

Appendix A

Air Quality/Energy/Greenhouse Gas Emissions Data

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, Annual

City of Gardena - Hotel Development MND
Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Fast Food Restaurant with Drive Thru	5.00	1000sqft	0.11	5,000.00	0
Hotel	450.00	Room	8.00	653,400.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	8			Operational Year	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	576.36	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, Annual

Project Characteristics - CO2 Intensity factor adjusted to reflect more recent RPS value (note: CalEEMod default factor is from 2012) - factor reduced by 17.9% based on change in eligible renewables from 22% in 2013 to 36% 2018 [702.44 -> 576.36]

Land Use - Land Uses: 450 hotel rooms + 5,000 sf of fast food restaurant.

Construction Phase - Construction schedule estimated based on project size.

Off-road Equipment -

Off-road Equipment - Project construction equipment provided by project applicant.

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Off-road Equipment -

Trips and VMT - Default values used for construction phase trips.

Demolition -

Grading - No material import/export anticipated. Total acres graded would equal total land area modeled (8 acres).

Vehicle Trips - 8.36 trips per dwelling unit for hotel (Hotel - ITE Code 310), and 470.95 trips per ksf of fast food, as provided by the Traffic Study prepared by Kittelson & Associates, Inc.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Woodstoves -

Energy Use -

Construction Off-road Equipment Mitigation - Water Exposed Area 3 times daily; Unpaved Road Mitigation (Moisture Content at 12%; Vehicle Speed 15 MPH); Soil Stabilizer for Unpaved Roads (30% reductions); Replace Ground Cover of Area Disturbed (15% reduction).

Mobile Land Use Mitigation -

Mobile Commute Mitigation - VMT mitigation included to reflect the requirements to reduce VMT by 3.1%, as provided in the traffic study. Equivalent to Workplace Parking Charge (100% eligible, daily parking charge of \$2).

Fleet Mix -

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, Annual

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	20.00	150.00
tblGrading	AcresOfGrading	10.00	8.00
tblLandUse	LotAcreage	15.00	8.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	576.36
tblVehicleTrips	ST_TR	722.03	470.95
tblVehicleTrips	ST_TR	8.19	8.36
tblVehicleTrips	SU_TR	542.72	470.95
tblVehicleTrips	SU_TR	5.95	8.36
tblVehicleTrips	WD_TR	496.12	470.95
tblVehicleTrips	WD_TR	8.17	8.36

2.0 Emissions Summary

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, Annual

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					
2021	0.4136	3.5847	3.5069	9.6600e-003	0.5587	0.1304	0.6891	0.1922	0.1222	0.3144	0.0000	878.6712	878.6712	0.1006	0.0000	881.1862
2022	3.1173	0.4159	0.6320	1.4900e-003	0.0729	0.0182	0.0910	0.0195	0.0173	0.0368	0.0000	133.1604	133.1604	0.0144	0.0000	133.5190
Maximum	3.1173	3.5847	3.5069	9.6600e-003	0.5587	0.1304	0.6891	0.1922	0.1222	0.3144	0.0000	878.6712	878.6712	0.1006	0.0000	881.1862

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					
2021	0.4136	3.5846	3.5069	9.6600e-003	0.4552	0.1304	0.5857	0.1366	0.1222	0.2587	0.0000	878.6709	878.6709	0.1006	0.0000	881.1859
2022	3.1173	0.4159	0.6320	1.4900e-003	0.0729	0.0182	0.0910	0.0195	0.0173	0.0368	0.0000	133.1603	133.1603	0.0144	0.0000	133.5190
Maximum	3.1173	3.5846	3.5069	9.6600e-003	0.4552	0.1304	0.5857	0.1366	0.1222	0.2587	0.0000	878.6709	878.6709	0.1006	0.0000	881.1859

	ROG	NOx	CO	SO2	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	16.38	0.00	13.26	26.28	0.00	15.84	0.00	0.00	0.00	0.00	0.00	0.00

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-22-2021	4-21-2021	1.0474	1.0474
2	4-22-2021	7-21-2021	1.0449	1.0449
3	7-22-2021	10-21-2021	1.0580	1.0580
4	10-22-2021	1-21-2022	1.0369	1.0369
5	1-22-2022	4-21-2022	1.0797	1.0797
6	4-22-2022	7-21-2022	1.3868	1.3868
7	7-22-2022	9-30-2022	0.8534	0.8534
		Highest	1.3868	1.3868

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	2.6848	5.0000e-005	5.8200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0113	0.0113	3.0000e-005	0.0000	0.0120
Energy	0.1277	1.1606	0.9749	6.9600e-003		0.0882	0.0882		0.0882	0.0882	0.0000	2,855.3156	2,855.3156	0.1043	0.0397	2,869.7643
Mobile	1.4980	7.2788	16.3883	0.0549	4.3476	0.0470	4.3946	1.1654	0.0438	1.2092	0.0000	5,072.3618	5,072.3618	0.2813	0.0000	5,079.3929
Waste						0.0000	0.0000		0.0000	0.0000	61.7032	0.0000	61.7032	3.6466	0.0000	152.8670
Water						0.0000	0.0000		0.0000	0.0000	4.1030	47.9897	52.0927	0.4238	0.0105	65.8025
Total	4.3105	8.4394	17.3690	0.0618	4.3476	0.1352	4.4828	1.1654	0.1320	1.2974	65.8061	7,975.6783	8,041.4844	4.4560	0.0502	8,167.8386

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, 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	2.6848	5.0000e-005	5.8200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0113	0.0113	3.0000e-005	0.0000	0.0120
Energy	0.1277	1.1606	0.9749	6.9600e-003		0.0882	0.0882		0.0882	0.0882	0.0000	2,855.3156	2,855.3156	0.1043	0.0397	2,869.7643
Mobile	1.4823	7.1726	16.0066	0.0533	4.2093	0.0457	4.2550	1.1283	0.0426	1.1709	0.0000	4,926.0995	4,926.0995	0.2745	0.0000	4,932.9623
Waste						0.0000	0.0000		0.0000	0.0000	61.7032	0.0000	61.7032	3.6466	0.0000	152.8670
Water						0.0000	0.0000		0.0000	0.0000	4.1030	47.9897	52.0927	0.4238	0.0105	65.8025
Total	4.2948	8.3333	16.9873	0.0602	4.2093	0.1339	4.3432	1.1283	0.1308	1.2591	65.8061	7,829.4160	7,895.2221	4.4492	0.0502	8,021.4081

	ROG	NOx	CO	SO2	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	0.36	1.26	2.20	2.56	3.18	0.95	3.11	3.18	0.91	2.95	0.00	1.83	1.82	0.15	0.00	1.79

3.0 Construction Detail**Construction Phase**

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/22/2021	2/4/2021	5	10	
2	Grading	Grading	2/5/2021	3/4/2021	5	20	
3	Building Construction	Building Construction	3/5/2021	1/20/2022	5	230	
4	Paving	Paving	1/21/2022	2/17/2022	5	20	
5	Architectural Coating	Architectural Coating	2/18/2022	9/15/2022	5	150	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 8

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 987,600; Non-Residential Outdoor: 329,200; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	277.00	108.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	55.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, Annual

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2021**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					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0194	0.2025	0.1058	1.9000e-004		0.0102	0.0102		9.4000e-003	9.4000e-003	0.0000	16.7179	16.7179	5.4100e-003	0.0000	16.8530
Total	0.0194	0.2025	0.1058	1.9000e-004	0.0903	0.0102	0.1006	0.0497	9.4000e-003	0.0591	0.0000	16.7179	16.7179	5.4100e-003	0.0000	16.8530

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, Annual

3.2 Site Preparation - 2021**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.9000e-004	3.0000e-004	3.4000e-003	1.0000e-005	9.9000e-004	1.0000e-005	9.9000e-004	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8900	0.8900	3.0000e-005	0.0000	0.8907
Total	3.9000e-004	3.0000e-004	3.4000e-003	1.0000e-005	9.9000e-004	1.0000e-005	9.9000e-004	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8900	0.8900	3.0000e-005	0.0000	0.8907

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					0.0299	0.0000	0.0299	0.0165	0.0000	0.0165	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0194	0.2025	0.1058	1.9000e-004		0.0102	0.0102		9.4000e-003	9.4000e-003	0.0000	16.7178	16.7178	5.4100e-003	0.0000	16.8530
Total	0.0194	0.2025	0.1058	1.9000e-004	0.0299	0.0102	0.0402	0.0165	9.4000e-003	0.0259	0.0000	16.7178	16.7178	5.4100e-003	0.0000	16.8530

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, Annual

3.2 Site Preparation - 2021**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.9000e-004	3.0000e-004	3.4000e-003	1.0000e-005	9.9000e-004	1.0000e-005	9.9000e-004	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8900	0.8900	3.0000e-005	0.0000	0.8907
Total	3.9000e-004	3.0000e-004	3.4000e-003	1.0000e-005	9.9000e-004	1.0000e-005	9.9000e-004	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8900	0.8900	3.0000e-005	0.0000	0.8907

3.3 Grading - 2021**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					0.0645	0.0000	0.0645	0.0336	0.0000	0.0336	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0229	0.2474	0.1586	3.0000e-004		0.0116	0.0116		0.0107	0.0107	0.0000	26.0537	26.0537	8.4300e-003	0.0000	26.2644
Total	0.0229	0.2474	0.1586	3.0000e-004	0.0645	0.0116	0.0761	0.0336	0.0107	0.0442	0.0000	26.0537	26.0537	8.4300e-003	0.0000	26.2644

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, Annual

3.3 Grading - 2021**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	6.5000e-004	5.0000e-004	5.6700e-003	2.0000e-005	1.6400e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.4834	1.4834	4.0000e-005	0.0000	1.4845
Total	6.5000e-004	5.0000e-004	5.6700e-003	2.0000e-005	1.6400e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.4834	1.4834	4.0000e-005	0.0000	1.4845

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					0.0214	0.0000	0.0214	0.0111	0.0000	0.0111	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0229	0.2474	0.1586	3.0000e-004		0.0116	0.0116		0.0107	0.0107	0.0000	26.0537	26.0537	8.4300e-003	0.0000	26.2643
Total	0.0229	0.2474	0.1586	3.0000e-004	0.0214	0.0116	0.0330	0.0111	0.0107	0.0218	0.0000	26.0537	26.0537	8.4300e-003	0.0000	26.2643

