	2.2541		2.2541	2.2541		35,591.6857	35,591.6857	0.6822	0.6525	35,803.1893
Apartments Mid Rise	109.517	1.1811	10.0927	4.2948	0.0644		0.8160	0.8160		0.8160	0.8160		12,884.3204	12,884.3204	0.2470	0.2362	12,960.8855
Apartments Mid Rise	117.096	1.2628	10.7912	4.5920	0.0689		0.8725	0.8725		0.8725	0.8725		13,776.0184	13,776.0184	0.2640	0.2526	13,857.8824
Elementary School	59.4998	0.6417	5.8333	4.9000	0.0350		0.4433	0.4433		0.4433	0.4433		6,999.9812	6,999.9812	0.1342	0.1283	7,041.5786
General Light Industry	131.74	1.4207	12.9157	10.8492	0.0775		0.9816	0.9816		0.9816	0.9816		15,498.8558	15,498.8558	0.2971	0.2842	15,590.9577
General Office Building	3.72707	0.0402	0.3654	0.3069	2.1900e-003		0.0278	0.0278		0.0278	0.0278		438.4783	438.4783	8.4000e-003	8.0400e-003	441.0839
Office Park	89.4056	0.9642	8.7653	7.3628	0.0526		0.6662	0.6662		0.6662	0.6662		10,518.3059	10,518.3059	0.2016	0.1928	10,580.8109
Regional Shopping Center	12.9816	0.1400	1.2727	1.0691	7.6400e-003		0.0967	0.0967		0.0967	0.0967		1,527.2455	1,527.2455	0.0293	0.0280	1,536.3212
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		8.9132	77.9165	45.2387	0.4862		6.1582	6.1582		6.1582	6.1582		97,234.8912	97,234.8912	1.8637	1.7826	97,812.7095

6.0 Area Detail**6.1 Mitigation Measures Area**

Northside Specific Plan - Scenario 1 Operation - South Coast AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5,712.502 1	391.1524	10,335.67 71	23.7607		1,401.575 6	1,401.575 6		1,401.575 6	1,401.5756	171,152.3 330	330,783.7 077	501,936.0 407	512.2125	11.6166	518,203.1 012
Unmitigated	5,712.502 1	391.1524	10,335.67 71	23.7607		1,401.575 6	1,401.575 6		1,401.575 6	1,401.5756	171,152.3 330	330,783.7 077	501,936.0 407	512.2125	11.6166	518,203.1 012

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	92.2747					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	800.9861					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	4,787.921 8	379.1133	9,292.259 2	23.7054		1,395.767 4	1,395.767 4		1,395.767 4	1,395.7674	171,152.3 330	328,896.0 000	500,048.3 330	510.4093	11.6166	516,270.3 147
Landscaping	31.3196	12.0391	1,043.417 9	0.0554		5.8082	5.8082		5.8082	5.8082		1,887.707 7	1,887.707 7	1.8032		1,932.786 5
Total	5,712.502 1	391.1524	10,335.67 71	23.7607		1,401.575 5	1,401.575 5		1,401.575 5	1,401.5755	171,152.3 330	330,783.7 077	501,936.0 407	512.2125	11.6166	518,203.1 013

Northside Specific Plan - Scenario 1 Operation - South Coast AQMD Air District, Winter

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	92.2747					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	800.9861					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	4,787.9218	379.1133	9,292.2592	23.7054		1,395.7674	1,395.7674		1,395.7674	1,395.7674	171,152.3330	328,896.0000	500,048.3330	510.4093	11.6166	516,270.3147
Landscaping	31.3196	12.0391	1,043.4179	0.0554		5.8082	5.8082		5.8082	5.8082		1,887.7077	1,887.7077	1.8032		1,932.7865
Total	5,712.5021	391.1524	10,335.6771	23.7607		1,401.5755	1,401.5755		1,401.5755	1,401.5755	171,152.3330	330,783.7077	501,936.0407	512.2125	11.6166	518,203.1013

7.0 Water Detail**7.1 Mitigation Measures Water****8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

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

Northside Specific Plan - Scenario 1 Operation - South Coast AQMD Air District, Winter

Fire Pumps and Emergency Generators

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

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Northside Specific Plan - Scenario 2 Operation - South Coast AQMD Air District, Annual

Northside Specific Plan - Scenario 2 Operation

South Coast AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	392.04	1000sqft	9.00	392,040.00	0
Office Park	14,574.40	1000sqft	334.58	14,574,400.00	0
Elementary School	2,479.16	1000sqft	56.91	2,479,160.00	0
General Light Industry	4,000.00	1000sqft	91.83	4,000,000.00	0
Single Family Housing	6.00	Dwelling Unit	1.95	10,800.00	17
User Defined Recreational	190.13	User Defined Unit	190.13	8,282,062.80	0
Apartments Low Rise	4,846.00	Dwelling Unit	302.88	4,846,000.00	13860
Apartments Mid Rise	3,630.00	Dwelling Unit	95.53	3,630,000.00	10382
Apartments Mid Rise	2,270.00	Dwelling Unit	59.74	2,270,000.00	6492
Regional Shopping Center	1,426.44	1000sqft	32.75	1,426,440.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10			Operational Year	2040
Utility Company	Riverside Public Utilities				
CO2 Intensity (lb/MW hr)	595.8	CH4 Intensity (lb/MW hr)	0.013	N2O Intensity (lb/MW hr)	0.003

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.0 Project Characteristics. Operational year 2040. GHG intensity factors adjusted for RPS assuming 60% renewables by

Northside Specific Plan - Scenario 2 Operation - South Coast AQMD Air District, Annual

December 31, 2030.

Land Use - Per Rick Engineering Traffic Impact Analysis (October 14, 2019). Scenario 2 at year 2040 buildout.

Construction Phase - Operation analysis only

Off-road Equipment - Operation analysis only

Off-road Equipment - Operation analysis only

Trips and VMT - Operation analysis only

On-road Fugitive Dust - Operation analysis only

Demolition - Operation analysis only

Grading - Operation analysis only

Architectural Coating - Operation analysis only

Vehicle Trips - Trip rates based on Rick Engineering Traffic Analysis, January 2020.1.49. Weekend trips conservatively assumed equal to weekday trips.

Vehicle Emission Factors - CalEEMod default values for 2040.

Vehicle Emission Factors - CalEEMod default values for 2040.

Vehicle Emission Factors - CalEEMod default values for 2040.

Road Dust - CalEEMod default values.

Woodstoves - CalEEMod default values.

Consumer Products - CalEEMod default values.

Area Coating - CalEEMod default values.

Landscape Equipment - CalEEMod default values.

Energy Use - CalEEMod default values.

Water And Wastewater - CalEEMod default values.

Solid Waste - CalEEMod default values.

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - No area source mitigation.

Energy Mitigation - No energy mitigation.

Water Mitigation - No water mitigation.

Waste Mitigation - No solid waste mitigation.

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Operational Off-Road Equipment -

Construction Off-road Equipment Mitigation - Operational analysis only

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	155,000.00	1.00
tblConstructionPhase	PhaseEndDate	2/15/2614	1/1/2020
tblLandUse	LandUseSquareFeet	0.00	8,282,062.80
tblLandUse	LotAcreage	0.00	190.13
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.013
tblProjectCharacteristics	CO2IntensityFactor	1325.65	595.8
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.003
tblTripsAndVMT	VendorTripNumber	6,256.00	0.00
tblTripsAndVMT	WorkerTripNumber	19,185.00	0.00
tblVehicleTrips	ST_TR	7.16	2.14
tblVehicleTrips	ST_TR	6.39	1.59
tblVehicleTrips	ST_TR	0.00	5.85
tblVehicleTrips	ST_TR	1.32	1.45
tblVehicleTrips	ST_TR	2.46	3.24
tblVehicleTrips	ST_TR	1.64	3.44
tblVehicleTrips	ST_TR	49.97	11.04
tblVehicleTrips	ST_TR	9.91	2.76
tblVehicleTrips	SU_TR	6.07	2.14

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tblVehicleTrips	SU_TR	5.86	1.59
tblVehicleTrips	SU_TR	0.00	5.85
tblVehicleTrips	SU_TR	0.68	1.45
tblVehicleTrips	SU_TR	1.05	3.24
tblVehicleTrips	SU_TR	0.76	3.44
tblVehicleTrips	SU_TR	25.24	11.04
tblVehicleTrips	SU_TR	8.62	2.76
tblVehicleTrips	WD_TR	6.59	2.14
tblVehicleTrips	WD_TR	6.65	1.59
tblVehicleTrips	WD_TR	15.43	5.85
tblVehicleTrips	WD_TR	6.97	1.45
tblVehicleTrips	WD_TR	11.03	3.24
tblVehicleTrips	WD_TR	11.42	3.44
tblVehicleTrips	WD_TR	42.70	11.04
tblVehicleTrips	WD_TR	9.52	2.76

2.0 Emissions Summary

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2.1 Overall Construction

Unmitigated Construction

[illegible]

Mitigated Construction

[illegible][illegible]

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

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	227.1217	5.5956	216.5421	0.2759		16.5162	16.5162		16.5162	16.5162	1,768.7599	3,580.6447	5,349.4047	5.4487	0.1201	5,521.3963
Energy	1.9504	17.2514	11.3793	0.1064		1.3475	1.3475		1.3475	1.3475	0.0000	93,737.7699	93,737.7699	1.9941	0.7287	94,004.7665
Mobile	15.3708	111.4365	205.8402	1.2145	133.3013	0.4948	133.7961	35.7093	0.4606	36.1698	0.0000	113,433.4651	113,433.4651	4.1432	0.0000	113,537.0438
Waste						0.0000	0.0000		0.0000	0.0000	5,795.3088	0.0000	5,795.3088	342.4929	0.0000	14,357.6322
Water						0.0000	0.0000		0.0000	0.0000	1,415.9438	22,675.9986	24,091.9425	145.9258	3.5481	28,797.4271
Total	244.4429	134.2835	433.7615	1.5968	133.3013	18.3585	151.6598	35.7093	18.3243	54.0335	8,980.0125	233,427.8784	242,407.8909	500.0046	4.3968	256,218.2657

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2.2 Overall Operational**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	227.1217	5.5956	216.5421	0.2759		16.5162	16.5162		16.5162	16.5162	1,768.7599	3,580.6447	5,349.4047	5.4487	0.1201	5,521.3963
Energy	1.9504	17.2514	11.3793	0.1064		1.3475	1.3475		1.3475	1.3475	0.0000	93,737.7699	93,737.7699	1.9941	0.7287	94,004.7665
Mobile	15.3708	111.4365	205.8402	1.2145	133.3013	0.4948	133.7961	35.7093	0.4606	36.1698	0.0000	113,433.4651	113,433.4651	4.1432	0.0000	113,537.0438
Waste						0.0000	0.0000		0.0000	0.0000	5,795.3088	0.0000	5,795.3088	342.4929	0.0000	14,357.6322
Water						0.0000	0.0000		0.0000	0.0000	1,415.9438	22,675.9986	24,091.9425	145.9258	3.5481	28,797.4271
Total	244.4429	134.2835	433.7615	1.5968	133.3013	18.3585	151.6598	35.7093	18.3243	54.0335	8,980.0125	233,427.8784	242,407.8909	500.0046	4.3968	256,218.2657

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	1/1/2020	1/1/2020	5	1	

Acres of Grading (Site Preparation Phase): 0

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Acres of Grading (Grading Phase): 0**Acres of Paving: 0****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	0	7.00	231	0.29
Building Construction	Forklifts	0	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction	Welders	0	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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3.2 Building Construction - 2020

Unmitigated Construction On-Site

[illegible]

Unmitigated Construction Off-Site

[illegible]

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3.2 Building Construction - 2020**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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.0 Operational Detail - Mobile

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4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	15.3708	111.4365	205.8402	1.2145	133.3013	0.4948	133.7961	35.7093	0.4606	36.1698	0.0000	113,433.4651	113,433.4651	4.1432	0.0000	113,537.0438
Unmitigated	15.3708	111.4365	205.8402	1.2145	133.3013	0.4948	133.7961	35.7093	0.4606	36.1698	0.0000	113,433.4651	113,433.4651	4.1432	0.0000	113,537.0438

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	10,370.44	10,370.44	10370.44	35,437,369	35,437,369
Apartments Mid Rise	5,771.70	5,771.70	5771.70	19,722,776	19,722,776
Apartments Mid Rise	3,609.30	3,609.30	3609.30	12,333,526	12,333,526
Elementary School	14,503.09	14,503.09	14503.09	49,983,201	49,983,201
General Light Industry	5,800.00	5,800.00	5800.00	25,684,009	25,684,009
General Office Building	1,270.21	1,270.21	1270.21	4,091,931	4,091,931
Office Park	50,135.94	50,135.94	50135.94	169,391,817	169,391,817
Regional Shopping Center	15,747.90	15,747.90	15747.90	34,060,245	34,060,245
Single Family Housing	16.56	16.56	16.56	56,588	56,588
User Defined Recreational	0.00	0.00	0.00		
Total	107,225.13	107,225.13	107,225.13	350,761,463	350,761,463

4.3 Trip Type Information

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Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Elementary School	16.60	8.40	6.90	65.00	30.00	5.00	63	25	12
General Light Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Office Park	16.60	8.40	6.90	33.00	48.00	19.00	82	15	3
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11
Single Family Housing	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
User Defined Recreational	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Apartments Mid Rise	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Elementary School	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
General Light Industry	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
General Office Building	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Office Park	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Regional Shopping Center	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Single Family Housing	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
User Defined Recreational	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	74,435.84 35	74,435.84 35	1.6242	0.3748	74,588.13 83
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	74,435.84 35	74,435.84 35	1.6242	0.3748	74,588.13 83
NaturalGas Mitigated	1.9504	17.2514	11.3793	0.1064		1.3475	1.3475		1.3475	1.3475	0.0000	19,301.92 64	19,301.92 64	0.3700	0.3539	19,416.62 81
NaturalGas Unmitigated	1.9504	17.2514	11.3793	0.1064		1.3475	1.3475		1.3475	1.3475	0.0000	19,301.92 64	19,301.92 64	0.3700	0.3539	19,416.62 81

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5.2 Energy by Land Use - NaturalGas**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	7.5474e+007	0.4070	3.4777	1.4799	0.0222		0.2812	0.2812		0.2812	0.2812	0.0000	4,027.5815	4,027.5815	0.0772	0.0738	4,051.5154
Apartments Mid Rise	3.35826e+007	0.1811	1.5474	0.6585	9.8800e-003		0.1251	0.1251		0.1251	0.1251	0.0000	1,792.0934	1,792.0934	0.0344	0.0329	1,802.7429
Apartments Mid Rise	5.37025e+007	0.2896	2.4745	1.0530	0.0158		0.2001	0.2001		0.2001	0.2001	0.0000	2,865.7705	2,865.7705	0.0549	0.0525	2,882.8003
Elementary School	2.17174e+007	0.1171	1.0646	0.8943	6.3900e-003		0.0809	0.0809		0.0809	0.0809	0.0000	1,158.9254	1,158.9254	0.0222	0.0213	1,165.8123
General Light Industry	1.2996e+008	0.7008	6.3706	5.3513	0.0382		0.4842	0.4842		0.4842	0.4842	0.0000	6,935.1605	6,935.1605	0.1329	0.1271	6,976.3727
General Office Building	1.36038e+006	7.3400e-003	0.0667	0.0560	4.0000e-004		5.0700e-003	5.0700e-003		5.0700e-003	5.0700e-003	0.0000	72.5950	72.5950	1.3900e-003	1.3300e-003	73.0264
Office Park	4.25572e+007	0.2295	2.0861	1.7524	0.0125		0.1586	0.1586		0.1586	0.1586	0.0000	2,271.0168	2,271.0168	0.0435	0.0416	2,284.5123
Regional Shopping Center	3.1667e+006	0.0171	0.1552	0.1304	9.3000e-004		0.0118	0.0118		0.0118	0.0118	0.0000	168.9870	168.9870	3.2400e-003	3.1000e-003	169.9912
Single Family Housing	183577	9.9000e-004	8.4600e-003	3.6000e-003	5.0000e-005		6.8000e-004	6.8000e-004		6.8000e-004	6.8000e-004	0.0000	9.7964	9.7964	1.9000e-004	1.8000e-004	9.8546
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		1.9504	17.2514	11.3793	0.1064		1.3475	1.3475		1.3475	1.3475	0.0000	19,301.9264	19,301.9264	0.3700	0.3539	19,416.6281

