

Appendix A

AQ/GHG Modeling Sheets

Menifee Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Menifee
Construction Start Date	1/1/2025
Operational Year	2027
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50
Precipitation (days)	18.6
Location	33.65877805676925, -117.18528494075258
County	Riverside-South Coast
City	Menifee
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5504
EDFZ	11
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.22

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
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Single Family Housing	39.0	Dwelling Unit	8.79	112,000	101,207	—	126	—
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1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.43	1.19	10.6	14.2	0.02	0.43	0.22	0.65	0.40	0.05	0.45	—	2,723	2,723	0.11	0.05	1.09	2,741
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.46	35.2	44.1	34.1	0.12	1.57	10.7	12.3	1.46	4.79	6.25	—	16,230	16,230	0.42	1.74	0.61	16,759
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.05	2.04	8.20	9.94	0.02	0.33	0.58	0.91	0.30	0.24	0.54	—	2,166	2,166	0.08	0.08	0.57	2,191
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.19	0.37	1.50	1.81	< 0.005	0.06	0.11	0.17	0.06	0.04	0.10	—	359	359	0.01	0.01	0.09	363

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
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Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	1.43	1.19	10.6	14.2	0.02	0.43	0.22	0.65	0.40	0.05	0.45	—	2,723	2,723	0.11	0.05	1.09	2,741
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	4.46	3.54	44.1	34.1	0.12	1.57	10.7	12.3	1.46	4.79	6.25	—	16,230	16,230	0.42	1.74	0.61	16,759
2026	1.35	35.2	10.1	13.8	0.02	0.38	0.22	0.60	0.35	0.05	0.40	—	2,701	2,701	0.10	0.05	0.03	2,717
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	1.05	0.88	8.20	9.94	0.02	0.33	0.58	0.91	0.30	0.24	0.54	—	2,166	2,166	0.08	0.08	0.57	2,191
2026	0.14	2.04	1.05	1.50	< 0.005	0.04	0.03	0.07	0.04	0.01	0.04	—	267	267	0.01	< 0.005	0.05	268
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.19	0.16	1.50	1.81	< 0.005	0.06	0.11	0.17	0.06	0.04	0.10	—	359	359	0.01	0.01	0.09	363
2026	0.03	0.37	0.19	0.27	< 0.005	0.01	< 0.005	0.01	0.01	< 0.005	0.01	—	44.1	44.1	< 0.005	< 0.005	0.01	44.4

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.77	5.11	2.26	21.1	0.07	1.46	2.51	3.97	1.41	0.64	2.04	252	4,406	4,658	3.51	0.14	9.93	4,799
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.68	5.02	2.34	19.4	0.06	1.46	2.51	3.97	1.41	0.64	2.04	252	4,231	4,483	3.52	0.15	1.04	4,616
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unmit.	1.59	3.97	1.68	10.4	0.03	0.14	2.42	2.57	0.14	0.61	0.75	38.1	3,545	3,583	2.50	0.14	4.66	3,693
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.29	0.72	0.31	1.90	0.01	0.03	0.44	0.47	0.03	0.11	0.14	6.30	587	593	0.41	0.02	0.77	611

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.53	1.42	1.20	11.2	0.03	0.02	2.51	2.53	0.02	0.64	0.66	—	2,898	2,898	0.12	0.13	9.13	2,948
Area	2.19	3.67	0.71	9.79	0.03	1.41	—	1.41	1.36	—	1.36	230	698	928	1.09	< 0.005	—	956
Energy	0.04	0.02	0.35	0.15	< 0.005	0.03	—	0.03	0.03	—	0.03	—	790	790	0.07	< 0.005	—	793
Water	—	—	—	—	—	—	—	—	—	—	—	3.04	20.1	23.2	0.31	0.01	—	33.3
Waste	—	—	—	—	—	—	—	—	—	—	—	19.2	0.00	19.2	1.92	0.00	—	67.3
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.80	0.80
Total	3.77	5.11	2.26	21.1	0.07	1.46	2.51	3.97	1.41	0.64	2.04	252	4,406	4,658	3.51	0.14	9.93	4,799
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.44	1.32	1.28	9.48	0.03	0.02	2.51	2.53	0.02	0.64	0.66	—	2,723	2,723	0.12	0.13	0.24	2,766
Area	2.19	3.67	0.71	9.79	0.03	1.41	—	1.41	1.36	—	1.36	230	698	928	1.09	< 0.005	—	956
Energy	0.04	0.02	0.35	0.15	< 0.005	0.03	—	0.03	0.03	—	0.03	—	790	790	0.07	< 0.005	—	793
Water	—	—	—	—	—	—	—	—	—	—	—	3.04	20.1	23.2	0.31	0.01	—	33.3
Waste	—	—	—	—	—	—	—	—	—	—	—	19.2	0.00	19.2	1.92	0.00	—	67.3
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.80	0.80
Total	3.68	5.02	2.34	19.4	0.06	1.46	2.51	3.97	1.41	0.64	2.04	252	4,231	4,483	3.52	0.15	1.04	4,616