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, Annual

3.3 Grading - 2021**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	6.5000e-004	5.0000e-004	5.6700e-003	2.0000e-005	1.6400e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.4834	1.4834	4.0000e-005	0.0000	1.4845
Total	6.5000e-004	5.0000e-004	5.6700e-003	2.0000e-005	1.6400e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.4834	1.4834	4.0000e-005	0.0000	1.4845

3.4 Building Construction - 2021**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	0.2053	1.8827	1.7901	2.9100e-003		0.1035	0.1035		0.0973	0.0973	0.0000	250.1683	250.1683	0.0604	0.0000	251.6771
Total	0.2053	1.8827	1.7901	2.9100e-003		0.1035	0.1035		0.0973	0.0973	0.0000	250.1683	250.1683	0.0604	0.0000	251.6771

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, Annual

3.4 Building Construction - 2021**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	0.0362	1.1511	0.3121	2.9700e-003	0.0735	2.3500e-003	0.0758	0.0212	2.2400e-003	0.0235	0.0000	287.5136	287.5136	0.0176	0.0000	287.9545
Worker	0.1287	0.1002	1.1313	3.2700e-003	0.3278	2.7000e-003	0.3305	0.0871	2.4900e-003	0.0896	0.0000	295.8444	295.8444	8.7100e-003	0.0000	296.0621
Total	0.1649	1.2513	1.4434	6.2400e-003	0.4013	5.0500e-003	0.4063	0.1083	4.7300e-003	0.1130	0.0000	583.3580	583.3580	0.0264	0.0000	584.0166

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	0.2053	1.8827	1.7901	2.9100e-003		0.1035	0.1035		0.0973	0.0973	0.0000	250.1680	250.1680	0.0604	0.0000	251.6768
Total	0.2053	1.8827	1.7901	2.9100e-003		0.1035	0.1035		0.0973	0.0973	0.0000	250.1680	250.1680	0.0604	0.0000	251.6768

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, Annual

3.4 Building Construction - 2021**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	0.0362	1.1511	0.3121	2.9700e-003	0.0735	2.3500e-003	0.0758	0.0212	2.2400e-003	0.0235	0.0000	287.5136	287.5136	0.0176	0.0000	287.9545
Worker	0.1287	0.1002	1.1313	3.2700e-003	0.3278	2.7000e-003	0.3305	0.0871	2.4900e-003	0.0896	0.0000	295.8444	295.8444	8.7100e-003	0.0000	296.0621
Total	0.1649	1.2513	1.4434	6.2400e-003	0.4013	5.0500e-003	0.4063	0.1083	4.7300e-003	0.1130	0.0000	583.3580	583.3580	0.0264	0.0000	584.0166

3.4 Building Construction - 2022**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	0.0119	0.1093	0.1145	1.9000e-004		5.6600e-003	5.6600e-003		5.3300e-003	5.3300e-003	0.0000	16.2208	16.2208	3.8900e-003	0.0000	16.3179
Total	0.0119	0.1093	0.1145	1.9000e-004		5.6600e-003	5.6600e-003		5.3300e-003	5.3300e-003	0.0000	16.2208	16.2208	3.8900e-003	0.0000	16.3179

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, Annual

3.4 Building Construction - 2022**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.2000e-003	0.0709	0.0191	1.9000e-004	4.7600e-003	1.3000e-004	4.9000e-003	1.3700e-003	1.3000e-004	1.5000e-003	0.0000	18.4715	18.4715	1.1000e-003	0.0000	18.4991
Worker	7.8200e-003	5.8700e-003	0.0676	2.0000e-004	0.0213	1.7000e-004	0.0214	5.6400e-003	1.6000e-004	5.8000e-003	0.0000	18.5011	18.5011	5.1000e-004	0.0000	18.5138
Total	0.0100	0.0768	0.0867	3.9000e-004	0.0260	3.0000e-004	0.0263	7.0100e-003	2.9000e-004	7.3000e-003	0.0000	36.9725	36.9725	1.6100e-003	0.0000	37.0129

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	0.0119	0.1093	0.1145	1.9000e-004		5.6600e-003	5.6600e-003		5.3300e-003	5.3300e-003	0.0000	16.2208	16.2208	3.8900e-003	0.0000	16.3179
Total	0.0119	0.1093	0.1145	1.9000e-004		5.6600e-003	5.6600e-003		5.3300e-003	5.3300e-003	0.0000	16.2208	16.2208	3.8900e-003	0.0000	16.3179

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, Annual

3.4 Building Construction - 2022**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.2000e-003	0.0709	0.0191	1.9000e-004	4.7600e-003	1.3000e-004	4.9000e-003	1.3700e-003	1.3000e-004	1.5000e-003	0.0000	18.4715	18.4715	1.1000e-003	0.0000	18.4991
Worker	7.8200e-003	5.8700e-003	0.0676	2.0000e-004	0.0213	1.7000e-004	0.0214	5.6400e-003	1.6000e-004	5.8000e-003	0.0000	18.5011	18.5011	5.1000e-004	0.0000	18.5138
Total	0.0100	0.0768	0.0867	3.9000e-004	0.0260	3.0000e-004	0.0263	7.0100e-003	2.9000e-004	7.3000e-003	0.0000	36.9725	36.9725	1.6100e-003	0.0000	37.0129

3.5 Paving - 2022**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	0.0110	0.1113	0.1458	2.3000e-004		5.6800e-003	5.6800e-003		5.2200e-003	5.2200e-003	0.0000	20.0276	20.0276	6.4800e-003	0.0000	20.1895
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0110	0.1113	0.1458	2.3000e-004		5.6800e-003	5.6800e-003		5.2200e-003	5.2200e-003	0.0000	20.0276	20.0276	6.4800e-003	0.0000	20.1895

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, Annual

3.5 Paving - 2022**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	6.1000e-004	4.5000e-004	5.2300e-003	2.0000e-005	1.6400e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.4312	1.4312	4.0000e-005	0.0000	1.4322
Total	6.1000e-004	4.5000e-004	5.2300e-003	2.0000e-005	1.6400e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.4312	1.4312	4.0000e-005	0.0000	1.4322

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	0.0110	0.1113	0.1458	2.3000e-004		5.6800e-003	5.6800e-003		5.2200e-003	5.2200e-003	0.0000	20.0275	20.0275	6.4800e-003	0.0000	20.1895
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0110	0.1113	0.1458	2.3000e-004		5.6800e-003	5.6800e-003		5.2200e-003	5.2200e-003	0.0000	20.0275	20.0275	6.4800e-003	0.0000	20.1895

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, Annual

3.5 Paving - 2022**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	6.1000e-004	4.5000e-004	5.2300e-003	2.0000e-005	1.6400e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.4312	1.4312	4.0000e-005	0.0000	1.4322
Total	6.1000e-004	4.5000e-004	5.2300e-003	2.0000e-005	1.6400e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.4312	1.4312	4.0000e-005	0.0000	1.4322

3.6 Architectural Coating - 2022**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	3.0517					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0153	0.1056	0.1360	2.2000e-004		6.1300e-003	6.1300e-003		6.1300e-003	6.1300e-003	0.0000	19.1494	19.1494	1.2500e-003	0.0000	19.1806
Total	3.0670	0.1056	0.1360	2.2000e-004		6.1300e-003	6.1300e-003		6.1300e-003	6.1300e-003	0.0000	19.1494	19.1494	1.2500e-003	0.0000	19.1806

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, Annual

3.6 Architectural Coating - 2022**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	0.0166	0.0125	0.1437	4.4000e-004	0.0452	3.6000e-004	0.0456	0.0120	3.3000e-004	0.0123	0.0000	39.3589	39.3589	1.0800e-003	0.0000	39.3860
Total	0.0166	0.0125	0.1437	4.4000e-004	0.0452	3.6000e-004	0.0456	0.0120	3.3000e-004	0.0123	0.0000	39.3589	39.3589	1.0800e-003	0.0000	39.3860

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	3.0517					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0153	0.1056	0.1360	2.2000e-004		6.1300e-003	6.1300e-003		6.1300e-003	6.1300e-003	0.0000	19.1494	19.1494	1.2500e-003	0.0000	19.1806
Total	3.0670	0.1056	0.1360	2.2000e-004		6.1300e-003	6.1300e-003		6.1300e-003	6.1300e-003	0.0000	19.1494	19.1494	1.2500e-003	0.0000	19.1806

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, Annual

3.6 Architectural Coating - 2022**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	0.0166	0.0125	0.1437	4.4000e-004	0.0452	3.6000e-004	0.0456	0.0120	3.3000e-004	0.0123	0.0000	39.3589	39.3589	1.0800e-003	0.0000	39.3860
Total	0.0166	0.0125	0.1437	4.4000e-004	0.0452	3.6000e-004	0.0456	0.0120	3.3000e-004	0.0123	0.0000	39.3589	39.3589	1.0800e-003	0.0000	39.3860

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

Workplace Parking Charge

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, 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	1.4823	7.1726	16.0066	0.0533	4.2093	0.0457	4.2550	1.1283	0.0426	1.1709	0.0000	4,926.0995	4,926.0995	0.2745	0.0000	4,932.9623
Unmitigated	1.4980	7.2788	16.3883	0.0549	4.3476	0.0470	4.3946	1.1654	0.0438	1.2092	0.0000	5,072.3618	5,072.3618	0.2813	0.0000	5,079.3929

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Fast Food Restaurant with Drive Thru	2,354.75	2,354.75	2354.75	2,478,110	2,400,961
Hotel	3,762.00	3,762.00	3762.00	8,976,776	8,689,509
Total	6,116.75	6,116.75	6,116.75	11,454,885	11,090,470

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
Fast Food Restaurant with Drive Thru	16.60	8.40	6.90	2.20	78.80	19.00	29	21	50
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Fast Food Restaurant with Drive Thru	0.546501	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.030678	0.002515	0.002201	0.005142	0.000687	0.000876
Hotel	0.546501	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.030678	0.002515	0.002201	0.005142	0.000687	0.000876