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5.2 Energy by Land Use - NaturalGas**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	7.5474e+007	0.4070	3.4777	1.4799	0.0222		0.2812	0.2812		0.2812	0.2812	0.0000	4,027.5815	4,027.5815	0.0772	0.0738	4,051.5154
Apartments Mid Rise	3.35826e+007	0.1811	1.5474	0.6585	9.8800e-003		0.1251	0.1251		0.1251	0.1251	0.0000	1,792.0934	1,792.0934	0.0344	0.0329	1,802.7429
Apartments Mid Rise	5.37025e+007	0.2896	2.4745	1.0530	0.0158		0.2001	0.2001		0.2001	0.2001	0.0000	2,865.7705	2,865.7705	0.0549	0.0525	2,882.8003
Elementary School	2.17174e+007	0.1171	1.0646	0.8943	6.3900e-003		0.0809	0.0809		0.0809	0.0809	0.0000	1,158.9254	1,158.9254	0.0222	0.0213	1,165.8123
General Light Industry	1.2996e+008	0.7008	6.3706	5.3513	0.0382		0.4842	0.4842		0.4842	0.4842	0.0000	6,935.1605	6,935.1605	0.1329	0.1271	6,976.3727
General Office Building	1.36038e+006	7.3400e-003	0.0667	0.0560	4.0000e-004		5.0700e-003	5.0700e-003		5.0700e-003	5.0700e-003	0.0000	72.5950	72.5950	1.3900e-003	1.3300e-003	73.0264
Office Park	4.25572e+007	0.2295	2.0861	1.7524	0.0125		0.1586	0.1586		0.1586	0.1586	0.0000	2,271.0168	2,271.0168	0.0435	0.0416	2,284.5123
Regional Shopping Center	3.1667e+006	0.0171	0.1552	0.1304	9.3000e-004		0.0118	0.0118		0.0118	0.0118	0.0000	168.9870	168.9870	3.2400e-003	3.1000e-003	169.9912
Single Family Housing	183577	9.9000e-004	8.4600e-003	3.6000e-003	5.0000e-005		6.8000e-004	6.8000e-004		6.8000e-004	6.8000e-004	0.0000	9.7964	9.7964	1.9000e-004	1.8000e-004	9.8546
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		1.9504	17.2514	11.3793	0.1064		1.3475	1.3475		1.3475	1.3475	0.0000	19,301.9264	19,301.9264	0.3700	0.3539	19,416.6281

Northside Specific Plan - Scenario 2 Operation - South Coast AQMD Air District, Annual

5.3 Energy by Land Use - Electricity**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	2.35528e+007	6,365.1575	0.1389	0.0321	6,378.1805
Apartments Mid Rise	1.03687e+007	2,802.1451	0.0611	0.0141	2,807.8783
Apartments Mid Rise	1.65808e+007	4,480.9633	0.0978	0.0226	4,490.1313
Elementary School	1.80979e+007	4,890.9549	0.1067	0.0246	4,900.9617
General Light Industry	4.06e+007	10,972.1636	0.2394	0.0553	10,994.6125
General Office Building	3.73222e+006	1,008.6339	0.0220	5.0800e-003	1,010.6976
Office Park	1.44432e+008	39,032.8784	0.8517	0.1965	39,112.7392
Regional Shopping Center	1.80159e+007	4,868.8131	0.1062	0.0245	4,878.7746
Single Family Housing	52298.9	14.1338	3.1000e-004	7.0000e-005	14.1627
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000
Total		74,435.8435	1.6241	0.3748	74,588.1383

Northside Specific Plan - Scenario 2 Operation - South Coast AQMD Air District, Annual

5.3 Energy by Land Use - Electricity**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	2.35528e+007	6,365.1575	0.1389	0.0321	6,378.1805
Apartments Mid Rise	1.03687e+007	2,802.1451	0.0611	0.0141	2,807.8783
Apartments Mid Rise	1.65808e+007	4,480.9633	0.0978	0.0226	4,490.1313
Elementary School	1.80979e+007	4,890.9549	0.1067	0.0246	4,900.9617
General Light Industry	4.06e+007	10,972.1636	0.2394	0.0553	10,994.6125
General Office Building	3.73222e+006	1,008.6339	0.0220	5.0800e-003	1,010.6976
Office Park	1.44432e+008	39,032.8784	0.8517	0.1965	39,112.7392
Regional Shopping Center	1.80159e+007	4,868.8131	0.1062	0.0245	4,878.7746
Single Family Housing	52298.9	14.1338	3.1000e-004	7.0000e-005	14.1627
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000
Total		74,435.8435	1.6241	0.3748	74,588.1383

6.0 Area Detail**6.1 Mitigation Measures Area**

Northside Specific Plan - Scenario 2 Operation - South Coast AQMD Air District, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	227.1217	5.5956	216.5421	0.2759		16.5162	16.5162		16.5162	16.5162	1,768.759 9	3,580.644 7	5,349.404 7	5.4487	0.1201	5,521.396 3
Unmitigated	227.1217	5.5956	216.5421	0.2759		16.5162	16.5162		16.5162	16.5162	1,768.759 9	3,580.644 7	5,349.404 7	5.4487	0.1201	5,521.396 3

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	17.8053					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	151.4451					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	54.5428	4.3188	105.8551	0.2701		15.9002	15.9002		15.9002	15.9002	1,768.759 9	3,398.949 1	5,167.709 0	5.2748	0.1201	5,335.353 7
Landscaping	3.3286	1.2769	110.6871	5.8800e-003		0.6159	0.6159		0.6159	0.6159	0.0000	181.6957	181.6957	0.1739	0.0000	186.0425
Total	227.1217	5.5956	216.5421	0.2759		16.5162	16.5162		16.5162	16.5162	1,768.759 9	3,580.644 7	5,349.404 7	5.4487	0.1201	5,521.396 3

Northside Specific Plan - Scenario 2 Operation - South Coast AQMD Air District, Annual

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	17.8053					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	151.4451					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	54.5428	4.3188	105.8551	0.2701		15.9002	15.9002		15.9002	15.9002	1,768.759 9	3,398.949 1	5,167.709 0	5.2748	0.1201	5,335.353 7
Landscaping	3.3286	1.2769	110.6871	5.8800e-003		0.6159	0.6159		0.6159	0.6159	0.0000	181.6957	181.6957	0.1739	0.0000	186.0425
Total	227.1217	5.5956	216.5421	0.2759		16.5162	16.5162		16.5162	16.5162	1,768.759 9	3,580.644 7	5,349.404 7	5.4487	0.1201	5,521.396 3

7.0 Water Detail**7.1 Mitigation Measures Water**

Northside Specific Plan - Scenario 2 Operation - South Coast AQMD Air District, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	24,091.94 25	145.9258	3.5481	28,797.42 71
Unmitigated	24,091.94 25	145.9258	3.5481	28,797.42 71

Northside Specific Plan - Scenario 2 Operation - South Coast AQMD Air District, Annual

7.2 Water by Land Use**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	315.736 / 199.051	1,808.8703	10.3256	0.2515	2,141.9659
Apartments Mid Rise	384.409 / 242.345	2,202.2978	12.5714	0.3062	2,607.8412
Elementary School	71.888 / 184.855	830.7988	2.3601	0.0594	907.4963
General Light Industry	925 / 0	3,548.4697	30.2122	0.7281	4,520.7438
General Office Building	69.6787 / 42.7063	395.5254	2.2786	0.0555	469.0275
Office Park	2590.36 / 1587.64	14,703.9710	84.7099	2.0629	17,436.4726
Regional Shopping Center	105.66 / 64.7594	599.7699	3.4553	0.0842	711.2277
Single Family Housing	0.390924 / 0.246452	2.2396	0.0128	3.1000e-004	2.6520
User Defined Recreational	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		24,091.9425	145.9258	3.5481	28,797.4270

Northside Specific Plan - Scenario 2 Operation - South Coast AQMD Air District, Annual

7.2 Water by Land Use**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	315.736 / 199.051	1,808.8703	10.3256	0.2515	2,141.9659
Apartments Mid Rise	384.409 / 242.345	2,202.2978	12.5714	0.3062	2,607.8412
Elementary School	71.888 / 184.855	830.7988	2.3601	0.0594	907.4963
General Light Industry	925 / 0	3,548.4697	30.2122	0.7281	4,520.7438
General Office Building	69.6787 / 42.7063	395.5254	2.2786	0.0555	469.0275
Office Park	2590.36 / 1587.64	14,703.9710	84.7099	2.0629	17,436.4726
Regional Shopping Center	105.66 / 64.7594	599.7699	3.4553	0.0842	711.2277
Single Family Housing	0.390924 / 0.246452	2.2396	0.0128	3.1000e-004	2.6520
User Defined Recreational	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		24,091.9425	145.9258	3.5481	28,797.4270

8.0 Waste Detail**8.1 Mitigation Measures Waste**

Northside Specific Plan - Scenario 2 Operation - South Coast AQMD Air District, Annual

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	5,795.308 8	342.4929	0.0000	14,357.63 22
Unmitigated	5,795.308 8	342.4929	0.0000	14,357.63 22

Northside Specific Plan - Scenario 2 Operation - South Coast AQMD Air District, Annual

8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	2229.16	452.4993	26.7419	0.0000	1,121.0480
Apartments Mid Rise	2714	550.9175	32.5583	0.0000	1,364.8747
Elementary School	3222.91	654.2216	38.6634	0.0000	1,620.8063
General Light Industry	4960	1,006.8352	59.5023	0.0000	2,494.3915
General Office Building	364.6	74.0105	4.3739	0.0000	183.3579
Office Park	13554.2	2,751.3781	162.6018	0.0000	6,816.4227
Regional Shopping Center	1497.76	304.0317	17.9678	0.0000	753.2258
Single Family Housing	6.97	1.4149	0.0836	0.0000	3.5052
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000
Total		5,795.3088	342.4929	0.0000	14,357.6322

Northside Specific Plan - Scenario 2 Operation - South Coast AQMD Air District, Annual

8.2 Waste by Land Use**Mitigated**

	Waste Disposed	Total CO ₂	CH ₄	N ₂ O	CO ₂ e
Land Use	tons	MT/yr			
Apartments Low Rise	2229.16	452.4993	26.7419	0.0000	1,121.0480
Apartments Mid Rise	2714	550.9175	32.5583	0.0000	1,364.8747
Elementary School	3222.91	654.2216	38.6634	0.0000	1,620.8063
General Light Industry	4960	1,006.8352	59.5023	0.0000	2,494.3915
General Office Building	364.6	74.0105	4.3739	0.0000	183.3579
Office Park	13554.2	2,751.3781	162.6018	0.0000	6,816.4227
Regional Shopping Center	1497.76	304.0317	17.9678	0.0000	753.2258
Single Family Housing	6.97	1.4149	0.0836	0.0000	3.5052
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000
Total		5,795.3088	342.4929	0.0000	14,357.6322

9.0 Operational Offroad

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

10.0 Stationary Equipment

Northside Specific Plan - Scenario 2 Operation - South Coast AQMD Air District, Annual

Fire Pumps and Emergency Generators

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

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Northside Specific Plan - Scenario 2 Operation - South Coast AQMD Air District, Summer

Northside Specific Plan - Scenario 2 Operation

South Coast AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	392.04	1000sqft	9.00	392,040.00	0
Office Park	14,574.40	1000sqft	334.58	14,574,400.00	0
Elementary School	2,479.16	1000sqft	56.91	2,479,160.00	0
General Light Industry	4,000.00	1000sqft	91.83	4,000,000.00	0
Single Family Housing	6.00	Dwelling Unit	1.95	10,800.00	17
User Defined Recreational	190.13	User Defined Unit	190.13	8,282,062.80	0
Apartments Low Rise	4,846.00	Dwelling Unit	302.88	4,846,000.00	13860
Apartments Mid Rise	3,630.00	Dwelling Unit	95.53	3,630,000.00	10382
Apartments Mid Rise	2,270.00	Dwelling Unit	59.74	2,270,000.00	6492
Regional Shopping Center	1,426.44	1000sqft	32.75	1,426,440.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10			Operational Year	2040
Utility Company	Riverside Public Utilities				
CO2 Intensity (lb/MW hr)	595.8	CH4 Intensity (lb/MW hr)	0.013	N2O Intensity (lb/MW hr)	0.003

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.0 Project Characteristics. Operational year 2040. GHG intensity factors adjusted for RPS assuming 60% renewables by

Northside Specific Plan - Scenario 2 Operation - South Coast AQMD Air District, Summer

December 31, 2030.

Land Use - Per Rick Engineering Traffic Impact Analysis (October 14, 2019). Scenario 2 at year 2040 buildout.

Construction Phase - Operation analysis only

Off-road Equipment - Operation analysis only

Off-road Equipment - Operation analysis only

Trips and VMT - Operation analysis only

On-road Fugitive Dust - Operation analysis only

Demolition - Operation analysis only

Grading - Operation analysis only

Architectural Coating - Operation analysis only

Vehicle Trips - Trip rates based on Rick Engineering Traffic Analysis, January 2020.1.49. Weekend trips conservatively assumed equal to weekday trips.

Vehicle Emission Factors - CalEEMod default values for 2040.

Vehicle Emission Factors - CalEEMod default values for 2040.

Vehicle Emission Factors - CalEEMod default values for 2040.

Road Dust - CalEEMod default values.

Woodstoves - CalEEMod default values.

Consumer Products - CalEEMod default values.

Area Coating - CalEEMod default values.

Landscape Equipment - CalEEMod default values.

Energy Use - CalEEMod default values.

Water And Wastewater - CalEEMod default values.

Solid Waste - CalEEMod default values.

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - No area source mitigation.

Energy Mitigation - No energy mitigation.

Water Mitigation - No water mitigation.

Waste Mitigation - No solid waste mitigation.