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.40	1.28	1.28	9.59	0.03	0.02	2.42	2.44	0.02	0.61	0.63	—	2,687	2,687	0.12	0.13	3.85	2,733
Area	0.15	2.66	0.05	0.67	< 0.005	0.10	—	0.10	0.09	—	0.09	15.8	47.8	63.6	0.07	< 0.005	—	65.5
Energy	0.04	0.02	0.35	0.15	< 0.005	0.03	—	0.03	0.03	—	0.03	—	790	790	0.07	< 0.005	—	793
Water	—	—	—	—	—	—	—	—	—	—	—	3.04	20.1	23.2	0.31	0.01	—	33.3
Waste	—	—	—	—	—	—	—	—	—	—	—	19.2	0.00	19.2	1.92	0.00	—	67.3
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.80	0.80
Total	1.59	3.97	1.68	10.4	0.03	0.14	2.42	2.57	0.14	0.61	0.75	38.1	3,545	3,583	2.50	0.14	4.66	3,693
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.26	0.23	0.23	1.75	< 0.005	< 0.005	0.44	0.45	< 0.005	0.11	0.12	—	445	445	0.02	0.02	0.64	452
Area	0.03	0.49	0.01	0.12	< 0.005	0.02	—	0.02	0.02	—	0.02	2.61	7.92	10.5	0.01	< 0.005	—	10.8
Energy	0.01	< 0.005	0.06	0.03	< 0.005	0.01	—	0.01	0.01	—	0.01	—	131	131	0.01	< 0.005	—	131
Water	—	—	—	—	—	—	—	—	—	—	—	0.50	3.33	3.83	0.05	< 0.005	—	5.51
Waste	—	—	—	—	—	—	—	—	—	—	—	3.19	0.00	3.19	0.32	0.00	—	11.1
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.13	0.13
Total	0.29	0.72	0.31	1.90	0.01	0.03	0.44	0.47	0.03	0.11	0.14	6.30	587	593	0.41	0.02	0.77	611

3. Construction Emissions Details

3.1. Site Preparation (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.94	3.31	31.6	30.2	0.05	1.37	—	1.37	1.26	—	1.26	—	5,295	5,295	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	7.69	7.69	—	3.94	3.94	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.87	0.83	< 0.005	0.04	—	0.04	0.03	—	0.03	—	145	145	0.01	< 0.005	—	146
Dust From Material Movement	—	—	—	—	—	—	0.21	0.21	—	0.11	0.11	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.16	0.15	< 0.005	0.01	—	0.01	0.01	—	0.01	—	24.0	24.0	< 0.005	< 0.005	—	24.1
Dust From Material Movement	—	—	—	—	—	—	0.04	0.04	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.08	1.02	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	227	227	0.01	0.01	0.02	230
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.43	0.16	12.4	2.95	0.07	0.21	2.81	3.02	0.21	0.79	0.99	—	10,708	10,708	0.20	1.68	0.59	11,215
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.29	6.29	< 0.005	< 0.005	0.01	6.38
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	< 0.005	0.34	0.08	< 0.005	0.01	0.08	0.08	0.01	0.02	0.03	—	293	293	0.01	0.05	0.27	307
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.04	1.04	< 0.005	< 0.005	< 0.005	1.06
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.06	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	48.6	48.6	< 0.005	0.01	0.04	50.9

3.3. Grading (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.07	1.74	16.3	17.9	0.03	0.72	—	0.72	0.66	—	0.66	—	2,959	2,959	0.12	0.02	—	2,970