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, Annual

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	1,591.8980	1,591.8980	0.0801	0.0166	1,598.8389
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,591.8980	1,591.8980	0.0801	0.0166	1,598.8389
NaturalGas Mitigated	0.1277	1.1606	0.9749	6.9600e-003		0.0882	0.0882		0.0882	0.0882	0.0000	1,263.4175	1,263.4175	0.0242	0.0232	1,270.9254
NaturalGas Unmitigated	0.1277	1.1606	0.9749	6.9600e-003		0.0882	0.0882		0.0882	0.0882	0.0000	1,263.4175	1,263.4175	0.0242	0.0232	1,270.9254

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, 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					
Fast Food Restaurant with Drive Thru	1.2966e+006	6.9900e-003	0.0636	0.0534	3.8000e-004		4.8300e-003	4.8300e-003		4.8300e-003	4.8300e-003	0.0000	69.1915	69.1915	1.3300e-003	1.2700e-003	69.6027
Hotel	2.2379e+007	0.1207	1.0970	0.9215	6.5800e-003		0.0834	0.0834		0.0834	0.0834	0.0000	1,194.2260	1,194.2260	0.0229	0.0219	1,201.3227
Total		0.1277	1.1606	0.9749	6.9600e-003		0.0882	0.0882		0.0882	0.0882	0.0000	1,263.4175	1,263.4175	0.0242	0.0232	1,270.9254

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					
Fast Food Restaurant with Drive Thru	1.2966e+006	6.9900e-003	0.0636	0.0534	3.8000e-004		4.8300e-003	4.8300e-003		4.8300e-003	4.8300e-003	0.0000	69.1915	69.1915	1.3300e-003	1.2700e-003	69.6027
Hotel	2.2379e+007	0.1207	1.0970	0.9215	6.5800e-003		0.0834	0.0834		0.0834	0.0834	0.0000	1,194.2260	1,194.2260	0.0229	0.0219	1,201.3227
Total		0.1277	1.1606	0.9749	6.9600e-003		0.0882	0.0882		0.0882	0.0882	0.0000	1,263.4175	1,263.4175	0.0242	0.0232	1,270.9254

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, Annual

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

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Fast Food Restaurant with Drive Thru	182400	47.6853	2.4000e-003	5.0000e-004	47.8932
Hotel	5.90674e+006	1,544.2128	0.0777	0.0161	1,550.9457
Total		1,591.8980	0.0801	0.0166	1,598.8389

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Fast Food Restaurant with Drive Thru	182400	47.6853	2.4000e-003	5.0000e-004	47.8932
Hotel	5.90674e+006	1,544.2128	0.0777	0.0161	1,550.9457
Total		1,591.8980	0.0801	0.0166	1,598.8389

6.0 Area Detail**6.1 Mitigation Measures Area**

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, 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	2.6848	5.0000e-005	5.8200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0113	0.0113	3.0000e-005	0.0000	0.0120
Unmitigated	2.6848	5.0000e-005	5.8200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0113	0.0113	3.0000e-005	0.0000	0.0120

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	0.3052					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.3791					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.4000e-004	5.0000e-005	5.8200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0113	0.0113	3.0000e-005	0.0000	0.0120
Total	2.6848	5.0000e-005	5.8200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0113	0.0113	3.0000e-005	0.0000	0.0120

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, 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	0.3052					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.3791					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.4000e-004	5.0000e-005	5.8200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0113	0.0113	3.0000e-005	0.0000	0.0120
Total	2.6848	5.0000e-005	5.8200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0113	0.0113	3.0000e-005	0.0000	0.0120

7.0 Water Detail**7.1 Mitigation Measures Water**

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	52.0927	0.4238	0.0105	65.8025
Unmitigated	52.0927	0.4238	0.0105	65.8025

7.2 Water by Land Use**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Fast Food Restaurant with Drive Thru	1.51767 / 0.0968725	5.9292	0.0497	1.2200e-003	7.5372
Hotel	11.415 / 1.26834	46.1635	0.3741	9.2300e-003	58.2652
Total		52.0927	0.4238	0.0105	65.8025

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, Annual

7.2 Water by Land Use**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Fast Food Restaurant with Drive Thru	1.51767 / 0.0968725	5.9292	0.0497	1.2200e-003	7.5372
Hotel	11.415 / 1.26834	46.1635	0.3741	9.2300e-003	58.2652
Total		52.0927	0.4238	0.0105	65.8025

8.0 Waste Detail**8.1 Mitigation Measures Waste****Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	61.7032	3.6466	0.0000	152.8670
Unmitigated	61.7032	3.6466	0.0000	152.8670

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, Annual

8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Fast Food Restaurant with Drive Thru	57.59	11.6903	0.6909	0.0000	28.9621
Hotel	246.38	50.0129	2.9557	0.0000	123.9049
Total		61.7032	3.6466	0.0000	152.8670

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Fast Food Restaurant with Drive Thru	57.59	11.6903	0.6909	0.0000	28.9621
Hotel	246.38	50.0129	2.9557	0.0000	123.9049
Total		61.7032	3.6466	0.0000	152.8670

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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City of Gardena - Hotel Development MND - Los Angeles-South Coast County, 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

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, Summer

City of Gardena - Hotel Development MND
Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Fast Food Restaurant with Drive Thru	5.00	1000sqft	0.11	5,000.00	0
Hotel	450.00	Room	8.00	653,400.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	8			Operational Year	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	576.36	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, Summer

Project Characteristics - CO2 Intensity factor adjusted to reflect more recent RPS value (note: CalEEMod default factor is from 2012) - factor reduced by 17.9% based on change in eligible renewables from 22% in 2013 to 36% 2018 [702.44 -> 576.36]

Land Use - Land Uses: 450 hotel rooms + 5,000 sf of fast food restaurant.

Construction Phase - Construction schedule estimated based on project size.

Off-road Equipment -

Off-road Equipment - Project construction equipment provided by project applicant.

Off-road Equipment - Project construction equipment provided by project applicant.

Off-road Equipment - Project construction equipment provided by project applicant.

Off-road Equipment - Project construction equipment provided by project applicant.

Off-road Equipment -

Trips and VMT - Default values used for construction phase trips.

Demolition -

Grading - No material import/export anticipated. Total acres graded would equal total land area modeled (8 acres).

Vehicle Trips - 8.36 trips per dwelling unit for hotel (Hotel - ITE Code 310), and 470.95 trips per ksf of fast food, as provided by the Traffic Study prepared by Kittelson & Associates, Inc.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Woodstoves -

Energy Use -

Construction Off-road Equipment Mitigation - Water Exposed Area 3 times daily; Unpaved Road Mitigation (Moisture Content at 12%; Vehicle Speed 15 MPH); Soil Stabilizer for Unpaved Roads (30% reductions); Replace Ground Cover of Area Disturbed (15% reduction).

Mobile Land Use Mitigation -

Mobile Commute Mitigation - VMT mitigation included to reflect the requirements to reduce VMT by 3.1%, as provided in the traffic study. Equivalent to Workplace Parking Charge (100% eligible, daily parking charge of \$2).

Fleet Mix -

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, Summer

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	20.00	150.00
tblGrading	AcresOfGrading	10.00	8.00
tblLandUse	LotAcreage	15.00	8.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	576.36
tblVehicleTrips	ST_TR	722.03	470.95
tblVehicleTrips	ST_TR	8.19	8.36
tblVehicleTrips	SU_TR	542.72	470.95
tblVehicleTrips	SU_TR	5.95	8.36
tblVehicleTrips	WD_TR	496.12	470.95
tblVehicleTrips	WD_TR	8.17	8.36

2.0 Emissions Summary

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, 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					
2021	3.9653	40.5501	30.4733	0.0864	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	8,676.467 2	8,676.467 2	1.1981	0.0000	8,698.563 6
2022	41.1145	26.3245	29.2504	0.0850	3.7877	0.8520	4.6396	1.0202	0.8014	1.8216	0.0000	8,540.614 3	8,540.614 3	0.8648	0.0000	8,562.234 9
Maximum	41.1145	40.5501	30.4733	0.0864	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	8,676.467 2	8,676.467 2	1.1981	0.0000	8,698.563 6

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					
2021	3.9653	40.5501	30.4733	0.0864	6.1902	2.0461	8.2362	3.3454	1.8824	5.2278	0.0000	8,676.467 2	8,676.467 2	1.1981	0.0000	8,698.563 5
2022	41.1145	26.3245	29.2504	0.0850	3.7877	0.8520	4.6396	1.0202	0.8014	1.8216	0.0000	8,540.614 3	8,540.614 3	0.8648	0.0000	8,562.234 9
Maximum	41.1145	40.5501	30.4733	0.0864	6.1902	2.0461	8.2362	3.3454	1.8824	5.2278	0.0000	8,676.467 2	8,676.467 2	1.1981	0.0000	8,698.563 5

	ROG	NOx	CO	SO2	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	54.76	0.00	48.40	60.33	0.00	48.50	0.00	0.00	0.00	0.00	0.00	0.00

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, 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	14.7128	4.2000e-004	0.0465	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		0.0996	0.0996	2.6000e-004		0.1061
Energy	0.6995	6.3593	5.3418	0.0382		0.4833	0.4833		0.4833	0.4833		7,631.1201	7,631.1201	0.1463	0.1399	7,676.4680
Mobile	8.7571	38.8121	91.7715	0.3125	24.3582	0.2574	24.6156	6.5187	0.2400	6.7586		31,836.5292	31,836.5292	1.7020		31,879.0799
Total	24.1694	45.1718	97.1598	0.3507	24.3582	0.7409	25.0991	6.5187	0.7235	7.2421		39,467.7489	39,467.7489	1.8486	0.1399	39,555.6540

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	14.7128	4.2000e-004	0.0465	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		0.0996	0.0996	2.6000e-004		0.1061
Energy	0.6995	6.3593	5.3418	0.0382		0.4833	0.4833		0.4833	0.4833		7,631.1201	7,631.1201	0.1463	0.1399	7,676.4680
Mobile	8.6694	38.2722	89.5169	0.3035	23.5833	0.2503	23.8336	6.3113	0.2334	6.5447		30,919.0610	30,919.0610	1.6604		30,960.5715
Total	24.0817	44.6319	94.9052	0.3416	23.5833	0.7338	24.3171	6.3113	0.7169	7.0281		38,550.2806	38,550.2806	1.8069	0.1399	38,637.1456

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, 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	0.36	1.20	2.32	2.58	3.18	0.95	3.12	3.18	0.91	2.95	0.00	2.32	2.32	2.25	0.00	2.32