Northside Specific Plan - Scenario 2 Operation - South Coast AQMD Air District, Summer

Operational Off-Road Equipment -

Construction Off-road Equipment Mitigation - Operational analysis only

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	155,000.00	1.00
tblConstructionPhase	PhaseEndDate	2/15/2614	1/1/2020
tblLandUse	LandUseSquareFeet	0.00	8,282,062.80
tblLandUse	LotAcreage	0.00	190.13
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.013
tblProjectCharacteristics	CO2IntensityFactor	1325.65	595.8
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.003
tblTripsAndVMT	VendorTripNumber	6,256.00	0.00
tblTripsAndVMT	WorkerTripNumber	19,185.00	0.00
tblVehicleTrips	ST_TR	7.16	2.14
tblVehicleTrips	ST_TR	6.39	1.59
tblVehicleTrips	ST_TR	0.00	5.85
tblVehicleTrips	ST_TR	1.32	1.45
tblVehicleTrips	ST_TR	2.46	3.24
tblVehicleTrips	ST_TR	1.64	3.44
tblVehicleTrips	ST_TR	49.97	11.04
tblVehicleTrips	ST_TR	9.91	2.76
tblVehicleTrips	SU_TR	6.07	2.14

Northside Specific Plan - Scenario 2 Operation - South Coast AQMD Air District, Summer

tblVehicleTrips	SU_TR	5.86	1.59
tblVehicleTrips	SU_TR	0.00	5.85
tblVehicleTrips	SU_TR	0.68	1.45
tblVehicleTrips	SU_TR	1.05	3.24
tblVehicleTrips	SU_TR	0.76	3.44
tblVehicleTrips	SU_TR	25.24	11.04
tblVehicleTrips	SU_TR	8.62	2.76
tblVehicleTrips	WD_TR	6.59	2.14
tblVehicleTrips	WD_TR	6.65	1.59
tblVehicleTrips	WD_TR	15.43	5.85
tblVehicleTrips	WD_TR	6.97	1.45
tblVehicleTrips	WD_TR	11.03	3.24
tblVehicleTrips	WD_TR	11.42	3.44
tblVehicleTrips	WD_TR	42.70	11.04
tblVehicleTrips	WD_TR	9.52	2.76

2.0 Emissions Summary

Northside Specific Plan - Scenario 2 Operation - South Coast AQMD Air District, Summer

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

[illegible]

Mitigated Construction

[illegible][illegible]

Northside Specific Plan - Scenario 2 Operation - South Coast AQMD Air District, Summer

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	5,317.451 3	355.7160	9,353.901 7	21.6507		1,276.945 8	1,276.945 8		1,276.945 8	1,276.9458	155,977.9 252	301,338.2 815	457,316.2 067	466.6896	10.5867	472,138.2 763
Energy	10.6869	94.5280	62.3521	0.5829		7.3837	7.3837		7.3837	7.3837		116,584.83 19	116,584.83 19	2.2345	2.1374	117,277.63 73
Mobile	90.3612	600.9047	1,192.079 5	6.9291	745.9501	2.7192	748.6693	199.5246	2.5310	202.0556		712,811.01 53	712,811.01 53	25.0352		713,436.8 940
Total	5,418.499 4	1,051.148 7	10,608.33 33	29.1626	745.9501	1,287.048 7	2,032.998 8	199.5246	1,286.860 5	1,486.3851	155,977.9 252	1,130,734. 1288	1,286,712. 0540	493.9593	12.7241	1,302,852. 8076

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	5,317.451 3	355.7160	9,353.901 7	21.6507		1,276.945 8	1,276.945 8		1,276.945 8	1,276.9458	155,977.9 252	301,338.2 815	457,316.2 067	466.6896	10.5867	472,138.2 763
Energy	10.6869	94.5280	62.3521	0.5829		7.3837	7.3837		7.3837	7.3837		116,584.83 19	116,584.83 19	2.2345	2.1374	117,277.63 73
Mobile	90.3612	600.9047	1,192.079 5	6.9291	745.9501	2.7192	748.6693	199.5246	2.5310	202.0556		712,811.01 53	712,811.01 53	25.0352		713,436.8 940
Total	5,418.499 4	1,051.148 7	10,608.33 33	29.1626	745.9501	1,287.048 7	2,032.998 8	199.5246	1,286.860 5	1,486.3851	155,977.9 252	1,130,734. 1288	1,286,712. 0540	493.9593	12.7241	1,302,852. 8076

Northside Specific Plan - Scenario 2 Operation - South Coast AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	1/1/2020	1/1/2020	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	0	7.00	231	0.29
Building Construction	Forklifts	0	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction	Welders	0	8.00	46	0.45

Trips and VMT

Northside Specific Plan - Scenario 2 Operation - South Coast AQMD Air District, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction**3.2 Building Construction - 2020****Unmitigated Construction On-Site**

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

Northside Specific Plan - Scenario 2 Operation - South Coast AQMD Air District, Summer

3.2 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Mitigated Construction On-Site

[illegible]

Northside Specific Plan - Scenario 2 Operation - South Coast AQMD Air District, Summer

3.2 Building Construction - 2020**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

Northside Specific Plan - Scenario 2 Operation - South Coast AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	90.3612	600.9047	1,192.0795	6.9291	745.9501	2.7192	748.6693	199.5246	2.5310	202.0556		712,811.0153	712,811.0153	25.0352		713,436.8940
Unmitigated	90.3612	600.9047	1,192.0795	6.9291	745.9501	2.7192	748.6693	199.5246	2.5310	202.0556		712,811.0153	712,811.0153	25.0352		713,436.8940

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	10,370.44	10,370.44	10370.44	35,437,369	35,437,369
Apartments Mid Rise	5,771.70	5,771.70	5771.70	19,722,776	19,722,776
Apartments Mid Rise	3,609.30	3,609.30	3609.30	12,333,526	12,333,526
Elementary School	14,503.09	14,503.09	14503.09	49,983,201	49,983,201
General Light Industry	5,800.00	5,800.00	5800.00	25,684,009	25,684,009
General Office Building	1,270.21	1,270.21	1270.21	4,091,931	4,091,931
Office Park	50,135.94	50,135.94	50135.94	169,391,817	169,391,817
Regional Shopping Center	15,747.90	15,747.90	15747.90	34,060,245	34,060,245
Single Family Housing	16.56	16.56	16.56	56,588	56,588
User Defined Recreational	0.00	0.00	0.00		
Total	107,225.13	107,225.13	107,225.13	350,761,463	350,761,463

4.3 Trip Type Information

Northside Specific Plan - Scenario 2 Operation - South Coast AQMD Air District, Summer

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Elementary School	16.60	8.40	6.90	65.00	30.00	5.00	63	25	12
General Light Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Office Park	16.60	8.40	6.90	33.00	48.00	19.00	82	15	3
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11
Single Family Housing	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
User Defined Recreational	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Apartments Mid Rise	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Elementary School	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
General Light Industry	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
General Office Building	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Office Park	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Regional Shopping Center	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Single Family Housing	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
User Defined Recreational	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Northside Specific Plan - Scenario 2 Operation - South Coast AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	10.6869	94.5280	62.3521	0.5829		7.3837	7.3837		7.3837	7.3837		116,584.8319	116,584.8319	2.2345	2.1374	117,277.6373
NaturalGas Unmitigated	10.6869	94.5280	62.3521	0.5829		7.3837	7.3837		7.3837	7.3837		116,584.8319	116,584.8319	2.2345	2.1374	117,277.6373

Northside Specific Plan - Scenario 2 Operation - South Coast AQMD Air District, Summer

5.2 Energy by Land Use - NaturalGas**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	206778	2.2300	19.0560	8.1090	0.1216		1.5407	1.5407		1.5407	1.5407		24,326.8419	24,326.8419	0.4663	0.4460	24,471.4042
Apartments Mid Rise	147130	1.5867	13.5591	5.7698	0.0866		1.0963	1.0963		1.0963	1.0963		17,309.4312	17,309.4312	0.3318	0.3173	17,412.2925
Apartments Mid Rise	92007	0.9922	8.4791	3.6081	0.0541		0.6855	0.6855		0.6855	0.6855		10,824.3551	10,824.3551	0.2075	0.1985	10,888.6788
Elementary School	59499.8	0.6417	5.8333	4.9000	0.0350		0.4433	0.4433		0.4433	0.4433		6,999.9812	6,999.9812	0.1342	0.1283	7,041.5786
General Light Industry	356055	3.8398	34.9073	29.3222	0.2094		2.6530	2.6530		2.6530	2.6530		41,888.7994	41,888.7994	0.8029	0.7680	42,137.7236
General Office Building	3727.07	0.0402	0.3654	0.3069	2.1900e-003		0.0278	0.0278		0.0278	0.0278		438.4783	438.4783	8.4000e-003	8.0400e-003	441.0839
Office Park	116595	1.2574	11.4309	9.6020	0.0686		0.8688	0.8688		0.8688	0.8688		13,717.0824	13,717.0824	0.2629	0.2515	13,798.5961
Regional Shopping Center	8675.88	0.0936	0.8506	0.7145	5.1000e-003		0.0646	0.0646		0.0646	0.0646		1,020.6920	1,020.6920	0.0196	0.0187	1,026.7574
Single Family Housing	502.95	5.4200e-003	0.0464	0.0197	3.0000e-004		3.7500e-003	3.7500e-003		3.7500e-003	3.7500e-003		59.1706	59.1706	1.1300e-003	1.0800e-003	59.5223
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		10.6869	94.5280	62.3521	0.5829		7.3837	7.3837		7.3837	7.3837		116,584.8320	116,584.8320	2.2345	2.1374	117,277.6373

Northside Specific Plan - Scenario 2 Operation - South Coast AQMD Air District, Summer

5.2 Energy by Land Use - NaturalGas**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	206.778	2.2300	19.0560	8.1090	0.1216		1.5407	1.5407		1.5407	1.5407		24,326.8419	24,326.8419	0.4663	0.4460	24,471.4042
Apartments Mid Rise	92.007	0.9922	8.4791	3.6081	0.0541		0.6855	0.6855		0.6855	0.6855		10,824.3551	10,824.3551	0.2075	0.1985	10,888.6788
Apartments Mid Rise	147.13	1.5867	13.5591	5.7698	0.0866		1.0963	1.0963		1.0963	1.0963		17,309.4312	17,309.4312	0.3318	0.3173	17,412.2925
Elementary School	59.4998	0.6417	5.8333	4.9000	0.0350		0.4433	0.4433		0.4433	0.4433		6,999.9812	6,999.9812	0.1342	0.1283	7,041.5786
General Light Industry	356.055	3.8398	34.9073	29.3222	0.2094		2.6530	2.6530		2.6530	2.6530		41,888.7994	41,888.7994	0.8029	0.7680	42,137.7236
General Office Building	3.72707	0.0402	0.3654	0.3069	2.1900e-003		0.0278	0.0278		0.0278	0.0278		438.4783	438.4783	8.4000e-003	8.0400e-003	441.0839
Office Park	116.595	1.2574	11.4309	9.6020	0.0686		0.8688	0.8688		0.8688	0.8688		13,717.0824	13,717.0824	0.2629	0.2515	13,798.5961
Regional Shopping Center	8.67588	0.0936	0.8506	0.7145	5.1000e-003		0.0646	0.0646		0.0646	0.0646		1,020.6920	1,020.6920	0.0196	0.0187	1,026.7574
Single Family Housing	0.50295	5.4200e-003	0.0464	0.0197	3.0000e-004		3.7500e-003	3.7500e-003		3.7500e-003	3.7500e-003		59.1706	59.1706	1.1300e-003	1.0800e-003	59.5223
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		10.6869	94.5280	62.3521	0.5829		7.3837	7.3837		7.3837	7.3837		116,584.8320	116,584.8320	2.2345	2.1374	117,277.6373

6.0 Area Detail**6.1 Mitigation Measures Area**

Northside Specific Plan - Scenario 2 Operation - South Coast AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5,317.451 3	355.7160	9,353.901 7	21.6507		1,276.945 8	1,276.945 8		1,276.945 8	1,276.9458	155,977.9 252	301,338.2 815	457,316.2 067	466.6896	10.5867	472,138.2 763
Unmitigated	5,317.451 3	355.7160	9,353.901 7	21.6507		1,276.945 8	1,276.945 8		1,276.945 8	1,276.9458	155,977.9 252	301,338.2 815	457,316.2 067	466.6896	10.5867	472,138.2 763

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	97.5634					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	829.8359					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	4,363.423 5	345.5010	8,468.405 2	21.6036		1,272.018 3	1,272.018 3		1,272.018 3	1,272.0183	155,977.9 252	299,736.0 000	455,713.9 252	465.1563	10.5867	470,497.6 621
Landscaping	26.6286	10.2150	885.4964	0.0470		4.9275	4.9275		4.9275	4.9275		1,602.281 5	1,602.281 5	1.5333		1,640.614 3
Total	5,317.451 3	355.7160	9,353.901 7	21.6507		1,276.945 8	1,276.945 8		1,276.945 8	1,276.9458	155,977.9 252	301,338.2 815	457,316.2 067	466.6896	10.5867	472,138.2 763

Northside Specific Plan - Scenario 2 Operation - South Coast AQMD Air District, Summer

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	97.5634					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	829.8359					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	4,363.4235	345.5010	8,468.4052	21.6036		1,272.0183	1,272.0183		1,272.0183	1,272.0183	155,977.9252	299,736.0000	455,713.9252	465.1563	10.5867	470,497.6621
Landscaping	26.6286	10.2150	885.4964	0.0470		4.9275	4.9275		4.9275	4.9275		1,602.2815	1,602.2815	1.5333		1,640.6143
Total	5,317.4513	355.7160	9,353.9017	21.6507		1,276.9458	1,276.9458		1,276.9458	1,276.9458	155,977.9252	301,338.2815	457,316.2067	466.6896	10.5867	472,138.2763

7.0 Water Detail**7.1 Mitigation Measures Water****8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

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

Northside Specific Plan - Scenario 2 Operation - South Coast AQMD Air District, Summer

Fire Pumps and Emergency Generators

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

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Northside Specific Plan - Scenario 2 Operation - South Coast AQMD Air District, Winter

Northside Specific Plan - Scenario 2 Operation

South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	392.04	1000sqft	9.00	392,040.00	0
Office Park	14,574.40	1000sqft	334.58	14,574,400.00	0
Elementary School	2,479.16	1000sqft	56.91	2,479,160.00	0
General Light Industry	4,000.00	1000sqft	91.83	4,000,000.00	0
Single Family Housing	6.00	Dwelling Unit	1.95	10,800.00	17
User Defined Recreational	190.13	User Defined Unit	190.13	8,282,062.80	0
Apartments Low Rise	4,846.00	Dwelling Unit	302.88	4,846,000.00	13860
Apartments Mid Rise	3,630.00	Dwelling Unit	95.53	3,630,000.00	10382
Apartments Mid Rise	2,270.00	Dwelling Unit	59.74	2,270,000.00	6492
Regional Shopping Center	1,426.44	1000sqft	32.75	1,426,440.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10			Operational Year	2040
Utility Company	Riverside Public Utilities				
CO2 Intensity (lb/MW hr)	595.8	CH4 Intensity (lb/MW hr)	0.013	N2O Intensity (lb/MW hr)	0.003

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.0 Project Characteristics. Operational year 2040. GHG intensity factors adjusted for RPS assuming 60% renewables by

Northside Specific Plan - Scenario 2 Operation - South Coast AQMD Air District, Winter

December 31, 2030.

Land Use - Per Rick Engineering Traffic Impact Analysis (October 14, 2019). Scenario 2 at year 2040 buildout.