Dust From Material Movement	—	—	—	—	—	—	2.76	2.76	—	1.34	1.34	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.10	0.89	0.98	< 0.005	0.04	—	0.04	0.04	—	0.04	—	162	162	0.01	< 0.005	—	163
Dust From Material Movement	—	—	—	—	—	—	0.15	0.15	—	0.07	0.07	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.16	0.18	< 0.005	0.01	—	0.01	0.01	—	0.01	—	26.8	26.8	< 0.005	< 0.005	—	26.9
Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.07	0.88	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	194	194	0.01	0.01	0.02	197
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.8	10.8	< 0.005	< 0.005	0.02	10.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.79	1.79	< 0.005	< 0.005	< 0.005	1.81
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Building Construction (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.77	0.64	5.97	7.45	0.01	0.25	—	0.25	0.23	—	0.23	—	1,370	1,370	0.06	0.01	—	1,375
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.12	1.09	1.36	< 0.005	0.05	—	0.05	0.04	—	0.04	—	227	227	0.01	< 0.005	—	228
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.06	0.06	1.08	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	198	198	0.01	0.01	0.73	201
Vendor	0.01	< 0.005	0.14	0.04	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	128	128	< 0.005	0.02	0.36	134
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.07	0.82	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	182	182	0.01	0.01	0.02	184
Vendor	0.01	< 0.005	0.15	0.04	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	128	128	< 0.005	0.02	0.01	133
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.04	0.49	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	105	105	< 0.005	< 0.005	0.18	107
Vendor	< 0.005	< 0.005	0.08	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	72.9	72.9	< 0.005	0.01	0.09	76.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	17.4	17.4	< 0.005	< 0.005	0.03	17.7
Vendor	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	12.1	12.1	< 0.005	< 0.005	0.01	12.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.06	0.60	0.79	< 0.005	0.02	—	0.02	0.02	—	0.02	—	145	145	0.01	< 0.005	—	146
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.11	0.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	24.1	24.1	< 0.005	< 0.005	—	24.2
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.06	0.06	0.06	0.76	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	178	178	< 0.005	0.01	0.02	180
Vendor	0.01	< 0.005	0.14	0.04	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	126	126	< 0.005	0.02	0.01	131
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.9	10.9	< 0.005	< 0.005	0.02	11.1
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.62	7.62	< 0.005	< 0.005	0.01	7.98
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.81	1.81	< 0.005	< 0.005	< 0.005	1.84
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.26	1.26	< 0.005	< 0.005	< 0.005	1.32
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Paving (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.91	0.76	7.12	9.94	0.01	0.32	—	0.32	0.29	—	0.29	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.05	0.04	0.39	0.54	< 0.005	0.02	—	0.02	0.02	—	0.02	—	82.8	82.8	< 0.005	< 0.005	—	83.1
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.7	13.7	< 0.005	< 0.005	—	13.8
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.07	0.82	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	190	190	< 0.005	0.01	0.02	193
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.6	10.6	< 0.005	< 0.005	0.02	10.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.75	1.75	< 0.005	< 0.005	< 0.005	1.77
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Architectural Coating (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	0.86	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architect ural Coatings	—	35.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.32	7.32	< 0.005	< 0.005	—	7.34
Architect ural Coatings	—	1.92	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.21	1.21	< 0.005	< 0.005	—	1.22
Architect ural Coatings	—	0.35	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.15	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	35.6	35.6	< 0.005	< 0.005	< 0.005	36.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.98	1.98	< 0.005	< 0.005	< 0.005	2.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.33	0.33	< 0.005	< 0.005	< 0.005	0.33
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
----------	-----	-----	-----	----	-----	-------	-------	-------	--------	--------	--------	------	-------	------	-----	-----	---	------

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	1.53	1.42	1.20	11.2	0.03	0.02	2.51	2.53	0.02	0.64	0.66	—	2,898	2,898	0.12	0.13	9.13	2,948
Total	1.53	1.42	1.20	11.2	0.03	0.02	2.51	2.53	0.02	0.64	0.66	—	2,898	2,898	0.12	0.13	9.13	2,948
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	1.44	1.32	1.28	9.48	0.03	0.02	2.51	2.53	0.02	0.64	0.66	—	2,723	2,723	0.12	0.13	0.24	2,766
Total	1.44	1.32	1.28	9.48	0.03	0.02	2.51	2.53	0.02	0.64	0.66	—	2,723	2,723	0.12	0.13	0.24	2,766
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.26	0.23	0.23	1.75	< 0.005	< 0.005	0.44	0.45	< 0.005	0.11	0.12	—	445	445	0.02	0.02	0.64	452
Total	0.26	0.23	0.23	1.75	< 0.005	< 0.005	0.44	0.45	< 0.005	0.11	0.12	—	445	445	0.02	0.02	0.64	452