3.0 Construction Detail**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/22/2021	2/4/2021	5	10	
2	Grading	Grading	2/5/2021	3/4/2021	5	20	
3	Building Construction	Building Construction	3/5/2021	1/20/2022	5	230	
4	Paving	Paving	1/21/2022	2/17/2022	5	20	
5	Architectural Coating	Architectural Coating	2/18/2022	9/15/2022	5	150	

Acres of Grading (Site Preparation Phase): 0**Acres of Grading (Grading Phase): 8****Acres of Paving: 0****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 987,600; Non-Residential Outdoor: 329,200; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	277.00	108.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	55.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, Summer

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.6569	3,685.6569	1.1920		3,715.4573
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116		3,685.6569	3,685.6569	1.1920		3,715.4573

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, Summer

3.2 Site Preparation - 2021**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	0.0772	0.0530	0.7250	2.0600e-003	0.2012	1.6300e-003	0.2028	0.0534	1.5000e-003	0.0549		204.9786	204.9786	6.0400e-003		205.1296
Total	0.0772	0.0530	0.7250	2.0600e-003	0.2012	1.6300e-003	0.2028	0.0534	1.5000e-003	0.0549		204.9786	204.9786	6.0400e-003		205.1296

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					5.9890	0.0000	5.9890	3.2920	0.0000	3.2920			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
Total	3.8882	40.4971	21.1543	0.0380	5.9890	2.0445	8.0334	3.2920	1.8809	5.1729	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, Summer

3.2 Site Preparation - 2021**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	0.0772	0.0530	0.7250	2.0600e-003	0.2012	1.6300e-003	0.2028	0.0534	1.5000e-003	0.0549		204.9786	204.9786	6.0400e-003		205.1296
Total	0.0772	0.0530	0.7250	2.0600e-003	0.2012	1.6300e-003	0.2028	0.0534	1.5000e-003	0.0549		204.9786	204.9786	6.0400e-003		205.1296

3.3 Grading - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.4463	0.0000	6.4463	3.3560	0.0000	3.3560			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671		2,871.9285	2,871.9285	0.9288		2,895,1495
Total	2.2903	24.7367	15.8575	0.0296	6.4463	1.1599	7.6062	3.3560	1.0671	4.4232		2,871.9285	2,871.9285	0.9288		2,895,1495

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, Summer

3.3 Grading - 2021**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	0.0643	0.0442	0.6042	1.7100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		170.8155	170.8155	5.0300e-003		170.9413
Total	0.0643	0.0442	0.6042	1.7100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		170.8155	170.8155	5.0300e-003		170.9413

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.1369	0.0000	2.1369	1.1125	0.0000	1.1125			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671	0.0000	2,871.9285	2,871.9285	0.9288		2,895,1495
Total	2.2903	24.7367	15.8575	0.0296	2.1369	1.1599	3.2969	1.1125	1.0671	2.1796	0.0000	2,871.9285	2,871.9285	0.9288		2,895,1495

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, Summer

3.3 Grading - 2021**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	0.0643	0.0442	0.6042	1.7100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		170.8155	170.8155	5.0300e-003		170.9413
Total	0.0643	0.0442	0.6042	1.7100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		170.8155	170.8155	5.0300e-003		170.9413

3.4 Building Construction - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643
Total	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, Summer

3.4 Building Construction - 2021**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	0.3283	10.4857	2.7412	0.0278	0.6914	0.0214	0.7129	0.1991	0.0205	0.2196		2,968.7108	2,968.7108	0.1749		2,973.0832
Worker	1.1874	0.8162	11.1568	0.0317	3.0962	0.0250	3.1212	0.8211	0.0231	0.8442		3,154.3925	3,154.3925	0.0929		3,156.7161
Total	1.5157	11.3018	13.8981	0.0594	3.7876	0.0465	3.8341	1.0202	0.0436	1.0638		6,123.1033	6,123.1033	0.2678		6,129.7993

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
Total	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, Summer

3.4 Building Construction - 2021**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	0.3283	10.4857	2.7412	0.0278	0.6914	0.0214	0.7129	0.1991	0.0205	0.2196		2,968.7108	2,968.7108	0.1749		2,973.0832
Worker	1.1874	0.8162	11.1568	0.0317	3.0962	0.0250	3.1212	0.8211	0.0231	0.8442		3,154.3925	3,154.3925	0.0929		3,156.7161
Total	1.5157	11.3018	13.8981	0.0594	3.7876	0.0465	3.8341	1.0202	0.0436	1.0638		6,123.1033	6,123.1033	0.2678		6,129.7993

3.4 Building Construction - 2022**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, Summer

3.4 Building Construction - 2022**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	0.3081	9.9717	2.5936	0.0275	0.6915	0.0188	0.7102	0.1991	0.0179	0.2170		2,942.847 6	2,942.847 6	0.1689		2,947.069 6
Worker	1.1122	0.7372	10.2934	0.0305	3.0962	0.0242	3.1204	0.8211	0.0223	0.8435		3,043.433 1	3,043.433 1	0.0840		3,045.533 1
Total	1.4203	10.7089	12.8870	0.0581	3.7877	0.0430	3.8306	1.0202	0.0403	1.0605		5,986.280 7	5,986.280 7	0.2529		5,992.602 7

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, Summer

3.4 Building Construction - 2022**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	0.3081	9.9717	2.5936	0.0275	0.6915	0.0188	0.7102	0.1991	0.0179	0.2170		2,942.847 6	2,942.847 6	0.1689		2,947.069 6
Worker	1.1122	0.7372	10.2934	0.0305	3.0962	0.0242	3.1204	0.8211	0.0223	0.8435		3,043.433 1	3,043.433 1	0.0840		3,045.533 1
Total	1.4203	10.7089	12.8870	0.0581	3.7877	0.0430	3.8306	1.0202	0.0403	1.0605		5,986.280 7	5,986.280 7	0.2529		5,992.602 7

3.5 Paving - 2022**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.660 3	2,207.660 3	0.7140		2,225.510 4
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.660 3	2,207.660 3	0.7140		2,225.510 4

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, Summer

3.5 Paving - 2022**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	0.0602	0.0399	0.5574	1.6500e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		164.8069	164.8069	4.5500e-003		164.9206
Total	0.0602	0.0399	0.5574	1.6500e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		164.8069	164.8069	4.5500e-003		164.9206

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, Summer

3.5 Paving - 2022**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	0.0602	0.0399	0.5574	1.6500e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		164.8069	164.8069	4.5500e-003		164.9206
Total	0.0602	0.0399	0.5574	1.6500e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		164.8069	164.8069	4.5500e-003		164.9206

3.6 Architectural Coating - 2022**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	40.6891					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	40.8937	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, Summer

3.6 Architectural Coating - 2022**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	0.2208	0.1464	2.0438	6.0600e-003	0.6148	4.8100e-003	0.6196	0.1630	4.4300e-003	0.1675		604.2918	604.2918	0.0167		604.7087
Total	0.2208	0.1464	2.0438	6.0600e-003	0.6148	4.8100e-003	0.6196	0.1630	4.4300e-003	0.1675		604.2918	604.2918	0.0167		604.7087

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	40.6891					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	40.8937	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, Summer

3.6 Architectural Coating - 2022**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	0.2208	0.1464	2.0438	6.0600e-003	0.6148	4.8100e-003	0.6196	0.1630	4.4300e-003	0.1675		604.2918	604.2918	0.0167		604.7087
Total	0.2208	0.1464	2.0438	6.0600e-003	0.6148	4.8100e-003	0.6196	0.1630	4.4300e-003	0.1675		604.2918	604.2918	0.0167		604.7087

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

Workplace Parking Charge

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, 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	8.6694	38.2722	89.5169	0.3035	23.5833	0.2503	23.8336	6.3113	0.2334	6.5447		30,919.06 10	30,919.06 10	1.6604		30,960.57 15
Unmitigated	8.7571	38.8121	91.7715	0.3125	24.3582	0.2574	24.6156	6.5187	0.2400	6.7586		31,836.52 92	31,836.52 92	1.7020		31,879.07 99

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Fast Food Restaurant with Drive Thru	2,354.75	2,354.75	2354.75	2,478,110	2,400,961
Hotel	3,762.00	3,762.00	3762.00	8,976,776	8,689,509
Total	6,116.75	6,116.75	6,116.75	11,454,885	11,090,470

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
Fast Food Restaurant with Drive Thru	16.60	8.40	6.90	2.20	78.80	19.00	29	21	50
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Fast Food Restaurant with Drive Thru	0.546501	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.030678	0.002515	0.002201	0.005142	0.000687	0.000876
Hotel	0.546501	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.030678	0.002515	0.002201	0.005142	0.000687	0.000876

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, Summer

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	lb/day										lb/day					
NaturalGas Mitigated	0.6995	6.3593	5.3418	0.0382		0.4833	0.4833		0.4833	0.4833		7,631.1201	7,631.1201	0.1463	0.1399	7,676.4680
NaturalGas Unmitigated	0.6995	6.3593	5.3418	0.0382		0.4833	0.4833		0.4833	0.4833		7,631.1201	7,631.1201	0.1463	0.1399	7,676.4680

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, 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					
Fast Food Restaurant with Drive Thru	3552.33	0.0383	0.3483	0.2925	2.0900e-003		0.0265	0.0265		0.0265	0.0265		417.9210	417.9210	8.0100e-003	7.6600e-003	420.4045
Hotel	61312.2	0.6612	6.0110	5.0492	0.0361		0.4568	0.4568		0.4568	0.4568		7,213.1990	7,213.1990	0.1383	0.1322	7,256.0635
Total		0.6995	6.3593	5.3418	0.0382		0.4833	0.4833		0.4833	0.4833		7,631.1201	7,631.1201	0.1463	0.1399	7,676.4680

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Fast Food Restaurant with Drive Thru	3.55233	0.0383	0.3483	0.2925	2.0900e-003		0.0265	0.0265		0.0265	0.0265		417.9210	417.9210	8.0100e-003	7.6600e-003	420.4045
Hotel	61.3122	0.6612	6.0110	5.0492	0.0361		0.4568	0.4568		0.4568	0.4568		7,213.1990	7,213.1990	0.1383	0.1322	7,256.0635
Total		0.6995	6.3593	5.3418	0.0382		0.4833	0.4833		0.4833	0.4833		7,631.1201	7,631.1201	0.1463	0.1399	7,676.4680