Construction Phase - Operation analysis only

Off-road Equipment - Operation analysis only

Off-road Equipment - Operation analysis only

Trips and VMT - Operation analysis only

On-road Fugitive Dust - Operation analysis only

Demolition - Operation analysis only

Grading - Operation analysis only

Architectural Coating - Operation analysis only

Vehicle Trips - Trip rates based on Rick Engineering Traffic Analysis, January 2020.1.49. Weekend trips conservatively assumed equal to weekday trips.

Vehicle Emission Factors - CalEEMod default values for 2040.

Vehicle Emission Factors - CalEEMod default values for 2040.

Vehicle Emission Factors - CalEEMod default values for 2040.

Road Dust - CalEEMod default values.

Woodstoves - CalEEMod default values.

Consumer Products - CalEEMod default values.

Area Coating - CalEEMod default values.

Landscape Equipment - CalEEMod default values.

Energy Use - CalEEMod default values.

Water And Wastewater - CalEEMod default values.

Solid Waste - CalEEMod default values.

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - No area source mitigation.

Energy Mitigation - No energy mitigation.

Water Mitigation - No water mitigation.

Waste Mitigation - No solid waste mitigation.

Northside Specific Plan - Scenario 2 Operation - South Coast AQMD Air District, Winter

Operational Off-Road Equipment -

Construction Off-road Equipment Mitigation - Operational analysis only

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	155,000.00	1.00
tblConstructionPhase	PhaseEndDate	2/15/2614	1/1/2020
tblLandUse	LandUseSquareFeet	0.00	8,282,062.80
tblLandUse	LotAcreage	0.00	190.13
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.013
tblProjectCharacteristics	CO2IntensityFactor	1325.65	595.8
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.003
tblTripsAndVMT	VendorTripNumber	6,256.00	0.00
tblTripsAndVMT	WorkerTripNumber	19,185.00	0.00
tblVehicleTrips	ST_TR	7.16	2.14
tblVehicleTrips	ST_TR	6.39	1.59
tblVehicleTrips	ST_TR	0.00	5.85
tblVehicleTrips	ST_TR	1.32	1.45
tblVehicleTrips	ST_TR	2.46	3.24
tblVehicleTrips	ST_TR	1.64	3.44
tblVehicleTrips	ST_TR	49.97	11.04
tblVehicleTrips	ST_TR	9.91	2.76
tblVehicleTrips	SU_TR	6.07	2.14

Northside Specific Plan - Scenario 2 Operation - South Coast AQMD Air District, Winter

tblVehicleTrips	SU_TR	5.86	1.59
tblVehicleTrips	SU_TR	0.00	5.85
tblVehicleTrips	SU_TR	0.68	1.45
tblVehicleTrips	SU_TR	1.05	3.24
tblVehicleTrips	SU_TR	0.76	3.44
tblVehicleTrips	SU_TR	25.24	11.04
tblVehicleTrips	SU_TR	8.62	2.76
tblVehicleTrips	WD_TR	6.59	2.14
tblVehicleTrips	WD_TR	6.65	1.59
tblVehicleTrips	WD_TR	15.43	5.85
tblVehicleTrips	WD_TR	6.97	1.45
tblVehicleTrips	WD_TR	11.03	3.24
tblVehicleTrips	WD_TR	11.42	3.44
tblVehicleTrips	WD_TR	42.70	11.04
tblVehicleTrips	WD_TR	9.52	2.76

2.0 Emissions Summary

Northside Specific Plan - Scenario 2 Operation - South Coast AQMD Air District, Winter

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

[illegible]

Mitigated Construction

[illegible][illegible]

Northside Specific Plan - Scenario 2 Operation - South Coast AQMD Air District, Winter

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	5,317.4513	355.7160	9,353.9017	21.6507		1,276.9458	1,276.9458		1,276.9458	1,276.9458	155,977.9252	301,338.2815	457,316.2067	466.6896	10.5867	472,138.2763
Energy	10.6869	94.5280	62.3521	0.5829		7.3837	7.3837		7.3837	7.3837		116,584.8319	116,584.8319	2.2345	2.1374	117,277.6373
Mobile	86.0273	603.1819	1,115.3064	6.5747	745.9501	2.7259	748.6760	199.5246	2.5375	202.0621		676,976.7435	676,976.7435	25.3755		677,611.1300
Total	5,414.1656	1,053.4259	10,531.5602	28.8082	745.9501	1,287.0554	2,033.0055	199.5246	1,286.8670	1,486.3916	155,977.9252	1,094,899.8570	1,250,877.7822	494.2996	12.7241	1,267,027.0437

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	5,317.4513	355.7160	9,353.9017	21.6507		1,276.9458	1,276.9458		1,276.9458	1,276.9458	155,977.9252	301,338.2815	457,316.2067	466.6896	10.5867	472,138.2763
Energy	10.6869	94.5280	62.3521	0.5829		7.3837	7.3837		7.3837	7.3837		116,584.8319	116,584.8319	2.2345	2.1374	117,277.6373
Mobile	86.0273	603.1819	1,115.3064	6.5747	745.9501	2.7259	748.6760	199.5246	2.5375	202.0621		676,976.7435	676,976.7435	25.3755		677,611.1300
Total	5,414.1656	1,053.4259	10,531.5602	28.8082	745.9501	1,287.0554	2,033.0055	199.5246	1,286.8670	1,486.3916	155,977.9252	1,094,899.8570	1,250,877.7822	494.2996	12.7241	1,267,027.0437

Northside Specific Plan - Scenario 2 Operation - South Coast AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	1/1/2020	1/1/2020	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	0	7.00	231	0.29
Building Construction	Forklifts	0	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction	Welders	0	8.00	46	0.45

Trips and VMT

Northside Specific Plan - Scenario 2 Operation - South Coast AQMD Air District, Winter

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction**3.2 Building Construction - 2020****Unmitigated Construction On-Site**

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

Northside Specific Plan - Scenario 2 Operation - South Coast AQMD Air District, Winter

3.2 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Mitigated Construction On-Site

[illegible]

Northside Specific Plan - Scenario 2 Operation - South Coast AQMD Air District, Winter

3.2 Building Construction - 2020**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

Northside Specific Plan - Scenario 2 Operation - South Coast AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	86.0273	603.1819	1,115.3064	6.5747	745.9501	2.7259	748.6760	199.5246	2.5375	202.0621		676,976.7435	676,976.7435	25.3755		677,611.1300
Unmitigated	86.0273	603.1819	1,115.3064	6.5747	745.9501	2.7259	748.6760	199.5246	2.5375	202.0621		676,976.7435	676,976.7435	25.3755		677,611.1300

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	10,370.44	10,370.44	10370.44	35,437,369	35,437,369
Apartments Mid Rise	5,771.70	5,771.70	5771.70	19,722,776	19,722,776
Apartments Mid Rise	3,609.30	3,609.30	3609.30	12,333,526	12,333,526
Elementary School	14,503.09	14,503.09	14503.09	49,983,201	49,983,201
General Light Industry	5,800.00	5,800.00	5800.00	25,684,009	25,684,009
General Office Building	1,270.21	1,270.21	1270.21	4,091,931	4,091,931
Office Park	50,135.94	50,135.94	50135.94	169,391,817	169,391,817
Regional Shopping Center	15,747.90	15,747.90	15747.90	34,060,245	34,060,245
Single Family Housing	16.56	16.56	16.56	56,588	56,588
User Defined Recreational	0.00	0.00	0.00		
Total	107,225.13	107,225.13	107,225.13	350,761,463	350,761,463

4.3 Trip Type Information

Northside Specific Plan - Scenario 2 Operation - South Coast AQMD Air District, Winter

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Elementary School	16.60	8.40	6.90	65.00	30.00	5.00	63	25	12
General Light Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Office Park	16.60	8.40	6.90	33.00	48.00	19.00	82	15	3
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11
Single Family Housing	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
User Defined Recreational	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Apartments Mid Rise	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Elementary School	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
General Light Industry	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
General Office Building	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Office Park	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Regional Shopping Center	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
Single Family Housing	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722
User Defined Recreational	0.550167	0.040939	0.205797	0.110554	0.011916	0.005723	0.023174	0.041705	0.002259	0.001412	0.004923	0.000709	0.000722

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Northside Specific Plan - Scenario 2 Operation - South Coast AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	10.6869	94.5280	62.3521	0.5829		7.3837	7.3837		7.3837	7.3837		116,584.8319	116,584.8319	2.2345	2.1374	117,277.6373
NaturalGas Unmitigated	10.6869	94.5280	62.3521	0.5829		7.3837	7.3837		7.3837	7.3837		116,584.8319	116,584.8319	2.2345	2.1374	117,277.6373

Northside Specific Plan - Scenario 2 Operation - South Coast AQMD Air District, Winter

5.2 Energy by Land Use - NaturalGas**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	206778	2.2300	19.0560	8.1090	0.1216		1.5407	1.5407		1.5407	1.5407		24,326.8419	24,326.8419	0.4663	0.4460	24,471.4042
Apartments Mid Rise	147130	1.5867	13.5591	5.7698	0.0866		1.0963	1.0963		1.0963	1.0963		17,309.4312	17,309.4312	0.3318	0.3173	17,412.2925
Apartments Mid Rise	92007	0.9922	8.4791	3.6081	0.0541		0.6855	0.6855		0.6855	0.6855		10,824.3551	10,824.3551	0.2075	0.1985	10,888.6788
Elementary School	59499.8	0.6417	5.8333	4.9000	0.0350		0.4433	0.4433		0.4433	0.4433		6,999.9812	6,999.9812	0.1342	0.1283	7,041.5786
General Light Industry	356055	3.8398	34.9073	29.3222	0.2094		2.6530	2.6530		2.6530	2.6530		41,888.7994	41,888.7994	0.8029	0.7680	42,137.7236
General Office Building	3727.07	0.0402	0.3654	0.3069	2.1900e-003		0.0278	0.0278		0.0278	0.0278		438.4783	438.4783	8.4000e-003	8.0400e-003	441.0839
Office Park	116595	1.2574	11.4309	9.6020	0.0686		0.8688	0.8688		0.8688	0.8688		13,717.0824	13,717.0824	0.2629	0.2515	13,798.5961
Regional Shopping Center	8675.88	0.0936	0.8506	0.7145	5.1000e-003		0.0646	0.0646		0.0646	0.0646		1,020.6920	1,020.6920	0.0196	0.0187	1,026.7574
Single Family Housing	502.95	5.4200e-003	0.0464	0.0197	3.0000e-004		3.7500e-003	3.7500e-003		3.7500e-003	3.7500e-003		59.1706	59.1706	1.1300e-003	1.0800e-003	59.5223
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		10.6869	94.5280	62.3521	0.5829		7.3837	7.3837		7.3837	7.3837		116,584.8320	116,584.8320	2.2345	2.1374	117,277.6373

Northside Specific Plan - Scenario 2 Operation - South Coast AQMD Air District, Winter

5.2 Energy by Land Use - NaturalGas**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	206.778	2.2300	19.0560	8.1090	0.1216		1.5407	1.5407		1.5407	1.5407		24,326.8419	24,326.8419	0.4663	0.4460	24,471.4042
Apartments Mid Rise	92.007	0.9922	8.4791	3.6081	0.0541		0.6855	0.6855		0.6855	0.6855		10,824.3551	10,824.3551	0.2075	0.1985	10,888.6788
Apartments Mid Rise	147.13	1.5867	13.5591	5.7698	0.0866		1.0963	1.0963		1.0963	1.0963		17,309.4312	17,309.4312	0.3318	0.3173	17,412.2925
Elementary School	59.4998	0.6417	5.8333	4.9000	0.0350		0.4433	0.4433		0.4433	0.4433		6,999.9812	6,999.9812	0.1342	0.1283	7,041.5786
General Light Industry	356.055	3.8398	34.9073	29.3222	0.2094		2.6530	2.6530		2.6530	2.6530		41,888.7994	41,888.7994	0.8029	0.7680	42,137.7236
General Office Building	3.72707	0.0402	0.3654	0.3069	2.1900e-003		0.0278	0.0278		0.0278	0.0278		438.4783	438.4783	8.4000e-003	8.0400e-003	441.0839
Office Park	116.595	1.2574	11.4309	9.6020	0.0686		0.8688	0.8688		0.8688	0.8688		13,717.0824	13,717.0824	0.2629	0.2515	13,798.5961
Regional Shopping Center	8.67588	0.0936	0.8506	0.7145	5.1000e-003		0.0646	0.0646		0.0646	0.0646		1,020.6920	1,020.6920	0.0196	0.0187	1,026.7574
Single Family Housing	0.50295	5.4200e-003	0.0464	0.0197	3.0000e-004		3.7500e-003	3.7500e-003		3.7500e-003	3.7500e-003		59.1706	59.1706	1.1300e-003	1.0800e-003	59.5223
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		10.6869	94.5280	62.3521	0.5829		7.3837	7.3837		7.3837	7.3837		116,584.8320	116,584.8320	2.2345	2.1374	117,277.6373

6.0 Area Detail**6.1 Mitigation Measures Area**

Northside Specific Plan - Scenario 2 Operation - South Coast AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5,317.451 3	355.7160	9,353.901 7	21.6507		1,276.945 8	1,276.945 8		1,276.945 8	1,276.9458	155,977.9 252	301,338.2 815	457,316.2 067	466.6896	10.5867	472,138.2 763
Unmitigated	5,317.451 3	355.7160	9,353.901 7	21.6507		1,276.945 8	1,276.945 8		1,276.945 8	1,276.9458	155,977.9 252	301,338.2 815	457,316.2 067	466.6896	10.5867	472,138.2 763

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	97.5634					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	829.8359					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	4,363.423 5	345.5010	8,468.405 2	21.6036		1,272.018 3	1,272.018 3		1,272.018 3	1,272.0183	155,977.9 252	299,736.0 000	455,713.9 252	465.1563	10.5867	470,497.6 621
Landscaping	26.6286	10.2150	885.4964	0.0470		4.9275	4.9275		4.9275	4.9275		1,602.281 5	1,602.281 5	1.5333		1,640.614 3
Total	5,317.451 3	355.7160	9,353.901 7	21.6507		1,276.945 8	1,276.945 8		1,276.945 8	1,276.9458	155,977.9 252	301,338.2 815	457,316.2 067	466.6896	10.5867	472,138.2 763

Northside Specific Plan - Scenario 2 Operation - South Coast AQMD Air District, Winter

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	97.5634					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	829.8359					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	4,363.4235	345.5010	8,468.4052	21.6036		1,272.0183	1,272.0183		1,272.0183	1,272.0183	155,977.9252	299,736.0000	455,713.9252	465.1563	10.5867	470,497.6621
Landscaping	26.6286	10.2150	885.4964	0.0470		4.9275	4.9275		4.9275	4.9275		1,602.2815	1,602.2815	1.5333		1,640.6143
Total	5,317.4513	355.7160	9,353.9017	21.6507		1,276.9458	1,276.9458		1,276.9458	1,276.9458	155,977.9252	301,338.2815	457,316.2067	466.6896	10.5867	472,138.2763

7.0 Water Detail**7.1 Mitigation Measures Water****8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

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

Northside Specific Plan - Scenario 2 Operation - South Coast AQMD Air District, Winter

Fire Pumps and Emergency Generators

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

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

DRAFT MEMORANDUM

To: Memorandum to File
From: Jennifer Reed, David Larocca; Dudek
Subject: Health Effects from Criteria Air Pollutant Emissions Associated with the Northside Specific Plan Project
Date: February 7, 2020

1 Purpose and Introduction

In response to the California Supreme Court's *Sierra Club v. County of Fresno* (2018) 6 Cal. 5th 502 decision (referred to herein as the Friant Ranch decision), this memorandum addresses the potential for adverse health effects related to emissions of criteria air pollutants associated with construction and operation of the proposed Northside Specific Plan Project (proposed project), based on scientific information and technological methods available at the time of this memorandum's preparation. The published Friant Ranch decision (issued on December 24, 2018) addresses the need to correlate mass emission values for criteria air pollutants to specific health consequences, and contains the following direction from the California Supreme Court: "The Environmental Impact Report (EIR) must provide an adequate analysis to inform the public how its bare numbers translate to create potential adverse impacts or it must explain what the agency *does* know and why, given existing scientific constraints, it cannot translate potential health impacts further." (*Italics original.*) (*Sierra Club v. County of Fresno* 2018.)