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	345	345	0.03	< 0.005	—	347
Total	—	—	—	—	—	—	—	—	—	—	—	—	345	345	0.03	< 0.005	—	347

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	345	345	0.03	< 0.005	—	347
Total	—	—	—	—	—	—	—	—	—	—	—	—	345	345	0.03	< 0.005	—	347
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	57.2	57.2	0.01	< 0.005	—	57.5
Total	—	—	—	—	—	—	—	—	—	—	—	—	57.2	57.2	0.01	< 0.005	—	57.5

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.04	0.02	0.35	0.15	< 0.005	0.03	—	0.03	0.03	—	0.03	—	445	445	0.04	< 0.005	—	446
Total	0.04	0.02	0.35	0.15	< 0.005	0.03	—	0.03	0.03	—	0.03	—	445	445	0.04	< 0.005	—	446
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.04	0.02	0.35	0.15	< 0.005	0.03	—	0.03	0.03	—	0.03	—	445	445	0.04	< 0.005	—	446
Total	0.04	0.02	0.35	0.15	< 0.005	0.03	—	0.03	0.03	—	0.03	—	445	445	0.04	< 0.005	—	446
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Single Family Housing	0.01	< 0.005	0.06	0.03	< 0.005	0.01	—	0.01	0.01	—	0.01	—	73.6	73.6	0.01	< 0.005	—	73.8
Total	0.01	< 0.005	0.06	0.03	< 0.005	0.01	—	0.01	0.01	—	0.01	—	73.6	73.6	0.01	< 0.005	—	73.8

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	2.19	1.08	0.71	9.79	0.03	1.41	—	1.41	1.36	—	1.36	230	698	928	1.09	< 0.005	—	956
Consumer Products	—	2.40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	2.19	3.67	0.71	9.79	0.03	1.41	—	1.41	1.36	—	1.36	230	698	928	1.09	< 0.005	—	956
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	2.19	1.08	0.71	9.79	0.03	1.41	—	1.41	1.36	—	1.36	230	698	928	1.09	< 0.005	—	956
Consumer Products	—	2.40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	2.19	3.67	0.71	9.79	0.03	1.41	—	1.41	1.36	—	1.36	230	698	928	1.09	< 0.005	—	956
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Hearths	0.03	0.01	0.01	0.12	< 0.005	0.02	—	0.02	0.02	—	0.02	2.61	7.92	10.5	0.01	< 0.005	—	10.8
Consumer Products	—	0.44	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.03	0.49	0.01	0.12	< 0.005	0.02	—	0.02	0.02	—	0.02	2.61	7.92	10.5	0.01	< 0.005	—	10.8

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	3.04	20.1	23.2	0.31	0.01	—	33.3
Total	—	—	—	—	—	—	—	—	—	—	—	3.04	20.1	23.2	0.31	0.01	—	33.3
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	3.04	20.1	23.2	0.31	0.01	—	33.3
Total	—	—	—	—	—	—	—	—	—	—	—	3.04	20.1	23.2	0.31	0.01	—	33.3
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	0.50	3.33	3.83	0.05	< 0.005	—	5.51

Total	—	—	—	—	—	—	—	—	—	—	—	0.50	3.33	3.83	0.05	< 0.005	—	5.51
-------	---	---	---	---	---	---	---	---	---	---	---	------	------	------	------	---------	---	------

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	19.2	0.00	19.2	1.92	0.00	—	67.3
Total	—	—	—	—	—	—	—	—	—	—	—	19.2	0.00	19.2	1.92	0.00	—	67.3
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	19.2	0.00	19.2	1.92	0.00	—	67.3
Total	—	—	—	—	—	—	—	—	—	—	—	19.2	0.00	19.2	1.92	0.00	—	67.3
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	3.19	0.00	3.19	0.32	0.00	—	11.1
Total	—	—	—	—	—	—	—	—	—	—	—	3.19	0.00	3.19	0.32	0.00	—	11.1