6.0 Area Detail**6.1 Mitigation Measures Area**

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, 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	14.7128	4.2000e-004	0.0465	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		0.0996	0.0996	2.6000e-004		0.1061
Unmitigated	14.7128	4.2000e-004	0.0465	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		0.0996	0.0996	2.6000e-004		0.1061

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.6722					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	13.0363					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.3300e-003	4.2000e-004	0.0465	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		0.0996	0.0996	2.6000e-004		0.1061
Total	14.7128	4.2000e-004	0.0465	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		0.0996	0.0996	2.6000e-004		0.1061

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, 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	1.6722					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	13.0363					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.3300e-003	4.2000e-004	0.0465	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		0.0996	0.0996	2.6000e-004		0.1061
Total	14.7128	4.2000e-004	0.0465	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		0.0996	0.0996	2.6000e-004		0.1061

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**Fire Pumps and Emergency Generators**

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, Summer

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

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, Winter

City of Gardena - Hotel Development MND
Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Fast Food Restaurant with Drive Thru	5.00	1000sqft	0.11	5,000.00	0
Hotel	450.00	Room	8.00	653,400.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	8			Operational Year	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	576.36	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, Winter

Project Characteristics - CO2 Intensity factor adjusted to reflect more recent RPS value (note: CalEEMod default factor is from 2012) - factor reduced by 17.9% based on change in eligible renewables from 22% in 2013 to 36% 2018 [702.44 -> 576.36]

Land Use - Land Uses: 450 hotel rooms + 5,000 sf of fast food restaurant.

Construction Phase - Construction schedule estimated based on project size.

Off-road Equipment -

Off-road Equipment - Project construction equipment provided by project applicant.

Off-road Equipment - Project construction equipment provided by project applicant.

Off-road Equipment - Project construction equipment provided by project applicant.

Off-road Equipment - Project construction equipment provided by project applicant.

Off-road Equipment -

Trips and VMT - Default values used for construction phase trips.

Demolition -

Grading - No material import/export anticipated. Total acres graded would equal total land area modeled (8 acres).

Vehicle Trips - 8.36 trips per dwelling unit for hotel (Hotel - ITE Code 310), and 470.95 trips per ksf of fast food, as provided by the Traffic Study prepared by Kittelson & Associates, Inc.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Woodstoves -

Energy Use -

Construction Off-road Equipment Mitigation - Water Exposed Area 3 times daily; Unpaved Road Mitigation (Moisture Content at 12%; Vehicle Speed 15 MPH); Soil Stabilizer for Unpaved Roads (30% reductions); Replace Ground Cover of Area Disturbed (15% reduction).

Mobile Land Use Mitigation -

Mobile Commute Mitigation - VMT mitigation included to reflect the requirements to reduce VMT by 3.1%, as provided in the traffic study. Equivalent to Workplace Parking Charge (100% eligible, daily parking charge of \$2).

Fleet Mix -

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, Winter

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	20.00	150.00
tblGrading	AcresOfGrading	10.00	8.00
tblLandUse	LotAcreage	15.00	8.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	576.36
tblVehicleTrips	ST_TR	722.03	470.95
tblVehicleTrips	ST_TR	8.19	8.36
tblVehicleTrips	SU_TR	542.72	470.95
tblVehicleTrips	SU_TR	5.95	8.36
tblVehicleTrips	WD_TR	496.12	470.95
tblVehicleTrips	WD_TR	8.17	8.36

2.0 Emissions Summary

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, 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					
2021	3.9740	40.5558	29.8082	0.0838	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	8,410.831 1	8,410.831 1	1.1977	0.0000	8,433.076 4
2022	41.1400	26.3761	28.6289	0.0825	3.7877	0.8526	4.6403	1.0202	0.8020	1.8222	0.0000	8,281.770 0	8,281.770 0	0.8707	0.0000	8,303.537 5
Maximum	41.1400	40.5558	29.8082	0.0838	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	8,410.831 1	8,410.831 1	1.1977	0.0000	8,433.076 4

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					
2021	3.9740	40.5558	29.8082	0.0838	6.1902	2.0461	8.2362	3.3454	1.8824	5.2278	0.0000	8,410.831 1	8,410.831 1	1.1977	0.0000	8,433.076 4
2022	41.1400	26.3761	28.6289	0.0825	3.7877	0.8526	4.6403	1.0202	0.8020	1.8222	0.0000	8,281.770 0	8,281.770 0	0.8707	0.0000	8,303.537 5
Maximum	41.1400	40.5558	29.8082	0.0838	6.1902	2.0461	8.2362	3.3454	1.8824	5.2278	0.0000	8,410.831 1	8,410.831 1	1.1977	0.0000	8,433.076 4

	ROG	NOx	CO	SO2	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	54.76	0.00	48.40	60.33	0.00	48.50	0.00	0.00	0.00	0.00	0.00	0.00

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, 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	14.7128	4.2000e-004	0.0465	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		0.0996	0.0996	2.6000e-004		0.1061
Energy	0.6995	6.3593	5.3418	0.0382		0.4833	0.4833		0.4833	0.4833		7,631.1201	7,631.1201	0.1463	0.1399	7,676.4680
Mobile	8.4892	39.2913	89.3835	0.2968	24.3582	0.2595	24.6177	6.5187	0.2420	6.7607		30,243.2283	30,243.2283	1.7201		30,286.2315
Total	23.9016	45.6510	94.7718	0.3349	24.3582	0.7430	25.1012	6.5187	0.7255	7.2442		37,874.4480	37,874.4480	1.8667	0.1399	37,962.8057

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	14.7128	4.2000e-004	0.0465	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		0.0996	0.0996	2.6000e-004		0.1061
Energy	0.6995	6.3593	5.3418	0.0382		0.4833	0.4833		0.4833	0.4833		7,631.1201	7,631.1201	0.1463	0.1399	7,676.4680
Mobile	8.4038	38.7198	87.3414	0.2882	23.5833	0.2525	23.8358	6.3113	0.2354	6.5467		29,367.5094	29,367.5094	1.6796		29,409.4992
Total	23.8161	45.0795	92.7297	0.3263	23.5833	0.7360	24.3192	6.3113	0.7189	7.0302		36,998.7291	36,998.7291	1.8261	0.1399	37,086.0733

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, 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	0.36	1.25	2.15	2.57	3.18	0.95	3.12	3.18	0.91	2.95	0.00	2.31	2.31	2.17	0.00	2.31

3.0 Construction Detail**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/22/2021	2/4/2021	5	10	
2	Grading	Grading	2/5/2021	3/4/2021	5	20	
3	Building Construction	Building Construction	3/5/2021	1/20/2022	5	230	
4	Paving	Paving	1/21/2022	2/17/2022	5	20	
5	Architectural Coating	Architectural Coating	2/18/2022	9/15/2022	5	150	

Acres of Grading (Site Preparation Phase): 0**Acres of Grading (Grading Phase): 8****Acres of Paving: 0****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 987,600; Non-Residential Outdoor: 329,200; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	277.00	108.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	55.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, Winter

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.6569	3,685.6569	1.1920		3,715.4573
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116		3,685.6569	3,685.6569	1.1920		3,715.4573

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, Winter

3.2 Site Preparation - 2021**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0858	0.0587	0.6629	1.9400e-003	0.2012	1.6300e-003	0.2028	0.0534	1.5000e-003	0.0549		193.0052	193.0052	5.6800e-003		193.1472
Total	0.0858	0.0587	0.6629	1.9400e-003	0.2012	1.6300e-003	0.2028	0.0534	1.5000e-003	0.0549		193.0052	193.0052	5.6800e-003		193.1472

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					5.9890	0.0000	5.9890	3.2920	0.0000	3.2920			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
Total	3.8882	40.4971	21.1543	0.0380	5.9890	2.0445	8.0334	3.2920	1.8809	5.1729	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, Winter

3.2 Site Preparation - 2021**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	0.0858	0.0587	0.6629	1.9400e-003	0.2012	1.6300e-003	0.2028	0.0534	1.5000e-003	0.0549		193.0052	193.0052	5.6800e-003		193.1472
Total	0.0858	0.0587	0.6629	1.9400e-003	0.2012	1.6300e-003	0.2028	0.0534	1.5000e-003	0.0549		193.0052	193.0052	5.6800e-003		193.1472

3.3 Grading - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.4463	0.0000	6.4463	3.3560	0.0000	3.3560			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671		2,871.9285	2,871.9285	0.9288		2,895,1495
Total	2.2903	24.7367	15.8575	0.0296	6.4463	1.1599	7.6062	3.3560	1.0671	4.4232		2,871.9285	2,871.9285	0.9288		2,895,1495

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, Winter

3.3 Grading - 2021**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	0.0715	0.0489	0.5524	1.6100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		160.8377	160.8377	4.7300e-003		160.9560
Total	0.0715	0.0489	0.5524	1.6100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		160.8377	160.8377	4.7300e-003		160.9560

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.1369	0.0000	2.1369	1.1125	0.0000	1.1125			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671	0.0000	2,871.9285	2,871.9285	0.9288		2,895,1495
Total	2.2903	24.7367	15.8575	0.0296	2.1369	1.1599	3.2969	1.1125	1.0671	2.1796	0.0000	2,871.9285	2,871.9285	0.9288		2,895,1495

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, Winter

3.3 Grading - 2021**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	0.0715	0.0489	0.5524	1.6100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		160.8377	160.8377	4.7300e-003		160.9560
Total	0.0715	0.0489	0.5524	1.6100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		160.8377	160.8377	4.7300e-003		160.9560

3.4 Building Construction - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643
Total	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, Winter

3.4 Building Construction - 2021**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	0.3446	10.4640	3.0323	0.0270	0.6914	0.0221	0.7136	0.1991	0.0212	0.2202		2,887.3317	2,887.3317	0.1864		2,891.9916
Worker	1.3208	0.9034	10.2007	0.0298	3.0962	0.0250	3.1212	0.8211	0.0231	0.8442		2,970.1355	2,970.1355	0.0874		2,972.3205
Total	1.6654	11.3674	13.2330	0.0568	3.7876	0.0472	3.8348	1.0202	0.0442	1.0644		5,857.4672	5,857.4672	0.2738		5,864.3121

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
Total	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, Winter