As discussed below, at the time of this memorandum's preparation, no expert agency, including the South Coast Air Quality Management District (SCAQMD), the California Air Resources Board (CARB), or the U.S. Environmental Protection Agency (EPA), has approved a quantitative method to reliably, meaningfully, and consistently translate the mass emission estimates for the criteria air pollutants resulting from the proposed project to specific health effects. No California air district or other expert agency/entity has published *quantitative* guidance on how to address the Friant Ranch decision.¹ However, in April 2019, the Sacramento Metropolitan Air Quality Management District (SMAQMD) published an Interim Recommendation on implementing the Friant Ranch decision in the review and analysis of proposed projects under the California Environmental Quality Act (CEQA) in Sacramento County. The SMAQMD Interim Recommendation, which does not endorse use of any quantitative methodology, is summarized in Section 4, Scientific and Technological Complexities.

¹ The following air districts, state agencies and entities were contacted by Dudek in January 2019, which could not provide guidance on how to proceed in response to the Friant Ranch decision at that time: San Diego Air Pollution Control District (APCD), Mojave Desert Air Quality Management District (AQMD), San Joaquin Valley APCD, Santa Barbara County APCD, San Luis Obispo County APCD, Bay Area AQMD, CARB, California Office of Planning and Research, California Air Pollution Control Officers Association, and Office of Environmental Health Hazard Assessment.

Nonetheless, following the Supreme Court's Friant Ranch decision, some EIRs where estimated criteria air pollutant emissions exceeded applicable air district thresholds have included a quantitative analysis of potential project-generated health effects using a combination of a regional photochemical grid model (PGM) and the EPA Benefits Mapping and Analysis Program (BenMAP or BenMAP–Community Edition (CE)). The publicly available health impact assessments (HIA) typically present results in terms of an increase in health incidences and/or the increase in background health incidences for various health outcomes resulting from the project's estimated increase in concentrations of ozone (O₃) and particulate matter with an aerodynamic diameter less than or equal to 2.5 microns (PM_{2.5}). To date, all of the HIAs that are publicly available have concluded that the evaluated project's health effects associated with the estimated project-generated increase in concentrations of O₃ and PM_{2.5} represent a small increase in incidences and a very small percent of the number of background incidences, indicating that these health impacts are negligible and potentially within the models' margin of error. A review of the publicly available HIAs in CEQA documents is provided in Section 4.

2 National and California Ambient Air Quality Standards

As discussed in Section 4.2, Air Quality, of the proposed project's EIR, ambient air quality standards (AAQS) define clean air, and are established to protect even the most sensitive individuals (CARB 2019a). An AAQS defines the maximum amount of a pollutant averaged over a specified period of time that can be present in outdoor air without harm to the public's health. The EPA and CARB are both authorized to set AAQS.

The Clean Air Act Amendments of 1970 instruct the EPA to set primary National AAQS (NAAQS) to protect public health, and secondary NAAQS to protect plants, forests, crops and materials from damage due to exposure to the following criteria air pollutants: O₃, nitrogen dioxide (NO₂), carbon monoxide (CO), sulfur dioxide (SO₂), particulate matter with an aerodynamic diameter less than or equal to 10 microns (PM₁₀), PM_{2.5}, and lead.

The federal Clean Air Act requires that the EPA reassess, at least every five years, whether adopted standards are adequate to protect public health based on current scientific evidence. The EPA is required to rely on the advice of an independent scientific panel, the Clean Air Scientific Advisory Committee. Reviewing the NAAQS is a lengthy undertaking and includes the following major phases: planning, integrated science assessment, risk/exposure assessment, policy assessment, and rulemaking (EPA 2018a). During the integrated science assessment, a comprehensive review, synthesis, and evaluation of the most policy-relevant science is conducted, including key science judgments that are important to inform the development of the risk and exposure assessments (EPA 2018a). Then, the risk/exposure assessment draws upon information and conclusions presented in the integrated science assessment to develop quantitative characterizations of exposures and associated risks to human health or the environment associated with recent air quality conditions and with air quality estimated to just meet the current or alternative standard(s) under consideration (EPA 2018a). Scientific review during policy assessment development, and the NAAQS review process in general, is thorough and extensive.

In 1959, California enacted legislation requiring the state Department of Public Health to establish AAQS and necessary controls for motor vehicle emissions (CARB 2019b). California's AAQS (CAAQS) were adopted in 1971 (CARB 2019b). The CAAQS are established for O₃, NO₂, CO, SO₂, PM₁₀, and PM_{2.5}, as well as hydrogen sulfide, vinyl chloride, sulfates, and visibility reducing particles.

Air quality standard setting in California commences with a critical review of all relevant peer reviewed scientific literature. The Office of Environmental Health Hazard Assessment (OEHHA) uses the review of health literature to

develop a recommendation for the standard. The recommendation can be for no change, or can recommend a new standard. The review, including the OEHHA recommendation, is summarized in a document called the draft Initial Statement of Reasons (ISOR), which is released for comment by the public, and also for public peer review by the Air Quality Advisory Committee (AQAC). AQAC members are appointed by the President of the University of California for their expertise in the range of subjects covered in the ISOR, including health, exposure, air quality monitoring, atmospheric chemistry and physics, and effects on plants, trees, materials, and ecosystems. The Committee provides written comments on the draft ISOR. CARB staff next revises the ISOR based on comments from AQAC and the public. The revised ISOR is then released for a 45-day public comment period prior to consideration by the Board of CARB at a regularly scheduled Board hearing (CARB 2017a).

Federal law requires that all states attain the NAAQS. Failure of a state to reach attainment of the NAAQS by the target date can trigger penalties, including withholding of federal highway funds (CARB 2019b). California law similarly continues to mandate CAAQS, although attainment of the NAAQS has precedence over attainment of the CAAQS (CARB 2019b).

Of importance to this memorandum, California air districts have based their thresholds of significance for CEQA purposes on the levels that scientific and factual data demonstrate that the air basin can accommodate without affecting the attainment date for the NAAQS or CAAQS. Since an AAQS is based on maximum pollutant levels in outdoor air that would not harm the public's health, and air district thresholds pertain to attainment of the AAQS, this means that the thresholds established by air districts are also protective of human health. The particular thresholds of relevance to the proposed project are illustrated in Table 4.2-4, South Coast Air Quality Management District Air Quality Significance Thresholds, of the EIR. Because O₃ is not emitted directly, air districts have established emissions-based thresholds for O₃ precursors—volatile organic compounds (VOCs) and oxides of nitrogen (NO_x)—which are intended to serve as a surrogate for an “O₃ significance threshold” (i.e., the potential for adverse O₃ impacts to occur).

The NAAQS and CAAQS for O₃, NO₂, CO, SO₂, PM₁₀, and PM_{2.5} are presented in Table 1. Hydrogen sulfide, vinyl chloride, sulfates, and visibility reducing particles are not addressed further in this evaluation because they are not routinely associated with land use development projects subject to CEQA review, and are thus not presented in Table 1.²

Table 1. Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards ^a	National Standards ^b	
		Concentration ^c	Primary ^{c,d}	Secondary ^{c,e}
O ₃	1 hour	0.09 ppm (180 µg/m ³)	—	Same as Primary Standard ^f
	8 hours	0.070 ppm (137 µg/m ³)	0.070 ppm (137 µg/m ³) ^f	
NO ₂ ^g	1 hour	0.18 ppm (339 µg/m ³)	0.100 ppm (188 µg/m ³)	Same as Primary Standard
	Annual Arithmetic Mean	0.030 ppm (57 µg/m ³)	0.053 ppm (100 µg/m ³)	
	1 hour	20 ppm (23 mg/m ³)	35 ppm (40 mg/m ³)	

² Ambient Air Quality Standards table is provided as Table 1 in the Air Quality and GHG Emissions Analysis Technical Report, and EIR Section 4.2, Air Quality, Table 4.2-1.

Table 1. Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards ^a	National Standards ^b	
		Concentration ^c	Primary ^{c,d}	Secondary ^{c,e}
CO	8 hours	9.0 ppm (10 mg/m ³)	9 ppm (10 mg/m ³)	None
SO ₂ ^h	1 hour	0.25 ppm (655 µg/m ³)	0.075 ppm (196 µg/m ³)	—
	3 hours	—	—	0.5 ppm (1,300 µg/m ³)
	24 hours	0.04 ppm (105 µg/m ³)	0.14 ppm (for certain areas) ^g	—
	Annual	—	0.030 ppm (for certain areas) ^g	—
PM ₁₀ ⁱ	24 hours	50 µg/m ³	150 µg/m ³	Same as Primary Standard
	Annual Arithmetic Mean	20 µg/m ³	—	
PM _{2.5} ⁱ	24 hours	—	35 µg/m ³	Same as Primary Standard
	Annual Arithmetic Mean	12 µg/m ³	12.0 µg/m ³	15.0 µg/m ³

Source: CARB 2016.

Notes: µg/m³ = micrograms per cubic meter; mg/m³ = milligrams per cubic meter; ppm = parts per million by volume; O₃ = ozone; NO₂ = nitrogen dioxide; CO = carbon monoxide; SO₂ = sulfur dioxide; PM₁₀ = particulate matter with an aerodynamic diameter less than or equal to 10 microns; PM_{2.5} = particulate matter with an aerodynamic diameter less than or equal to 2.5 microns.

^a California standards for O₃, CO, SO₂ (1-hour and 24-hour), NO₂, suspended particulate matter (PM₁₀, PM_{2.5}), and visibility-reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded. CAAQS are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

^b National standards (other than O₃, NO₂, SO₂, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once per year. The O₃ standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over 3 years, is equal to or less than the standard. For PM₁₀, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m³ is equal to or less than 1. For PM_{2.5}, the 24-hour standard is attained when 98% of the daily concentrations, averaged over 3 years, are equal to or less than the standard.

^c Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based on a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

^d National Primary Standards: The levels of air quality necessary, with an adequate margin of safety, to protect the public health.

^e National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

^f On October 1, 2015, the national 8-hour O₃ primary and secondary standards were lowered from 0.075 to 0.070 ppm.

^g To attain the national 1-hour standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 parts per billion (ppb). Note that the national 1-hour standard is in units of ppb. California standards are in units of ppm. To directly compare the national 1-hour standard to the California standards, the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.

^h On June 2, 2010, a new 1-hour SO₂ standard was established, and the existing 24-hour and annual primary standards were revoked. To attain the national 1-hour standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO₂ national standards (24-hour and annual) remain in effect until 1 year after an area is designated for the 2010 standard, except that in areas designated nonattainment of the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

ⁱ CARB adopted new PM standards in June of 2002, responding to requirements of the Children's Environmental Health Protection Act (Senate Bill 25, Escutia 1999), specifically the evaluation of all health-based AAQS to determine if the standards adequately protect human health, particularly that of infants and children. The subsequent review of the PM standards resulted in the recommendation of more health-protective AAQS for PM₁₀ and a new standard for PM_{2.5}. The new PM standards became effective in 2003. Upon further review, the national annual PM_{2.5} primary standard was lowered from 15 µg/m³ to 12.0 µg/m³ on December 14, 2012. The existing national 24-hour PM_{2.5} standards (primary and secondary) were retained at 35 µg/m³, as was the annual secondary standard of 15 µg/m³. The existing 24-hour PM₁₀ standards (primary and secondary) of 150 µg/m³ were also retained. The form of the annual primary and secondary standards is the annual mean averaged over 3 years.

Pursuant to the 1990 Clean Air Act amendments, the EPA classifies air basins (or portions thereof) as “attainment” or “nonattainment” for each criteria air pollutant, based on whether the NAAQS have been achieved. Generally, if the recorded concentrations of a pollutant are lower than the standard, the area is classified as “attainment” for that pollutant. If an area exceeds the standard, the area is classified as “nonattainment” for that pollutant. If there is not enough data available to determine whether the standard is exceeded in an area, the area is designated as “unclassified” or “unclassifiable.” The designation of “unclassifiable/attainment” means that the area meets the standard or is expected to be meet the standard despite a lack of monitoring data. Nonattainment areas must develop plans to attain the NAAQS. Areas that achieve the standards after a nonattainment designation are redesignated as maintenance areas and must have approved maintenance plans to ensure continued attainment of the standards. The California Clean Air Act, like its federal counterpart, called for the designation of areas as “attainment” or “nonattainment,” but based on CAAQS rather than NAAQS. The attainment designations for O₃, NO₂, CO, SO₂, PM₁₀, and PM_{2.5} for the South Coast Air Basin (SCAB) are listed in Table 2.³

Table 2. South Coast Air Basin Attainment Designation

Pollutant	National Designation	California Designation
O ₃ (1-hour)	No National Standard	Nonattainment
O ₃ (8-hour – 1997) (8-hour – 2008)	Attainment (Maintenance) Nonattainment (Moderate)	Nonattainment
NO ₂	Unclassifiable/attainment	Attainment
CO	Attainment/maintenance	Attainment
SO ₂	Unclassifiable/attainment	Attainment
PM ₁₀	Attainment/maintenance	Nonattainment
PM _{2.5}	Serious nonattainment	Nonattainment

Sources: EPA 2018b (national); CARB 2018a (California).

Notes:

Bold text = not in attainment; Attainment = meets the standards; Attainment (Maintenance) = achieve the standards after a nonattainment designation; Nonattainment = does not meet the standards; Unclassified or Unclassifiable = insufficient data to classify; Unclassifiable/Attainment = meets the standard or is expected to be meet the standard despite a lack of monitoring data.

As shown in Table 2, the SCAB is designated as a nonattainment area for O₃, PM₁₀, and PM_{2.5} under the NAAQS and/or the CAAQS.

As discussed in 4.2.2, Relevant Plans, Policies, and, the SCAQMD is responsible for developing and implementing the clean air plan for attainment and maintenance of the AAQS in the SCAB and portions of the Salton Sea Air Basin and Mojave Desert Air Basin. Accordingly, the SCAQMD has adopted federal and state attainment plans; most recently, the 2016 Air Quality Management Plan (AQMP). The AQMP relies on information from CARB and Southern California Association of Governments, as well as information regarding projected growth in the cities and counties (all of Orange County and the non-desert portions of Los Angeles, Riverside and San Bernardino counties) within the SCAQMD jurisdiction, to forecast future emissions and then determine from that the strategies necessary for the reduction of emissions through regulatory controls. As the SCAQMD develops and implements plans and control

³ The same discussion of the SCAB attainment designation is provided in Section 2.3.1, South Coast Air Basin Attainment Designation, of the Air Quality and GHG Emissions Analysis Technical Report, and Section 4.2.2, Relevant Plans, Policies, and Ordinances, of the EIR.

measures designed to attain the AAQS, the SCAQMD implements measures to reduce public health effects associated with criteria air pollutants.