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.80	0.80
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.80	0.80
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.80	0.80
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.80	0.80
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.13	0.13
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.13	0.13

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequest ered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Remove d	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequest ered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Remove d	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	1/30/2025	2/13/2025	5.00	10.0	—
Grading	Grading	2/14/2025	3/14/2025	5.00	20.0	—

Building Construction	Building Construction	3/15/2025	1/31/2026	5.00	230	—
Paving	Paving	2/1/2026	3/1/2026	5.00	20.0	—
Architectural Coating	Architectural Coating	3/2/2026	3/30/2026	5.00	20.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT
Site Preparation	Hauling	155	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	15.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	14.0	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	4.17	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	2.81	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	226,800	75,600	0.00	0.00	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	12,419	—	15.0	0.00	—
Grading	—	—	20.0	0.00	—
Paving	0.00	0.00	0.00	0.00	0.43

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Single Family Housing	0.43	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	349	0.03	< 0.005
2026	0.00	346	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Single Family Housing	368	372	333	132,772	3,504	3,541	3,173	1,263,543

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Single Family Housing	—
Wood Fireplaces	0
Gas Fireplaces	33
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	4
Conventional Wood Stoves	0
Catalytic Wood Stoves	2
Non-Catalytic Wood Stoves	2
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
226800	75,600	0.00	0.00	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Single Family Housing	364,231	346	0.0330	0.0040	1,387,008

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Single Family Housing	1,586,277	1,961,311

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
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Single Family Housing	35.7	—
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5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
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5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
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5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)
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5.17. User Defined

Equipment Type	Fuel Type
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5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
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5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	27.6	annual days of extreme heat
Extreme Precipitation	2.85	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	8.86	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about $\frac{3}{4}$ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	3	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	3	1	1	3
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2

Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	84.6
AQ-PM	46.3
AQ-DPM	37.7
Drinking Water	10.2
Lead Risk Housing	14.6
Pesticides	58.3
Toxic Releases	15.5
Traffic	70.1
Effect Indicators	—
CleanUp Sites	0.00

Groundwater	0.00
Haz Waste Facilities/Generators	26.7
Impaired Water Bodies	0.00
Solid Waste	0.00
Sensitive Population	—
Asthma	47.9
Cardio-vascular	79.6
Low Birth Weights	27.6
Socioeconomic Factor Indicators	—
Education	40.5
Housing	35.8
Linguistic	10.4
Poverty	22.5
Unemployment	64.5

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	74.27178237
Employed	49.30065443
Median HI	70.78147055
Education	—
Bachelor's or higher	37.08456307
High school enrollment	100
Preschool enrollment	18.29847299
Transportation	—

Auto Access	98.98626973
Active commuting	7.76337739
Social	—
2-parent households	91.21006031
Voting	56.1144617
Neighborhood	—
Alcohol availability	90.4914667
Park access	2.194276915
Retail density	24.98395996
Supermarket access	10.72757603
Tree canopy	4.324393687
Housing	—
Homeownership	88.31002181
Housing habitability	92.59591941
Low-inc homeowner severe housing cost burden	35.91684845
Low-inc renter severe housing cost burden	97.20261773
Uncrowded housing	51.79006801
Health Outcomes	—
Insured adults	48.91569357
Arthritis	53.0
Asthma ER Admissions	64.0
High Blood Pressure	71.3
Cancer (excluding skin)	47.4
Asthma	40.2
Coronary Heart Disease	72.1
Chronic Obstructive Pulmonary Disease	50.7
Diagnosed Diabetes	78.0

Life Expectancy at Birth	22.4
Cognitively Disabled	60.3
Physically Disabled	77.4
Heart Attack ER Admissions	7.4
Mental Health Not Good	45.5
Chronic Kidney Disease	79.8
Obesity	39.2
Pedestrian Injuries	19.6
Physical Health Not Good	57.2
Stroke	75.8
Health Risk Behaviors	—
Binge Drinking	10.1
Current Smoker	34.8
No Leisure Time for Physical Activity	56.5
Climate Change Exposures	—
Wildfire Risk	1.9
SLR Inundation Area	0.0
Children	10.0
Elderly	76.6
English Speaking	90.9
Foreign-born	23.1
Outdoor Workers	38.5
Climate Change Adaptive Capacity	—
Impervious Surface Cover	92.5
Traffic Density	70.9
Traffic Access	23.0
Other Indices	—