3.4 Building Construction - 2021**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	0.3446	10.4640	3.0323	0.0270	0.6914	0.0221	0.7136	0.1991	0.0212	0.2202		2,887.3317	2,887.3317	0.1864		2,891.9916
Worker	1.3208	0.9034	10.2007	0.0298	3.0962	0.0250	3.1212	0.8211	0.0231	0.8442		2,970.1355	2,970.1355	0.0874		2,972.3205
Total	1.6654	11.3674	13.2330	0.0568	3.7876	0.0472	3.8348	1.0202	0.0442	1.0644		5,857.4672	5,857.4672	0.2738		5,864.3121

3.4 Building Construction - 2022**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, Winter

3.4 Building Construction - 2022**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	0.3235	9.9446	2.8703	0.0268	0.6915	0.0194	0.7108	0.1991	0.0185	0.2176		2,861.679 0	2,861.679 0	0.1799		2,866.175 2
Worker	1.2405	0.8159	9.3952	0.0288	3.0962	0.0242	3.1204	0.8211	0.0223	0.8435		2,865.757 4	2,865.757 4	0.0789		2,867.730 1
Total	1.5640	10.7604	12.2655	0.0555	3.7877	0.0436	3.8313	1.0202	0.0408	1.0610		5,727.436 4	5,727.436 4	0.2588		5,733.905 3

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, Winter

3.4 Building Construction - 2022**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	0.3235	9.9446	2.8703	0.0268	0.6915	0.0194	0.7108	0.1991	0.0185	0.2176		2,861.679 0	2,861.679 0	0.1799		2,866.175 2
Worker	1.2405	0.8159	9.3952	0.0288	3.0962	0.0242	3.1204	0.8211	0.0223	0.8435		2,865.757 4	2,865.757 4	0.0789		2,867.730 1
Total	1.5640	10.7604	12.2655	0.0555	3.7877	0.0436	3.8313	1.0202	0.0408	1.0610		5,727.436 4	5,727.436 4	0.2588		5,733.905 3

3.5 Paving - 2022**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.660 3	2,207.660 3	0.7140		2,225.510 4
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.660 3	2,207.660 3	0.7140		2,225.510 4

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, Winter

3.5 Paving - 2022**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	0.0672	0.0442	0.5088	1.5600e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		155.1854	155.1854	4.2700e-003		155.2922
Total	0.0672	0.0442	0.5088	1.5600e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		155.1854	155.1854	4.2700e-003		155.2922

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, Winter

3.5 Paving - 2022**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	0.0672	0.0442	0.5088	1.5600e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		155.1854	155.1854	4.2700e-003		155.2922
Total	0.0672	0.0442	0.5088	1.5600e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		155.1854	155.1854	4.2700e-003		155.2922

3.6 Architectural Coating - 2022**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	40.6891					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	40.8937	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, Winter

3.6 Architectural Coating - 2022**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	0.2463	0.1620	1.8655	5.7100e-003	0.6148	4.8100e-003	0.6196	0.1630	4.4300e-003	0.1675		569.0132	569.0132	0.0157		569.4049
Total	0.2463	0.1620	1.8655	5.7100e-003	0.6148	4.8100e-003	0.6196	0.1630	4.4300e-003	0.1675		569.0132	569.0132	0.0157		569.4049

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	40.6891					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	40.8937	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, Winter

3.6 Architectural Coating - 2022**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	0.2463	0.1620	1.8655	5.7100e-003	0.6148	4.8100e-003	0.6196	0.1630	4.4300e-003	0.1675		569.0132	569.0132	0.0157		569.4049
Total	0.2463	0.1620	1.8655	5.7100e-003	0.6148	4.8100e-003	0.6196	0.1630	4.4300e-003	0.1675		569.0132	569.0132	0.0157		569.4049

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

Workplace Parking Charge

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, 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	8.4038	38.7198	87.3414	0.2882	23.5833	0.2525	23.8358	6.3113	0.2354	6.5467		29,367.50 94	29,367.50 94	1.6796		29,409.49 92
Unmitigated	8.4892	39.2913	89.3835	0.2968	24.3582	0.2595	24.6177	6.5187	0.2420	6.7607		30,243.22 83	30,243.22 83	1.7201		30,286.23 15

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Fast Food Restaurant with Drive Thru	2,354.75	2,354.75	2354.75	2,478,110	2,400,961
Hotel	3,762.00	3,762.00	3762.00	8,976,776	8,689,509
Total	6,116.75	6,116.75	6,116.75	11,454,885	11,090,470

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
Fast Food Restaurant with Drive Thru	16.60	8.40	6.90	2.20	78.80	19.00	29	21	50
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Fast Food Restaurant with Drive Thru	0.546501	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.030678	0.002515	0.002201	0.005142	0.000687	0.000876
Hotel	0.546501	0.044961	0.204016	0.120355	0.015740	0.006196	0.020131	0.030678	0.002515	0.002201	0.005142	0.000687	0.000876

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, Winter

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	lb/day										lb/day					
NaturalGas Mitigated	0.6995	6.3593	5.3418	0.0382		0.4833	0.4833		0.4833	0.4833		7,631.1201	7,631.1201	0.1463	0.1399	7,676.4680
NaturalGas Unmitigated	0.6995	6.3593	5.3418	0.0382		0.4833	0.4833		0.4833	0.4833		7,631.1201	7,631.1201	0.1463	0.1399	7,676.4680

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, 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					
Fast Food Restaurant with Drive Thru	3552.33	0.0383	0.3483	0.2925	2.0900e-003		0.0265	0.0265		0.0265	0.0265		417.9210	417.9210	8.0100e-003	7.6600e-003	420.4045
Hotel	61312.2	0.6612	6.0110	5.0492	0.0361		0.4568	0.4568		0.4568	0.4568		7,213.1990	7,213.1990	0.1383	0.1322	7,256.0635
Total		0.6995	6.3593	5.3418	0.0382		0.4833	0.4833		0.4833	0.4833		7,631.1201	7,631.1201	0.1463	0.1399	7,676.4680

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Fast Food Restaurant with Drive Thru	3.55233	0.0383	0.3483	0.2925	2.0900e-003		0.0265	0.0265		0.0265	0.0265		417.9210	417.9210	8.0100e-003	7.6600e-003	420.4045
Hotel	61.3122	0.6612	6.0110	5.0492	0.0361		0.4568	0.4568		0.4568	0.4568		7,213.1990	7,213.1990	0.1383	0.1322	7,256.0635
Total		0.6995	6.3593	5.3418	0.0382		0.4833	0.4833		0.4833	0.4833		7,631.1201	7,631.1201	0.1463	0.1399	7,676.4680

6.0 Area Detail**6.1 Mitigation Measures Area**

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, 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	14.7128	4.2000e-004	0.0465	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		0.0996	0.0996	2.6000e-004		0.1061
Unmitigated	14.7128	4.2000e-004	0.0465	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		0.0996	0.0996	2.6000e-004		0.1061

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.6722					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	13.0363					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.3300e-003	4.2000e-004	0.0465	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		0.0996	0.0996	2.6000e-004		0.1061
Total	14.7128	4.2000e-004	0.0465	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		0.0996	0.0996	2.6000e-004		0.1061

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, 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	1.6722					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	13.0363					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.3300e-003	4.2000e-004	0.0465	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		0.0996	0.0996	2.6000e-004		0.1061
Total	14.7128	4.2000e-004	0.0465	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		0.0996	0.0996	2.6000e-004		0.1061

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**Fire Pumps and Emergency Generators**

City of Gardena - Hotel Development MND - Los Angeles-South Coast County, Winter

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

EMFAC2017 (v1.0.2) Emissions Inventory

Region Type: County

Region: LOS ANGELES

Calendar Year: 2021

Season: Annual

Vehicle Classification: EMFAC2011 Categories

Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption. Note 'day' in the unit is operation day.