3 Health Effects of Criteria Air Pollutants and their Precursors

Numerous scientific studies published over the past 50 years point to the harmful effects of air pollution (CARB 2019b). As explained above, the AAQS are designed to prevent these effects (CARB 2019b). The adverse health effects associated with air pollution are diverse and include (SCAQMD 2017):

- Premature mortality
- Cardiovascular effects
- Increased health care utilization (hospitalization, physician and emergency room visits)
- Increased respiratory illness and other morbidity (symptoms, infections, and asthma exacerbation)
- Decreased lung function (breathing capacity)
- Lung inflammation
- Potential immunological changes
- Increased airway reactivity to a known pharmacological agent exposure - a method used in laboratories to evaluate the tendency of airways to have an increased possibility of developing an asthmatic response
- A decreased tolerance for exercise
- Adverse birth outcomes such as low birth weights

The evidence linking these effects to air pollutants is derived from population-based observational and field studies (epidemiological) as well as controlled laboratory studies involving human subjects and animals. There have been an increasing number of studies focusing on the mechanisms (that is, on learning how specific organs, cell types, and biomarkers are involved in the human body's response to air pollution) and specific pollutants responsible for individual effects. Yet the underlying biological pathways for these effects are not always clearly understood (SCAQMD 2017).

Although individuals inhale pollutants as a mixture under ambient conditions, the regulatory framework and the control measures developed are pollutant-specific for six major outdoor pollutants covered under Sections 108 and 109 of the Clean Air Act. This is appropriate, in that different pollutants usually differ in their sources, their times and places of occurrence, the kinds of health effects they may cause, and their overall levels of health risk. Different pollutants, from the same or different sources, oftentimes occur together. Evidence for more than additive effects has not been strong and, as a practical matter, health scientists, as well as regulatory officials, usually must deal with one pollutant at a time in adopting AAQS (SCAQMD 2017).

Health effects associated with criteria air pollutants are discussed below; the same or similar information is provided in Section 2.1.2, Pollutants and Effects, of the Air Quality and GHG Emissions Analysis Technical Report prepared for the project, and Section 4.2, Air Quality, of the proposed project's EIR.

Ozone (O₃). O₃ in the troposphere causes numerous adverse health effects; short-term exposures (lasting for a few hours) to O₃ at levels typically observed in Southern California can result in breathing pattern changes, reduction of breathing capacity, respiratory symptoms, worsening of lung disease leading to premature death, increased

susceptibility to infections, inflammation of and damage to the lung tissue, and some immunological changes (EPA 2013, CARB 2019c). These health problems are particularly acute in sensitive receptors such as the sick, older adults, and young children.

Inhalation of O₃ causes inflammation and irritation of the tissues lining human airways, causing and worsening a variety of symptoms. Exposure to O₃ can reduce the volume of air that the lungs breathe in and cause shortness of breath. O₃ in sufficient doses increases the permeability of lung cells, rendering them more susceptible to toxins and microorganisms. The occurrence and severity of health effects from O₃ exposure vary widely among individuals, even when the dose and the duration of exposure are the same. Research shows adults and children who spend more time outdoors participating in vigorous physical activities are at greater risk from the harmful health effects of O₃ exposure. While there are relatively few studies of O₃'s effects on children, the available studies show that children are no more or less likely to suffer harmful effects than adults. However, there are a number of reasons why children may be more susceptible to O₃ and other pollutants. Children and teens spend nearly twice as much time outdoors and engaged in vigorous activities as adults. Children breathe more rapidly than adults and inhale more pollution per pound of their body weight than adults. Also, children are less likely than adults to notice their own symptoms and avoid harmful exposures. Further research may be able to better distinguish between health effects in children and adults. Children, adolescents and adults who exercise or work outdoors, where O₃ concentrations are the highest, are at the greatest risk of harm from this pollutant (CARB 2019c).

A number of population groups are potentially at increased risk for O₃ exposure effects. In the ongoing review of O₃, the EPA has identified populations as having adequate evidence for increased risk from O₃ exposures include individuals with asthma, younger and older age groups, individuals with reduced intake of certain nutrients such as Vitamins C and E, and outdoor workers. There is suggestive evidence for other potential factors, such as variations in genes related to oxidative metabolism or inflammation, gender, socioeconomic status, and obesity. However further evidence is needed (SCAQMD 2017).

The adverse effects reported with short-term O₃ exposure are greater with increased activity because activity increases the breathing rate and the volume of air reaching the lungs, resulting in an increased amount of O₃ reaching the lungs. Children may be a particularly vulnerable population to air pollution effects because they spend more time outdoors, are generally more active, and have a higher specific ventilation relative to their body weight, compared to adults (SCAQMD 2017).

Volatile Organic Compounds (VOCs). The primary health effects of VOCs result from the formation of O₃ and its related health effects. High levels of VOCs in the atmosphere can interfere with oxygen intake by reducing the amount of available oxygen through displacement. Carcinogenic forms of hydrocarbons, such as benzene, are considered TACs. There are no separate health standards for VOCs as a group. Within this evaluation, VOC and reactive organic gases (ROGs) are used interchangeably.

Nitrogen Dioxide (NO₂). A large body of health science literature indicates that exposure to NO₂ can induce adverse health effects. The strongest health evidence, and the health basis for the AAQS for NO₂, is results from controlled human exposure studies that show that NO₂ exposure can intensify responses to allergens in allergic asthmatics. In addition, a number of epidemiological studies have demonstrated associations between NO₂ exposure and premature death, cardiopulmonary effects, decreased lung function growth in children, respiratory symptoms, emergency room visits for asthma, and intensified allergic responses. Infants and children are particularly at risk because they have disproportionately higher exposure to NO₂ than adults due to their greater breathing rate for

their body weight and their typically greater outdoor exposure duration. Several studies have shown that long-term NO₂ exposure during childhood, the period of rapid lung growth, can lead to smaller lungs at maturity in children with higher compared to lower levels of exposure. In addition, children with asthma have a greater degree of airway responsiveness compared with adult asthmatics. In adults, the greatest risk is to people who have chronic respiratory diseases, such as asthma and chronic obstructive pulmonary disease (CARB 2019d).

Carbon Monoxide (CO). Carbon monoxide is harmful because it binds to hemoglobin in the blood, reducing the ability of blood to carry oxygen. This interferes with oxygen delivery to the body's organs. The most common effects of CO exposure are fatigue, headaches, confusion and reduced mental alertness, and light-headedness, dizziness due to inadequate oxygen delivery to the brain. For people with cardiovascular disease, short-term CO exposure can further reduce their body's already compromised ability to respond to the increased oxygen demands of exercise, exertion, or stress. Inadequate oxygen delivery to the heart muscle leads to chest pain and decreased exercise tolerance. Unborn babies whose mothers experience high levels of CO exposure during pregnancy are at risk of adverse developmental effects. Unborn babies, infants, elderly people, and people with anemia or with a history of heart or respiratory disease are most likely to experience health effects with exposure to elevated levels of CO (CARB 2019e).

Sulfur Dioxide (SO₂). SO₂ is an irritant gas that attacks the throat and lungs and can cause acute respiratory symptoms and diminished ventilator function in children. When combined with particulate matter (PM), SO₂ can injure lung tissue and reduce visibility and the level of sunlight. SO₂ can worsen asthma resulting in increased symptoms, increased medication usage, and emergency room visits.

Controlled human exposure and epidemiological studies show that children and adults with asthma are more likely to experience adverse responses with SO₂ exposure, compared with the non-asthmatic population. Effects at levels near the one-hour standard are those of asthma exacerbation, including bronchoconstriction accompanied by symptoms of respiratory irritation such as wheezing, shortness of breath and chest tightness, especially during exercise or physical activity. Also, exposure at elevated levels of SO₂ (above 1 parts per million (ppm)) results in increased incidence of pulmonary symptoms and disease, decreased pulmonary function, and increased risk of mortality. The elderly and people with cardiovascular disease or chronic lung disease (such as bronchitis or emphysema) are most likely to experience these adverse effects (CARB 2019f).

SO₂ is of concern both because it is a direct respiratory irritant and because it contributes to the formation of sulfate and sulfuric acid in PM (NRC 2005). People with asthma are of particular concern, both because they have increased baseline airflow resistance and because their SO₂-induced increase in resistance is greater than in healthy people, and it increases with the severity of their asthma (NRC 2005). SO₂ is thought to induce airway constriction via neural reflexes involving irritant receptors in the airways (NRC 2005).

Particulate Matter (PM₁₀ and PM_{2.5}). A number of adverse health effects have been associated with exposure to both PM_{2.5} and PM₁₀. For PM_{2.5}, short-term exposures (up to 24-hours duration) have been associated with premature mortality, increased hospital admissions for heart or lung causes, acute and chronic bronchitis, asthma attacks, emergency room visits, respiratory symptoms, and restricted activity days. These adverse health effects have been reported primarily in infants, children, and older adults with preexisting heart or lung diseases. In addition, of all of the common air pollutants, PM_{2.5} is associated with the greatest proportion of adverse health effects related to air pollution, both in the United States and world-wide based on the World Health Organization's Global Burden of Disease Project. Short-term exposures to PM₁₀ have been associated primarily with

worsening of respiratory diseases, including asthma and chronic obstructive pulmonary disease, leading to hospitalization and emergency department visits (CARB 2017b).

Long-term (months to years) exposure to PM_{2.5} has been linked to premature death, particularly in people who have chronic heart or lung diseases, and reduced lung function growth in children. The effects of long-term exposure to PM₁₀ are less clear, although several studies suggest a link between long-term PM₁₀ exposure and respiratory mortality. The International Agency for Research on Cancer published a review in 2015 that concluded that PM in outdoor air pollution causes lung cancer (CARB 2017b).

People with influenza, people with chronic respiratory and cardiovascular diseases, and older adults may suffer worsening illness and premature death as a result of breathing PM. People with bronchitis can expect aggravated symptoms from breathing PM. Children may experience a decline in lung function due to breathing in PM₁₀ and PM_{2.5} (EPA 2009).

PM encompasses a physically and chemically diverse class of ambient air pollutants of both anthropogenic and biological origin. The PM standard is the only NAAQS that does not target a specific chemical or family of chemical species (NRC 2005). The range of human health effects associated with ambient PM levels or demonstrated in laboratory studies has expanded from earlier concerns for total mortality and respiratory morbidity to include cardiac mortality and morbidity, blood vessel constriction, stroke, premature birth, low birth weight, retarded lung growth, enhancement of allergic responses, reduced resistance to infection, degenerative lesions in the brain, and lung cancer (EPA 2004).

4 Scientific and Technological Complexities

At issue in the Friant Ranch decision was the fact that a development project's EIR did not connect its mass emission totals to specific adverse human health effects. Concerned with the sufficiency of the EIR as an informational document, and specifically whether the magnitude of project impacts was adequately disclosed, the California Supreme Court stated the following:

“The task for real party and the County is clear: The EIR must provide an adequate analysis to inform the public how its bare numbers translate to create potential adverse impacts or it must adequately explain what the agency *does* know and why, given existing scientific constraints, it cannot translate potential health impacts further.” (Sierra Club v. County of Fresno 2018; italics original)

As discussed further below, at the time of this writing, no available modeling tools have been proven to provide a reliable and meaningful analysis to correlate an increase in mass totals or concentrations of criteria air pollutants from an individual project to specific health effects, or estimate additional pollutant nonattainment days relative to the NAAQS and CAAQS due to a single project.

Formation of Secondary Pollutants

The California Supreme Court noted, in the Friant Ranch decision, that: “The raw numbers estimating the tons per year of ROG and NO_x from the Project do not give any information to the reader about how much ozone is estimated to be produced as a result.”

In response, the formation of O₃ and PM in the atmosphere, as secondary pollutants,⁴ involves complex chemical and physical interactions of multiple pollutants from natural and anthropogenic sources, as further explained below. The complexity in how secondary pollutants are formed and dispersed has resulted in ongoing difficulties in measuring and regulating those pollutants.

Tropospheric, or ground level O₃, is not emitted directly into the air, but is created by chemical reactions between NO_x and VOCs (EPA 2018c). This happens when pollutants emitted by cars, power plants, industrial boilers, refineries, chemical plants, and other sources chemically react in the presence of sunlight (EPA 2018c). O₃ is most likely to reach unhealthy levels on hot sunny days in urban environments, but can still reach high levels during colder months (EPA 2018c). O₃ can also be transported long distances by wind, so even rural areas can experience high O₃ levels (EPA 2018c).

The O₃ reaction is self-perpetuating (or catalytic) in the presence of sunlight because NO₂ is photochemically reformed from nitric oxide (NO). In this way, O₃ is controlled by both NO_x and VOC emissions (NRC 2005). The complexity of these interacting cycles of pollutants means that incremental decreases in one emission may not result in proportional decreases in O₃ (NRC 2005). Although these reactions and interactions are well understood, variability in emission source operations and meteorology creates uncertainty in the modeled O₃ concentrations to which downwind populations may be exposed (NRC 2005). This is especially true for individual projects, like the proposed project, where project-generated criteria air pollutant emissions are not derived from a single "point source," but from mobile sources (cars and trucks) driving to, from and around the Project area and area sources (consumer products, architectural coating, natural gas fireplaces, etc.).

In many urban areas, O₃ nonattainment is not caused by emissions from the local area alone (EPA 2008). Due to atmospheric transport, contributions of precursors from the surrounding region can also be important (EPA 2008, O₃ NAAQS). Thus, in designing control strategies to reduce O₃ concentrations in a local area, it is often necessary to account for regional transport within the U.S. (EPA 2008). In some areas, such as California, global transport of O₃ from beyond North America also can contribute to nonattainment areas (EPA 2008).

PM can be divided into two categories: directly emitted PM and secondary PM. Secondary PM, like O₃, is formed via complex chemical reactions in the atmosphere between precursor chemicals such as SO_x and NO_x (SJVAPCD 2015). In general, PM₁₀ is composed largely of primary particles, and a much greater portion of PM_{2.5} contains secondary particles (EPA 2015b). The secondary formation of PM_{2.5} is dominated by a variety of chemical species or components of atmospheric particles, such as ammonium sulfate, ammonium nitrate, organic carbon mass, elemental carbon, and other soil compounds and oxidized metals. PM_{2.5}, sulfate, nitrate, and ammonium ions are predominantly the result of chemical reactions of the oxidized products of SO₂ and NO_x emissions with direct ammonia emission (EPA 2017a). Because of the complexity of secondary PM formation, including the potential to be transported long distances by wind, the tonnage of PM-forming precursor emissions in an area does not necessarily result in an equivalent concentration of secondary PM in that area (SJVAPCD 2015).

Because of the long-range transport of some pollutants, important emission sources may be far from the locations where measured pollutant concentrations exceed the AAQS (NRC 2005). Thus, for areas experiencing higher

⁴ Air pollutants formed through chemical reactions in the atmosphere are referred to as secondary pollutants.

ambient concentrations of pollutants, such as O₃ and PM, controlling emissions of those pollutants and their precursors is typically a regional, often multistate, problem, not a local one (NRC 2005).