Region	Calendar Y	Vehicle Category	Model Year	Speed	Fuel	Population	VMT	Fuel Consumption	MPG (Derived)
LOS ANGELES	2021	All Other Buses	Aggregated	Aggregated	DSL	2395.753094	142177.9043	14.32591647	9.92
LOS ANGELES	2021	LDA	Aggregated	Aggregated	GAS	3998082.55	154957028.3	5253.036076	29.50
LOS ANGELES	2021	LDA	Aggregated	Aggregated	DSL	33364.94911	1336170.355	28.995514	46.08
LOS ANGELES	2021	LDA	Aggregated	Aggregated	ELEC	67210.71775	2697315.265	0	#DIV/0!
LOS ANGELES	2021	LDT1	Aggregated	Aggregated	GAS	451923.1455	17065391.26	670.3612556	25.46
LOS ANGELES	2021	LDT1	Aggregated	Aggregated	DSL	297.0410267	7338.123275	0.340197438	21.57
LOS ANGELES	2021	LDT1	Aggregated	Aggregated	ELEC	2539.277034	100849.3946	0	#DIV/0!
LOS ANGELES	2021	LDT2	Aggregated	Aggregated	GAS	1370275.92	52553142.22	2238.862589	23.47
LOS ANGELES	2021	LDT2	Aggregated	Aggregated	DSL	8126.390234	355535.4183	10.50575614	33.84
LOS ANGELES	2021	LDT2	Aggregated	Aggregated	ELEC	11051.44449	368949.9062	0	#DIV/0!
LOS ANGELES	2021	LHD1	Aggregated	Aggregated	GAS	108025.983	3955472.057	382.6976915	10.34
LOS ANGELES	2021	LHD1	Aggregated	Aggregated	DSL	61698.84585	2667214.83	124.5587375	21.41
LOS ANGELES	2021	LHD2	Aggregated	Aggregated	GAS	17947.14388	636046.3967	70.61942731	9.01
LOS ANGELES	2021	LHD2	Aggregated	Aggregated	DSL	24847.529	1035822.88	53.69276638	19.29
LOS ANGELES	2021	MCY	Aggregated	Aggregated	GAS	174733.5483	1259345.847	35.18425126	35.79
LOS ANGELES	2021	MDV	Aggregated	Aggregated	GAS	932036.8903	33105798.77	1730.986924	19.13
LOS ANGELES	2021	MDV	Aggregated	Aggregated	DSL	18030.2644	734378.7436	28.12152985	26.11
LOS ANGELES	2021	MDV	Aggregated	Aggregated	ELEC	4837.670599	167248.7908	0	#DIV/0!
LOS ANGELES	2021	MH	Aggregated	Aggregated	GAS	19738.38855	198097.0268	39.17625337	5.06
LOS ANGELES	2021	MH	Aggregated	Aggregated	DSL	5837.585418	61474.42824	5.917628629	10.39
LOS ANGELES	2021	Motor Coach	Aggregated	Aggregated	DSL	703.2457106	91424.80552	14.43958	6.33
LOS ANGELES	2021	OBUS	Aggregated	Aggregated	GAS	4043.633604	172164.4313	34.90940232	4.93
LOS ANGELES	2021	PTO	Aggregated	Aggregated	DSL	0	78431.86638	16.37607095	4.79
LOS ANGELES	2021	SBUS	Aggregated	Aggregated	GAS	1289.957091	53467.22336	5.870331948	9.11
LOS ANGELES	2021	SBUS	Aggregated	Aggregated	DSL	3836.738425	121324.4844	16.1045611	7.53 MHD
LOS ANGELES	2021	T6 Ag	Aggregated	Aggregated	DSL	12.13095267	104.3587548	0.012450059	8.38 8.692322
LOS ANGELES	2021	T6 CAIRP heavy	Aggregated	Aggregated	DSL	334.3089902	65862.4333	5.887575104	11.19
LOS ANGELES	2021	T6 CAIRP small	Aggregated	Aggregated	DSL	176.7171664	9271.232452	0.879539355	10.54
LOS ANGELES	2021	T6 instate construction heavy	Aggregated	Aggregated	DSL	2463.579926	167642.3835	17.15132005	9.77
LOS ANGELES	2021	T6 instate construction small	Aggregated	Aggregated	DSL	8566.238267	443239.724	44.59597433	9.94
LOS ANGELES	2021	T6 instate heavy	Aggregated	Aggregated	DSL	10455.48502	1410072.143	133.2175395	10.58
LOS ANGELES	2021	T6 instate small	Aggregated	Aggregated	DSL	38393.79645	1920331.232	191.398187	10.03
LOS ANGELES	2021	T6 OOS heavy	Aggregated	Aggregated	DSL	191.6398006	38081.09496	3.396939931	11.21
LOS ANGELES	2021	T6 OOS small	Aggregated	Aggregated	DSL	101.7297612	5283.650628	0.502246213	10.52
LOS ANGELES	2021	T6 Public	Aggregated	Aggregated	DSL	4497.854571	69891.41772	8.726611111	8.01
LOS ANGELES	2021	T6 utility	Aggregated	Aggregated	DSL	1007.559291	16957.30385	1.7773803	9.54
LOS ANGELES	2021	T6TS	Aggregated	Aggregated	GAS	14589.7762	807949.859	162.4615311	4.97 HHD
LOS ANGELES	2021	T7 Ag	Aggregated	Aggregated	DSL	4.854707518	113.1890197	0.020332678	5.57 6.253066
LOS ANGELES	2021	T7 CAIRP	Aggregated	Aggregated	DSL	6279.132793	1115075.522	165.0304383	6.76
LOS ANGELES	2021	T7 CAIRP construction	Aggregated	Aggregated	DSL	666.4134286	120418.9803	16.82162322	7.16
LOS ANGELES	2021	T7 NNOOS	Aggregated	Aggregated	DSL	6776.419057	1359344.742	192.9162697	7.05
LOS ANGELES	2021	T7 NOOS	Aggregated	Aggregated	DSL	2465.53665	438114.9058	66.36716141	6.60
LOS ANGELES	2021	T7 POLA	Aggregated	Aggregated	DSL	8055.06441	1016317.432	181.646039	5.60
LOS ANGELES	2021	T7 Public	Aggregated	Aggregated	DSL	5442.962372	110265.6618	19.25858137	5.73
LOS ANGELES	2021	T7 Single	Aggregated	Aggregated	DSL	5864.858433	394998.5563	62.68355999	6.30
LOS ANGELES	2021	T7 single construction	Aggregated	Aggregated	DSL	4248.667003	298737.3414	46.12726641	6.48
LOS ANGELES	2021	T7 SWCV	Aggregated	Aggregated	DSL	1524.436923	62284.87901	30.71187598	2.03
LOS ANGELES	2021	T7 SWCV	Aggregated	Aggregated	NG	2453.780525	99862.0129	45.36807419	2.20
LOS ANGELES	2021	T7 tractor	Aggregated	Aggregated	DSL	12117.53918	1643190.233	238.4926366	6.89
LOS ANGELES	2021	T7 tractor construction	Aggregated	Aggregated	DSL	3547.888701	246432.0056	38.32018639	6.43
LOS ANGELES	2021	T7 utility	Aggregated	Aggregated	DSL	403.9712025	8195.988304	1.308976399	6.26
LOS ANGELES	2021	T7IS	Aggregated	Aggregated	GAS	58.22843706	5770.219973	1.443583293	4.00
LOS ANGELES	2021	UBUS	Aggregated	Aggregated	GAS	458.4288176	33383.22271	8.035868912	4.15
LOS ANGELES	2021	UBUS	Aggregated	Aggregated	DSL	37.1389	5105.145298	0.807132926	6.33
LOS ANGELES	2021	UBUS	Aggregated	Aggregated	ELEC	14	1217.553685	0	#DIV/0!
LOS ANGELES	2021	UBUS	Aggregated	Aggregated	NG	4152.468621	439987.1908	111.6541508	3.94

EMFAC2017 (v1.0.2) Emissions Inventory

Region Type: County

Region: LOS ANGELES

Calendar Year: 2022

Season: Annual

Vehicle Classification: EMFAC2011 Categories

Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption. Note 'day' in the unit is operation day.

Region	Calendar Y	Vehicle Category	Model Year	Speed	Fuel	Population	VMT	Fuel Consumption	MPG (Derived)
LOS ANGELES	2022	All Other Buses	Aggregated	Aggregated	DSL	2426.598446	146501.7328	14.3421019	10.21
LOS ANGELES	2022	LDA	Aggregated	Aggregated	GAS	4040504.833	154312636.5	5096.55014	30.28
LOS ANGELES	2022	LDA	Aggregated	Aggregated	DSL	35580.70761	1405948.594	29.71915281	47.31
LOS ANGELES	2022	LDA	Aggregated	Aggregated	ELEC	79346.01523	3237232.352	0	#DIV/0!
LOS ANGELES	2022	LDT1	Aggregated	Aggregated	GAS	466456.294	17402686.02	666.5509097	26.11
LOS ANGELES	2022	LDT1	Aggregated	Aggregated	DSL	276.3592923	6755.981354	0.309652997	21.82
LOS ANGELES	2022	LDT1	Aggregated	Aggregated	ELEC	3550.873409	146697.1661	0	#DIV/0!
LOS ANGELES	2022	LDT2	Aggregated	Aggregated	GAS	1395327.914	52851239.49	2173.392058	24.32
LOS ANGELES	2022	LDT2	Aggregated	Aggregated	DSL	9029.025545	384253.17	11.04279173	34.80
LOS ANGELES	2022	LDT2	Aggregated	Aggregated	ELEC	14572.87567	476540.0157	0	#DIV/0!
LOS ANGELES	2022	LHD1	Aggregated	Aggregated	GAS	107665.0189	3912114.95	374.458459	10.45
LOS ANGELES	2022	LHD1	Aggregated	Aggregated	DSL	66438.77298	2829556.448	130.1752661	21.74
LOS ANGELES	2022	LHD2	Aggregated	Aggregated	GAS	18107.10123	636816.2065	69.95440206	9.10
LOS ANGELES	2022	LHD2	Aggregated	Aggregated	DSL	26821.57306	1100164.26	56.1858244	19.58
LOS ANGELES	2022	MCY	Aggregated	Aggregated	GAS	181916.5067	1290803.93	36.08497322	35.77
LOS ANGELES	2022	MDV	Aggregated	Aggregated	GAS	941584.3061	33063464.21	1672.525685	19.77
LOS ANGELES	2022	MDV	Aggregated	Aggregated	DSL	19913.35499	791156.8054	29.43021248	26.88
LOS ANGELES	2022	MDV	Aggregated	Aggregated	ELEC	7529.633431	254507.8273	0	#DIV/0!
LOS ANGELES	2022	MH	Aggregated	Aggregated	GAS	19672.43712	198291.6854	38.63505089	5.13
LOS ANGELES	2022	MH	Aggregated	Aggregated	DSL	6142.766028	64185.85871	6.094200677	10.53
LOS ANGELES	2022	Motor Coach	Aggregated	Aggregated	DSL	690.4147844	93044.15999	14.28409549	6.51
LOS ANGELES	2022	OBUS	Aggregated	Aggregated	GAS	4028.136326	167752.5949	33.55748039	5.00
LOS ANGELES	2022	PTO	Aggregated	Aggregated	DSL	0	79209.0386	16.05411209	4.93
LOS ANGELES	2022	SBUS	Aggregated	Aggregated	GAS	1393.897962	56948.09952	6.189684102	9.20
LOS ANGELES	2022	SBUS	Aggregated	Aggregated	DSL	3866.897734	122197.4183	16.06384209	7.61 MHD
LOS ANGELES	2022	T6 Ag	Aggregated	Aggregated	DSL	12.10479957	101.9666453	0.012181572	8.37 8.970169
LOS ANGELES	2022	T6 CAIRP heavy	Aggregated	Aggregated	DSL	339.4332582	67083.52265	5.807813802	11.55
LOS ANGELES	2022	T6 CAIRP small	Aggregated	Aggregated	DSL	181.7202948	9464.327402	0.875877811	10.81
LOS ANGELES	2022	T6 instate construction heavy	Aggregated	Aggregated	DSL	2542.224734	170126.8415	16.71218546	10.18
LOS ANGELES	2022	T6 instate construction small	Aggregated	Aggregated	DSL	8462.077315	450145.7555	43.95843647	10.24
LOS ANGELES	2022	T6 instate heavy	Aggregated	Aggregated	DSL	10547.07409	1455514.974	131.8685352	11.04
LOS ANGELES	2022	T6 instate small	Aggregated	Aggregated	DSL	38737.1496	1972425.144	190.7940541	10.34
LOS ANGELES	2022	T6 OOS heavy	Aggregated	Aggregated	DSL	195.638099	38838.81209	3.358836601	11.56
LOS ANGELES	2022	T6 OOS small	Aggregated	Aggregated	DSL	104.3823473	5388.107709	0.499529555	10.79
LOS ANGELES	2022	T6 Public	Aggregated	Aggregated	DSL	4527.375726	70713.41714	8.660830266	8.16
LOS ANGELES	2022	T6 utility	Aggregated	Aggregated	DSL	1014.343198	17105.5263	1.766075853	9.69
LOS ANGELES	2022	T6TS	Aggregated	Aggregated	GAS	14669.99802	811414.7327	160.7054395	5.05 HHD
LOS ANGELES	2022	T7 Ag	Aggregated	Aggregated	DSL	5.193051548	102.8930892	0.01852168	5.56 6.413361
LOS ANGELES	2022	T7 CAIRP	Aggregated	Aggregated	DSL	6382.019495	1134600.882	164.6523981	6.89
LOS ANGELES	2022	T7 CAIRP construction	Aggregated	Aggregated	DSL	677.6914819	122203.5881	16.7040882	7.32
LOS ANGELES	2022	T7 NNOOS	Aggregated	Aggregated	DSL	6908.616933	1383134.925	190.1637574	7.27
LOS ANGELES	2022	T7 NOOS	Aggregated	Aggregated	DSL	2520.514105	445789.868	66.33830455	6.72
LOS ANGELES	2022	T7 POLA	Aggregated	Aggregated	DSL	8290.297935	1076131.599	189.4428135	5.68
LOS ANGELES	2022	T7 Public	Aggregated	Aggregated	DSL	5501.543454	111458.0695	19.18026863	5.81
LOS ANGELES	2022	T7 Single	Aggregated	Aggregated	DSL	6004.21985	398912.551	60.92726724	6.55
LOS ANGELES	2022	T7 single construction	Aggregated	Aggregated	DSL	4339.818685	303164.6252	44.86801387	6.76
LOS ANGELES	2022	T7 SWCV	Aggregated	Aggregated	DSL	1392.501649	56894.30171	28.04619094	2.03
LOS ANGELES	2022	T7 SWCV	Aggregated	Aggregated	NG	2627.443069	106986.7103	47.85102148	2.24
LOS ANGELES	2022	T7 tractor	Aggregated	Aggregated	DSL	12303.60189	1664070.759	233.2857898	7.13
LOS ANGELES	2022	T7 tractor construction	Aggregated	Aggregated	DSL	3625.325785	250084.1249	37.80397958	6.62
LOS ANGELES	2022	T7 utility	Aggregated	Aggregated	DSL	407.1754051	8267.098357	1.312326899	6.30
LOS ANGELES	2022	T7IS	Aggregated	Aggregated	GAS	55.46637507	5860.691124	1.426947994	4.11
LOS ANGELES	2022	UBUS	Aggregated	Aggregated	GAS	463.7251984	33581.36145	7.944288802	4.23
LOS ANGELES	2022	UBUS	Aggregated	Aggregated	DSL	37.1389	5105.145298	0.807132926	6.33
LOS ANGELES	2022	UBUS	Aggregated	Aggregated	ELEC	14	1217.553685	0	#DIV/0!
LOS ANGELES	2022	UBUS	Aggregated	Aggregated	NG	4177.418205	442636.1645	112.5471708	3.93

On-road Mobile (Operational) Energy Usage

Note: Assumes that all vehicles that are generated as part of proposed project use gasoline as a fuel source (for simplicity), since the vast majority of vehicles generated by the project would use gasoline.

Unmitigated:

Step 1:

Therefore:
Average Daily VMT:
30,385 Note: Estimated via CalEEMod output (11090470 annual VMT, divided by 365 days per year).

Step 2:

Given:

Fleet Mix (CalEEMod Output)													
LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH	
54.65%	4.50%	20.40%	12.04%	1.57%	0.62%	2.01%	3.07%	0.25%	0.22%	0.51%	0.07%	0.09%	

And:

Gasoline MPG Factors for each Vehicle Class - Year 2022 (EMFAC2017 Output)													
LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH	
30.28	26.11	24.32	19.77	10.45	9.10	N/A	N/A		5.00	4.23	35.77	9.20	5.13

Therefore:
Weighted Average MPG Factors
Gasoline: 25.50

Step 3:

Therefore:
1,192 daily gallons of gasoline
or
434,944 annual gallons of gasoline

Off-road (i.e. On-site) Mobile (Construction) Energy Usage

Note: For the sake of simplicity, and as a conservative estimation, it was assumed that all off-road vehicles use diesel fuel as an energy source. Demolition (if applicable), Site preparation and Grading off-road mobile vehicle on-site gallons of fuel are calculated below.

Given Factor:	43.1 metric tons	CO2	(provided in CalEEMod Output File)
Conversion Factor:	2204.6262 pounds	per metric ton	
Intermediate Result:	95,058 pounds	CO2	
Conversion Factor:	22.38 pounds	CO2 per 1 gallon of diesel fuel	Source: U.S. EIA, 2016
Final Result:	4,247.43 gallons	diesel fuel	http://www.eia.gov/tools/faqs/faq.cfm?id=307&t=11

Mitigated Onsite Scenario	Total CO2 (MT/yr) (provided in CalEEMod Output File)
Site Preparation	16.8530
Grading	26.2643

On-road Mobile (Construction) Energy Usage - Site Preparation

Step 1: **Total Daily Worker Trips (CalEEMod Output)**

18

Worker Trip Length (miles) (CalEEMod Output)

14.7

Therefore:

Average Worker Daily VMT:

265

Step 2: **Given:**

Assumed Fleet Mix for Workers

LDA	LDT1	LDT2
0.5	0.25	0.25

(% mix is provided on Appendix A: Calculation Details for CalEEMOD p. 15)

And:

Gasoline MPG Factors for each Vehicle Class (from EMFAC2017) - Year 2021

LDA	LDT1	LDT2
29.50	25.46	23.47

Therefore:

Weighted Average Worker MPG Factor

26.98

Step 3: **Therefore:**

10 Worker daily gallons of gasoline

Step 4: 10 # of Days (CalEEMod Output)

Therefore:

Result: 98 Total gallons of gasoline

On-road Mobile (Construction) Energy Usage - Grading

Step 1: **Total Daily Worker Trips (CalEEMod Output)**

15

Worker Trip Length (miles) (CalEEMod Output)

14.7

Therefore:

Average Worker Daily VMT:

221

Step 2: **Given:**

Assumed Fleet Mix for Workers

LDA	LDT1	LDT2
0.5	0.25	0.25

(Percentage mix is provided on Appendix A: Calculation Details for CalEEMOD p. 15)

And:

Gasoline MPG Factors for each Vehicle Class (from EMFAC2017) - Year 2021

LDA	LDT1	LDT2
29.50	25.46	23.47

Therefore:

Weighted Average Worker MPG Factor

26.98

Step 3: **Therefore:**

8 Worker daily gallons of gasoline

Step 4: 20 # of Days (CalEEMod Output)

Therefore:

Result: 163 Total gallons of gasoline

On-road Mobile (Construction) Energy Usage - Building Construction

Step 1:	Total Daily Worker Trips (CalEEMod Output)			Total Daily Vendor Trips (CalEEMod Output)		
	277			108		
	Worker Trip Length (miles) (CalEEMod Output)			Vendor Trip Length (miles) (CalEEMod Output)		
	14.7			6.9		
	Therefore:					
	Average Worker Daily VMT:			Average Vendor Daily VMT:		
	4,072			745		
Step 2:	Given:					
	Assumed Fleet Mix for Workers			(Percentage mix is provided on Appendix A: Calculation Details for CalEEMOD p. 15)		
	LDA	LDT1	LDT2	Fleet Mix for Workers (CalEEMod Output)		
	0.5	0.25	0.25	MHD	HHD	
	Assumed Fleet Mix for Vendors			0%	100%	
	And:					
	MPG Factors for each Vehicle Class (from EMFAC2017) - Year 2021					
	Gasoline:			Diesel:		
	LDA	LDT1	LDT2	MHD	HHD	
	29.50	25.46	23.47	8.69	6.25	
	Therefore:					
	Weighted Average Worker (Gasoline) MPG Factor			Weighted Average Vendor (Diesel) MPG Factor		
	26.98			6.25		
Step 3:	Therefore:			Therefore:		
	151 Worker daily gallons of gasoline			119 Vendor daily gallons of diesel		
Step 4:						
	230	# of Days (CalEEMod Output)				
	Therefore:					
	34,710	Total gallons of gasoline				
	27,410	Total gallons of diesel				

On-road Mobile (Construction) Energy Usage - Paving

Step 1: **Total Daily Worker Trips (CalEEMod Output)**

15

Worker Trip Length (miles) (CalEEMod Output)

14.7

Therefore:

Average Worker Daily VMT:

221

Step 2: **Given:**

Assumed Fleet Mix for Workers

LDA	LDT1	LDT2
0.5	0.25	0.25

(Percentage mix is provided on Appendix A: Calculation Details for CalEEMOD p. 15)

And:

Gasoline MPG Factors for each Vehicle Class (from EMFAC2017) - Year 2021

LDA	LDT1	LDT2
29.50	25.46	23.47

Therefore:

Weighted Average Worker MPG Factor

27.0

Step 3: **Therefore:**

8 Worker daily gallons of gasoline

Step 4: 20 # of Days (CalEEMod Output)

Therefore:

Result: 163 Total gallons of gasoline

On-road Mobile (Construction) Energy Usage - Architectural Coating

Step 1: **Total Daily Worker Trips (CalEEMod Output)**

55

Worker Trip Length (miles) (CalEEMod Output)

14.7

Therefore:

Average Worker Daily VMT:

809

Step 2: Given:

Assumed Fleet Mix for Workers

LDA	LDT1	LDT2
0.5	0.25	0.25

(Percentage mix is provided on Appendix A: Calculation Details for CalEEMOD p. 15)

And:

Gasoline MPG Factors for each Vehicle Class (EMFAC2017 Output) - Year 2021

LDA	LDT1	LDT2
29.50	25.46	23.47

Therefore:

Weighted Average Worker MPG Factor

27.0

Step 3: **Therefore:**

30 Worker daily gallons of gasoline

Step 4: 150 # of Days (CalEEMod Output)

Therefore:

Result: 4,495 Total gallons of gasoline