San Joaquin Valley Air Pollution Control District and South Coast Air Quality Management District Briefs

In connection with the judicial proceedings culminating in issuance of the Friant Ranch decision, the San Joaquin Valley Air Pollution Control District (SJVAPCD) and the South Coast Air Quality Management District (SCAQMD) filed amicus briefs attesting to the extreme difficulty of correlating an individual project's criteria air pollutant emissions to specific health impacts. Both the SJVAPCD and the SCAQMD have among the most sophisticated air quality modeling and health impact evaluation capabilities of the air districts in the State. While the information and arguments presented in those briefs was considered by the California Supreme Court, the Court noted that such information was not part of the administrative record associated with the County's decision to approve the Friant Ranch project. A summary of the key, relevant points of the SJVAPCD and SCAQMD briefs is provided below.

Difference between Toxic Air Contaminants and Criteria Air Pollutants

As explained in Section 4.2.1, Existing Conditions, a toxic air contaminant (TAC) is an air pollutant, identified in regulation by CARB, which may cause or contribute to an increase in deaths or in serious illness, or which may pose a present or potential hazard to human health. TACs are considered under a different regulatory process (California Health and Safety Code section 39650 et seq.) than pollutants subject to CAAQS and NAAQS. Health effects to TACs may occur at extremely low levels and it is typically difficult to identify levels of exposure which do not produce adverse health effects. A criteria air pollutant, on the other hand, is an air pollutant for which acceptable levels of exposure can be determined and for which an AAQS has been set (CARB 2019g).

As the SJVAPCD explained in their brief, "Although criteria air pollutants can also be harmful to human health, they are distinguishable from TACs and are regulated separately. The most relevant difference between criteria pollutants and TACs for purposes of this case is the manner in which human health impacts are accounted for. While it is common practice to analyze the correlation between an individual facility's TAC emissions and the expected localized human health impacts, such is not the case for criteria pollutants" (SJVAPCD 2015). Unlike with TACs (where assessment occurs in conjunction with environmental analysis for individual projects), the human health impacts associated with criteria air pollutants are analyzed and taken into consideration when EPA sets the NAAQS for each criteria pollutant. (42 U.S.C. § 7409(b)(1).) The health impact of a particular criteria pollutant is analyzed on a regional and not a facility or individual project level based on how close the area is to complying with (attaining) the NAAQS (SJVAPCD 2015). The SJVAPCD concluded that while it is possible to perform a health impact analysis for TACs, which was done for construction of the proposed project (see Section 4.2.4 Impacts Analysis, AQ-3), "it is not feasible to conduct a similar analysis for criteria air pollutants because currently available computer modeling tools are not equipped for this task" (SJVAPCD 2015).

Disconnect Between Mass and Concentration

Another important technical nuance is that health effects from air pollutants are related to the concentration of the air pollutant that an individual is exposed to, not necessarily the individual mass quantity of emissions associated with an individual project. For example, health effects from O₃ are correlated with increases in the ambient level of

O₃ in the air a person breathes (SCAQMD 2015). However, it takes a large amount of additional precursor emissions to cause a modeled increase in ambient O₃ levels over an entire region (SCAQMD 2015).

For CEQA analyses, project-generated emissions are typically estimated in pounds per day or tons per year and compared to mass daily or annual emission thresholds. While CEQA thresholds are established at levels that the air basin can accommodate without affecting the attainment date for the AAQS, even if a project exceeds established CEQA significance thresholds, this does not mean that one can easily determine the concentration of O₃ or PM that will be created at or near the project site on a particular day or month of the year, or what specific health impacts will occur (SJVAPCD 2015).

As the SJVAPCD points out, the tonnage of PM “emitted does not always equate to the local PM concentration because it can be transported long distances by wind,” and “[s]econdary PM, like O₃, is formed via complex chemical reactions in the atmosphere between precursor chemicals such as sulfur dioxides (SO_x) and NO_x,” meaning that “the tonnage of PM-forming precursor emissions in an area does not necessarily result in an equivalent concentration of secondary PM in that area” (SJVAPCD 2015). The disconnect between the tonnage of precursor pollutants (NO_x, SO_x and VOCs) and the concentration of O₃ or PM formed is important because it is not necessarily the tonnage of precursor pollutants that causes human health effects, but the concentration of resulting O₃ or PM (SJVAPCD 2015). As discussed previously, the AAQS are established as concentrations of O₃ or PM and not as tonnages of their precursor pollutants (SJVAPCD 2015). The disconnect between the amount of precursor pollutants and the concentration of O₃ or PM formed makes it difficult to determine potential health impacts, which are related to the concentration of O₃ and PM experienced by the receptor rather than levels of NO_x, SO_x, and VOCs produced by a source (SJVAPCD 2015).

As discussed above, attainment of a particular AAQS occurs when the concentration of the relevant pollutant remains below a set threshold on a consistent basis throughout a particular region (SJVAPCD 2015). Because the AAQS are focused on achieving a particular concentration of pollution region-wide, an air district's tools and plans for attaining the AAQS are regional in nature (SJVAPCD 2015). For instance, the computer models used to simulate and predict an attainment date for the O₃ or PM NAAQS in the San Joaquin Valley are based on regional inputs, such as regional inventories of precursor pollutants (NO_x, SO_x and VOCs) and the atmospheric chemistry and meteorology of the San Joaquin Valley (SJVAPCD 2015). At a very basic level, the models simulate future O₃ or PM levels based on predicted changes in precursor emissions San Joaquin Valley Air Basin-wide (SJVAPCD 2015). Because the AAQS are set levels necessary to protect human health, the closer a region is to attaining a particular AAQS, the lower the human health impact is from that pollutant (SJVAPCD 2015).

The goal of these modeling exercises is not to determine whether the emissions generated by a particular factory or development project will affect the date that the San Joaquin Valley Air Basin attains the AAQS (SJVAPCD 2015). Rather, the SJVAPCD's modeling and planning strategy is regional in nature and based on the extent to which all of the emission-generating sources in the San Joaquin Valley Air Basin (current and future) must be controlled in order to reach attainment (SJVAPCD 2015).

Correlation to Health Effects

The SJVAPCD ties the difficulty of correlating the emission of criteria pollutants to health impacts to how O₃ and PM are formed, as explained above. According to SJVAPCD, “even once a model is developed to accurately ascertain local increases in concentrations of photochemical pollutants like O₃ and some particulates, it remains impossible,

using today's models, to correlate that increase in concentration to a specific health impact [because] such models are designed to determine regional, population-wide health impacts, and simply are not accurate when applied at the local level" (SJVAPCD 2015).

To demonstrate the relative scale between emissions within the SCAQMD jurisdiction used in photochemical and other regional modeling and proposed project-level emissions, emissions for the SCAQMD jurisdiction from the CARB California Emissions Projection Analysis Model (CEPAM) emissions inventory and estimated emissions from the proposed project are summarized below. CEPAM produces projected emissions that can then be gridded to serve as the emission input for photochemical modeling. Including all sources except natural sources,⁵ total emissions for the SCAQMD for the CEPAM baseline year of 2012 is as follows: 485 tons per day for VOC, 573 tons per day of NO_x, 2,183 tons per day of CO, 19 tons per day for SO_x, 168 tons per day of PM₁₀, and 70 tons per day of PM_{2.5} (CARB 2018b). For the proposed project's buildout year of 2021, total projected emissions for the SCAQMD for all sources except natural, as forecasted by CEPAM, is as follows: 379 tons per day for VOC, 336 tons per day of NO_x, 1,400 tons per day of CO, 16 tons per day for SO_x, 184 tons per day of PM₁₀, and 67 tons per day of PM_{2.5} (CARB 2018b). Construction of the proposed project is estimated to result in maximum daily emissions of 0.01 ton per day for VOC, 0.04 ton per day of NO_x, 0.06 ton per day of CO, less than 0.01 ton per day for SO_x, 0.01 ton per day of PM₁₀, and 0.01 ton per day of PM_{2.5} after incorporation of mitigation (see Table 4.2-14, Estimated Maximum Daily Construction Criteria Air Pollutant Emissions - Mitigated). Proposed project operation is anticipated to result in maximum daily emissions of 0.02 ton per day for VOC, 0.12 ton per day of NO_x, 0.14 ton per day of CO, less than 0.01 ton per day for SO_x, 0.04 ton per day of PM₁₀, and 0.01 ton per day of PM_{2.5} under unmitigated conditions (see Table 4.2-8, Estimated Maximum Daily Operational Emissions - Unmitigated). As presented above, proposed project emissions represent a small fraction of the total emissions in the SCAQMD jurisdiction.

SCAQMD used O₃, which is formed from the chemical reaction of NO_x and VOCs in the presence of sunlight, as an example of why it is impracticable to determine specific health outcomes from criteria pollutants for all but very large, regional-scale projects. First, forming O₃ "takes time and the influence of meteorological conditions for these reactions to occur, so ozone may be formed at a distance downwind from the sources" (SCAQMD 2015). Second, "it takes a large amount of additional precursor emissions (NO_x and VOCs) to cause a modeled increase in ambient ozone levels over an entire region," with a 2012 study showing that "reducing NO_x by 432 tons per day (157,680 tons/year) and reducing VOC by 187 tons per day (68,255 tons/year) would reduce ozone levels at the SCAQMD's monitor site with the highest levels by only 9 parts per billion" (SCAQMD 2015). SCAQMD thus concludes that it "does not currently know of a way to accurately quantify O₃-related health impacts caused by NO_x or VOC emissions from relatively small projects" (SCAQMD 2015).

Essentially, SCAQMD takes the position that a project emitting only 10 tons per year of NO_x or VOC is small enough that its regional impact on ambient O₃ levels may not be detected in the regional air quality models that are currently used to determine O₃ levels; thus, in this case it would not be feasible to directly correlate project emissions of VOC or NO_x with specific health impacts from O₃ (SCAQMD 2015). Therefore, lead agencies that use SCAQMD's thresholds of significance may determine that many projects have "significant" air quality impacts and must apply all feasible mitigation measures, yet will not be able to precisely correlate the project to quantifiable health impacts.

⁵ Natural sources are non-manmade emission sources, which include biological and geological sources, wildfires, windblown dust, and biogenic emissions from plants and trees.

Effects on Number of Nonattainment Days

In regard to regional concentrations and air basin attainment, the SJVAPCD emphasized that attempting to identify a change in background pollutant concentrations that can be attributed to a single project, even one as large as the entire Friant Ranch Specific Plan, is a theoretical exercise. The SJVAPCD brief noted that it “would be extremely difficult to model the impact on NAAQS attainment that the emissions from the Friant Ranch project may have” (SJVAPCD 2015). The situation is further complicated by the fact that background concentrations of regional pollutants are not uniform either temporally or geographically throughout an air basin, but are constantly fluctuating based upon meteorology and other environmental factors. As discussed above, the currently available modeling tools are equipped to model the impact of all emission sources in the San Joaquin Valley Air Basin on attainment (SJVAPCD 2015). The SJVAPCD brief then indicated that, “Running the photochemical grid model used for predicting O₃ attainment with the emissions solely from the Friant Ranch project (which equate to less than one-tenth of one percent of the total NO_x and VOC in the Valley) is not likely to yield valid information given the relative scale involved” (SJVAPCD 2015).

Sacramento Metropolitan Air Quality Management District Interim Recommendation

As previously discussed, the SMAQMD is to date the only California air district to formally release guidance (Interim Recommendation, April 2019) for lead agencies and practitioners preparing CEQA documents for projects within Sacramento County to comply with the Friant Ranch decision. Consistent with the expert opinions submitted to the Court in Friant Ranch by SJVAPCD and SCAQMD, the SMAQMD guidance confirms the absence of an acceptable or reliable quantitative methodology that would correlate the expected criteria air pollutant emissions of projects to the likely health consequences to people from project-generated criteria air pollutant emissions. The SMAQMD guidance explains that while it is in the process of developing a methodology to assess these impacts, lead agencies should follow the Friant Court’s advice to explain in meaningful detail why this analysis is not yet feasible.

The Interim Recommendation further states that, “neither the Sac Metro Air District nor any other air district currently have methodologies that would provide Lead Agencies and CEQA practitioners with a consistent, reliable, and meaningful analysis to correlate specific health impacts that may result from a proposed project’s mass emissions” (SMAQMD 2019). The recommendation further explains that air districts have focused on reducing regional emissions from all sectors to meet the health-based concentration standards, thereby reducing the pollutant-specific health impacts for the entire population. For example, the SMAQMD prepared plans to attain and maintain the O₃ and PM AAQS. These attainment plans include emissions inventories, air monitoring data, control measures, modeling, future pollutant-level estimates, and general health information. Attainment planning models rely on regional inputs to determine O₃ and PM formation and concentrations in a regional context, not a project-specific context. Because of the complexity of O₃ formation, the pounds or tons of emissions from a proposed project in a specific geographical location does not equate to a specific concentration of O₃ formation in a given area, because in addition to emission levels, O₃ formation is affected by atmospheric chemistry, geography, and weather. Secondary formation of PM is very similar to the complexity of O₃ formation, and localized impacts of directly emitted PM do not always equate to local PM concentrations due to transport of emissions. Accordingly, because air district attainment plans and supporting air model tools are regional in nature, they do not allow for analysis of the health impacts of specific projects on any given geographic location. The Interim Recommendation also references available health-related information, but indicates that the available information cannot be directly correlated to the pounds/day or tons/year of emissions estimated from a single proposed project.

The Interim Recommendation is in place to assist lead agencies and practitioners with CEQA document preparation until SMAQMD develops a methodology that provides a consistent, reliable, and meaningful analysis to address the Court's direction on correlating health impacts to a project's emissions.

Methods Available

At the time of writing, no specific tools have been developed for use in CEQA documents to connect criteria air pollutant emissions from an individual project to specific health effects in response to Friant Ranch. However, it has been demonstrated to be technically feasible to use existing regional models and an existing health effect modeling program to evaluate individual projects, which was conducted for a few projects in 2019. The following CEQA documents included a quantitative HIA to address Friant Ranch:

1. California State University Dominguez Hills 2018 Campus Master Plan EIR (CSUDH MP) (CSUDH 2019)
2. March Joint Powers Association K4 Warehouse and Cactus Channel Improvements EIR (March JPA K4) (March JPA 2019)
3. Mineta San Jose Airport Amendment to the Airport Master Plan EIR (San Jose Airport) (City of San Jose 2019)
4. Inglewood Basketball and Entertainment Center Project EIR (IBEC) (City of Inglewood 2019)

The first step in all of the four above-listed examples included running a regional PGM, such as the Community Multiscale Air Quality (CMAQ)⁶ model or the Comprehensive Air Quality Model with extensions (CAMx)⁷ to estimate the increase in concentrations of O₃ and PM_{2.5} as a result of project-generated emissions of criteria and precursor pollutants. Air districts, such as the SCAQMD, use photochemical air quality models for regional air quality planning. These photochemical models are large-scale air quality models that simulate the changes of pollutant concentrations in the atmosphere using a set of mathematical equations characterizing the chemical and physical processes in the atmosphere (EPA 2017b).

After estimating the increase in concentrations of O₃ and PM_{2.5}, the second step in the four examples includes use of BenMAP or BenMAP-CE to estimate the resulting associated health effects. BenMAP estimates the number of health incidences resulting from changes in air pollution concentrations (EPA 2018e). The health impact function in BenMAP-CE incorporates four key sources of data: (i) modeled or monitored air quality changes, (ii) population, (iii) baseline incidence rates, and (iv) an effect estimate. While BenMAP can estimate the health effects of emissions of VOC, NO_x, CO, SO₂, and PM_{2.5}, O₃ and PM_{2.5} were determined to have the most critical health impacts and thus, were the pollutants evaluated to determine the project's health effects in three of the four examples (i.e., CSUDH MP, March JPA K4, and San Jose Airport). The current version of BenMAP-CE only has health impact functions

⁶ The CMAQ modeling system includes state-of-the-science capabilities for conducting urban-to-regional-to-hemispheric scale simulations of multiple air quality issues, including tropospheric O₃, fine particles, TACs, acid deposition, and visibility degradation. CMAQ brings together three kinds of models: (1) meteorological models to represent atmospheric and weather activities, (2) emission models to represent man-made and naturally-occurring contributions to the atmosphere, and (3) an air chemistry-transport model to predict the atmospheric fate of air pollutants under varying conditions (EPA 2018d).

⁷ CAMx is a three-dimensional grid-based Eulerian air quality model designed to estimate the formation and fate of oxidant precursors, primary and secondary particulate matter concentrations, and deposition over regional and urban spatial scales (e.g., over the contiguous U.S.) (EPA 2015a).

associated with O₃ and PM_{2.5}, which is why the example HIA using BenMAP-CE only quantitatively addressed O₃- and PM_{2.5}-related health outcomes. As such, all example HIAs focused on O₃ and PM_{2.5}.

BenMAP outputs include O₃- and PM-related health endpoints such as premature mortality, hospital admissions, and emergency room visits (City of San Jose 2019). BenMAP uses the following simplified formula to relate changes in ambient air pollution to certain health endpoints (City of San Jose 2019):

$$\text{Health Effect} = \text{Air Quality Change} \times \text{Health Effect Estimate} \times \text{Exposed Population} \\ \times \text{Background Health Incidence}$$

Population characteristics are a key variable in the BenMAP estimate of health incidences. As such, small increases in emissions in an area with a high population may have a much greater affect than large increases in emissions over an area with a small population. While location and associated population is a key factor, making the four examples specific not only to the project-generated emissions, but also to the geographic location and underlying population estimates, the findings of the four examples are provided herein for context, particularly for the conclusions.

For the CSUDH MP, the proposed project retains the existing campus enrollment cap of 20,000 full-time-equivalent students, while providing a framework for development of the CSUDH's campus in a forward-looking manner that accommodates growth from the current enrollment of approximately 11,000 full-time-equivalent students to the maximum enrollment of 20,000 full-time-equivalent students over a planning horizon extending to 2035. The project is located within Los Angeles County within the SCAQMD jurisdictional boundaries (within the South Coast Air Basin). For context, the maximum daily emissions of relevant pollutants generated by the CSUDH MP were estimated to be 482.6 pounds per day of VOC, 240.1 pounds per day of NO_x, 2.7 pounds per day of SO_x, and 79.5 pounds per day of PM_{2.5}.

The CSUDH MP presented HIA results in terms of an increase in health incidences and the increase in background health incidence for various health outcomes referred to as endpoints. The background health incidence is the actual incidence of health effects as measured in the local population in the absence of additional emissions from the project (CSUDH 2019).

The two highest PM_{2.5}-related health outcomes attributed to the CSUDH MP project-related increases in ambient air concentrations included mortality (10.31 incidences per year, 0.0032% of background health incidence) and asthma-related emergency room visits (4.38 incidences per year, 0.0033% of background health incidence). The remaining health endpoints, including asthma-related hospital admissions, all cardiovascular-related hospital admissions (not including myocardial infarctions), all respiratory-related hospital admissions, and nonfatal acute myocardial infarction ranged from 0.00044 to 2.44 incidences per year (0.00047% to 0.0014% of background health incidence) (CSUDH 2019).

O₃-related health outcomes attributed to the CSUDH MP project-related increases in ambient air concentrations included respiratory-related hospital admissions (0.67 incidences per year, 0.00034% of background health incidence), mortality (0.28 incidences per year, 0.00013% of background health incidence), and asthma-related emergency room visits for any age range (lower than 3.38 incidences per year for all age groups, lower than 0.0058% percent in background health incidence for all age groups) (CSUDH 2019).

The CSUDH MP HIA then concluded that “for all these health endpoints, the number of estimated incidences is less than 0.0058% of the background health incidence. . . . When taken into context, the small increase in incidences and the very

small percent of the number of background incidences indicate that these health impacts are negligible in a developed, urban environment” (CSUDH 2019). Of the four examples discussed herein, the CSUDH MP HIA estimated the highest health effects from PM_{2.5}; however, the associated health effect was determined to not be substantial.

The March JPA K4 project is also located within the SCAQMD jurisdictional boundaries (within the South Coast Air Basin), but within Riverside County. The proposed project involves the development of the five parcels on the 35.4-acre K4 Parcel with a 718,000-square-foot building conservatively assumed to be occupied by High-Cube ecommerce/fulfillment center use. The mitigated maximum daily operational emissions of relevant pollutants generated by the March JPA K4 were estimated to be 41.0 pounds per day of VOC, 253.0 pounds per day of NO_x, 1.4 pounds per day of SO_x, and 30.3 pounds per day of PM_{2.5}. The March HPA K4 HIA determined that “for all these health endpoints, the number of estimated incidences is less than 0.0042% of the baseline number of incidences,” and that “these health impacts are conservatively estimated, and the actual impacts may be zero” (March JPA 2019).

While the San Jose Airport project is not similar to the proposed Northside Specific Plan Project based on land use type, emissions profile, and geographical location, the results still provide a relevant data point. San Jose Airport is located in Santa Clara County within the Bay Area AQMD jurisdictional boundaries (within the San Francisco Bay Area Air Basin). The San Jose Airport project includes amending the approved 2018 Airport Master Plan to (a) shift the planning horizon year from 2027 to 2037, (b) modify future facility requirements at the airport to reflect updated demand forecasts, and (c) modify certain components of the airfield to reduce the potential for runway incursions (City of San Jose 2019). The following emissions inventory was assumed for the HIA for San Jose Airport: 57.3 pounds per day of VOC, 5,643.0 pounds per day of NO_x, and 51.6 pounds per day of PM_{2.5}.

The San Jose Airport HIA estimated that the highest health endpoint from PM_{2.5} was mortality, at 4.46 incidences (0.0017% of background health incidence). All other PM_{2.5}-related health incidences ranged from 0.00022 to 1.89 (0.00027% to 0.0016% of background health incidence). For O₃-related health endpoints, the highest was emergency room visits for asthma, which was estimated to be 11.05 incidences (0.028% of background health incidence) for ages 0–17 and 14.59 incidences (0.019% of background health incidence) for ages 18–99 (City of San Jose 2019). Of the four examples discussed herein, the San Jose Airport resulted in the greatest O₃ incidences, which correlates with the estimated high emissions of O₃-precursors, specifically NO_x at 5,643 pounds per day. Nonetheless, the conclusion was that “when taken into context, the small increase in incidences and the very small percent of the number of background incidences indicate that these health impacts are negligible in a developed, urban environment” (City of San Jose 2019).

The IBEC project HIA provides another important data point for consideration. The IBEC project consists of an arena designed to host the LA Clippers basketball team with up to 18,000 fixed seats for National Basketball Association games and up to 500 additional temporary seats for events such as family shows, concerts, conventions, corporate events, and non-LA Clippers sporting events. The IBEC project is located within Los Angeles County within the jurisdictional boundaries of the SCAQMD (within the South Coast Air Basin). The IBEC EIR evaluated nine operational scenarios; across these multiple scenarios, the estimated maximum daily net increase in operational emissions of relevant pollutants was 94 pounds per day of VOC, 99 pounds per day of NO_x, 3 pounds per day of SO_x, and 89 pounds per day of PM_{2.5}.

The IBEC EIR analysis provided helpful context on using regional models for individual projects, as follows (City of Inglewood 2019):

Generally, models that correlate criteria air pollutant concentrations with specific health effects focus on regulatory decision-making that will apply throughout an entire air basin or region. These models focus on the region-wide health effects of pollutants so that regulators can assess the costs and benefits of adopting a proposed regulation that applies to an entire category of air pollutant sources, rather than the health effects related to emissions from a specific proposed project or source. Because of the scale of these analyses, any one project is likely to have only very small incremental effects which may be difficult to differentiate from the effects of air pollutant concentrations in an entire air basin. . . . For regional pollutants, it is difficult to trace a particular project's criteria air pollutant emissions to a specific health effect. Moreover, the modeled results may be misleading because the margin of error in such modeling is large enough that, even if the modeled results report a given health effect, the model is sufficiently imprecise that the actual effect may differ from the reported results; that is, the modeled results suggest precision, when in fact available models cannot be that precise on a project level.

For O₃-related health endpoints, emergency room visits for asthma was estimated to be 0.087 incidences per year for all studied age groups combined, 0.016 incidences per year of respiratory-related hospital admissions, and less than 0.02 incidences per year of mortality; the amount of estimated incremental health effects incidences is less than 0.0001% of the baseline number of health effects incidences in the study area.

A key finding from the IBEC HIA was that the for PM_{2.5}-related health endpoints, due to the very small changes in ambient PM_{2.5} concentrations as modeled by CMAQ, all of the estimated incremental health incidences were negative values. The IBEC HIA stated that this further confirms that the modeled PM_{2.5} concentrations are within the model's margin of error, no meaningful conclusions can be reached on the specific health effects that may be caused by the proposed project O₃ precursor and PM_{2.5} emissions, and health impacts may in fact be zero, and they would still be well within the models' margin of error (City of Inglewood 2019).

It is also important to note that while these results conclude that the project emissions do not result in a substantial increase in health incidences, the estimated emissions and assumed toxicity are also conservatively inputted into the HIA and thus, overestimate health incidences, particularly for PM_{2.5}. For example, as discussed in the San Jose Airport HIA (City of San Jose 2019),

“The USEPA has also stated that results from various studies have shown the importance of considering particle size, composition, and particle source in determining the health impacts of PM. Further, USEPA found that studies have reported that particles from industrial sources and from coal combustion appear to be the most significant contributors to PM-related mortality, consistent with the findings by Rohr and Wyzga and others. This is particularly important to note here, as the majority of PM emissions generated from the Project are from entrained roadway dust, and not from combustion. Therefore, by not considering the relative toxicity of PM components, the results presented here are conservative.”

As explained in the SJVAPCD brief and noted previously, running the PGM used for predicting O₃ attainment with the emissions solely from an individual project like the Friant Ranch project or the proposed project is not likely to yield valid information given the relative scale involved. The four examples discussed herein support the SJVAPCD's brief contention that consistent, reliable, and meaningful results may not be provided by methods applied at this time. Accordingly, additional work in the industry and more importantly, air district participation, is needed to

develop a more meaningful analysis to correlate project-level mass criteria air pollutant emissions and health effects for decision makers and the public. Furthermore, at the time of writing, no HIA has concluded that health effects estimated using the PGM and BenMAP approach are substantial provided that the estimated project-generated incidences represent a very small percentage of the number of background incidences, potentially within the models' margin of error.

5 Evaluation of the Specific Plan's Health Effects

Based on the evaluation of methods available provided in Section 4, this evaluation does not attempt to quantify health effects, but builds upon the discussion provided in Sections 2 and 3 to disclose potential health effects associated with the Specific Plan. As explained in Section 2, the EPA and CARB have established AAQS at levels above which concentrations could be harmful to human health and welfare, with an adequate margin of safety. Further, California air districts (like SCAQMD) have established emission-based thresholds that provide project-level estimates of criteria air pollutant quantities that air basins can accommodate without affecting the attainment dates for the AAQS. Accordingly, elevated levels of criteria air pollutants as a result of a Specific Plan's emissions could cause adverse health effects associated with these pollutants.

In this case, construction and operation of the Specific Plan could result in emissions that would exceed the SCAQMD thresholds for criteria air pollutants including VOC, NO_x, CO PM₁₀ and PM_{2.5}. As shown in Table 3.2-2 (Section 3.2), the SCAB is designated as a nonattainment area for federal and state O₃ standards and federal and state PM_{2.5} standards. The SCAB is designated as a nonattainment area for state PM₁₀ standards; however, it is designated as an attainment area for federal PM₁₀ standards. While the SCAB has been designated as nonattainment for the federal rolling 3-month average lead standard, it is designated attainment for the state lead standard (EPA 2018b; CARB 2018a).

As discussed in Section 3.2, health effects associated with O₃ include respiratory symptoms, worsening of lung disease leading to premature death, and damage to lung tissue (CARB 2019h). VOCs and NO_x are precursors to O₃, for which the SCAB is designated as nonattainment with respect to the NAAQS and CAAQS. The health effects associated with O₃ are generally associated with reduced lung function. The contribution of VOCs and NO_x to regional ambient O₃ concentrations is the result of complex photochemistry. The increases in O₃ concentrations in the SCAB due to O₃ precursor emissions tend to be found downwind from the source location to allow time for the photochemical reactions to occur. However, the potential for exacerbating excessive O₃ concentrations would also depend on the time of year that the VOC emissions would occur because exceedances of the O₃ ambient air quality standards tend to occur between April and October when solar radiation is highest. The holistic effect of a single project's emissions of O₃ precursors is speculative because of the lack of quantitative methods to assess this impact. Nonetheless, because VOC and NO_x emissions associated with Specific Plan construction and operation would exceed the SCAQMD mass daily construction threshold, it could minimally contribute to regional O₃ concentrations and the associated health effects.

Health effects associated with NO_x include lung irritation and enhanced allergic responses (see Section 3; CARB 2019h). Health impacts that result from NO₂ and NO_x include respiratory irritation. Although the Specific Plan construction and operation would generate NO_x emissions that would exceed the SCAQMD mass daily thresholds, construction and operation of the Specific Plan is not anticipated to contribute to exceedances of the NAAQS and CAAQS for NO₂ because the SCAB is designated as in attainment of the NAAQS and CAAQS for NO₂ and the existing NO₂ concentrations in the area are well below the NAAQS and CAAQS standards. Nonetheless, because there are

nearby receptors to be affected by off-road construction equipment and operational sources of NO_x, the Specific Plan could result in potential health effects associated with NO₂ and NO_x

Health effects associated with CO include chest pain in patients with heart disease, headache, light-headedness, and reduced mental alertness (See Section 3; CARB 2019h). CO tends to be a localized impact associated with congested intersections. The associated potential for CO hotspots were discussed in Section 3.2.4 Impacts Analysis and are determined to be a less-than-significant impact. As such, emissions would not contribute to health effects associated with this pollutant.

The construction and operation of the Specific Plan would exceed the SCAQMD threshold for PM₁₀ and PM_{2.5}. As such, the Specific Plan would potentially contribute to exceedances of the NAAQS and CAAQS for particulate matter or would obstruct the SCAB from coming into attainment for these pollutants. Because the Specific Plan has the potential to contribute particulate matter during construction and operation, the Specific Plan could result in associated health effects.

In summary, because construction and operation of the Specific Plan could result in exceedances of the SCAQMD significance thresholds for VOC, NO_x, CO, PM₁₀, and PM_{2.5}, the Specific Plan would potentially result in health effects associated with those pollutants, as explained in Section 3.2. At the time of preparation of this memorandum, there are no modeling tools, as explained above, that can provide reliable and meaningful additional information regarding the potential health effects or potential for further nonattainment days from criteria air pollutants generated by the Specific Plan.

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