Hardship	45.6
Other Decision Support	—
2016 Voting	66.2

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	29.0
Healthy Places Index Score for Project Location (b)	58.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	39 SFHs on 8.79 acres with 112000 total building SF and 101207 landscaping SF on 401231 gross SF
Construction: Construction Phases	no demo
Operations: Vehicle Data	368 daily trips

Operations: Hearths	no wood-burning fireplaces in SCAQMD
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Construction Schedule: CalEEMod defaults, starting in early 2025

Cut: 21825 CY

Fill: 32244 CY

Import: 12419 CY

Construction schedule?

Construction Monday - Saturday 6:30 am to 7:00 pm (12.5 hours)

8.79 acres

39 single family houses

401231 gross SF

112000 building SF

101207 landscaped area

9013 SF of open space

126 proposed trees

Operational year: 2027

Daily Trip gen: 368

Trip Rate (368 trips/39 units) 9.435897436

1. Basic Project Information

1.1. Basic Project Information

Data Field Value
Project Name Menifee
Construction 1/1/2025
Operation 2027
Lead Agency
Land Use & Project/site
Analysis Location County
Windspeed 2.5
Precipitation 18.6
Location 33.65877805676925,-117.18528494075258
County Riverside-South Coast
City Menifee
Air District South Coast AQMD
Air Basin South Coast
TAZ 5504
EDFZ 11
Electric Utility Southern California Edison
Gas Utility Southern California Gas
App Version 2022.1.1.22

1.2. Land Use Types

Land Use & Size Unit Lot Acreage Building Area Landscape Special Land Use Population Description
Single Family 39 Dwelling Unit 8.79 112000 101207 126

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector # Measure Title

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Un/Mit.	TOG	ROG	NOx	CO	SO ₂	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO ₂	NBCO ₂	CO ₂ T	CH ₄	N ₂ O	R	CO ₂ e
Daily - Summer (Max)																		
Unmit.	1.43	1.19	10.6	14.2	0.02	0.43	0.22	0.65	0.4	0.05	0.45		2723	2723	0.11	0.05	1.09	2741
Daily - Winter (Max)																		
Unmit.	4.46	35.2	44.1	34.1	0.12	1.57	10.7	12.3	1.46	4.79	6.25		16230	16230	0.42	1.74	0.61	16759
Average Daily (Max)																		
Unmit.	1.05	2.04	8.2	9.94	0.02	0.33	0.58	0.91	0.3	0.24	0.54		2166	2166	0.08	0.08	0.57	2191
Annual (Max)																		
Unmit.	0.19	0.37	1.5	1.81	< 0.005	0.06	0.11	0.17	0.06	0.04	0.1		359	359	0.01	0.01	0.09	363

2.2. Construction Emissions by Year, Unmitigated

Year	TOG	ROG	NOx	CO	SO ₂	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO ₂	NBCO ₂	CO ₂ T	CH ₄	N ₂ O	R	CO ₂ e
Daily - Summer (Max)																		
2025	1.43	1.19	10.6	14.2	0.02	0.43	0.22	0.65	0.4	0.05	0.45		2723	2723	0.11	0.05	1.09	2741
Daily - Winter (Max)																		
2025	4.46	35.4	44.1	34.1	0.12	1.57	10.7	12.3	1.46	4.79	6.25		16230	16230	0.42	1.74	0.61	16759
2026	1.35	35.2	10.1	13.8	0.02	0.38	0.22	0.6	0.35	0.05	0.4		2701	2701	0.1	0.05	0.03	2717
Average Daily																		
2025	1.05	0.88	8.2	9.94	0.02	0.33	0.58	0.91	0.3	0.24	0.54		2166	2166	0.08	0.08	0.57	2191
2026	0.14	2.04	1.05	1.5	< 0.005	0.04	0.03	0.07	0.04	0.01	0.04		267	267	0.01	< 0.005	0.05	268
Annual																		
2025	0.19	0.16	1.5	1.81	< 0.005	0.06	0.11	0.17	0.06	0.04	0.1		359	359	0.01	0.01	0.09	363
2026	0.03	0.37	0.19	0.27	< 0.005	0.01	< 0.005	0.01	0.01	< 0.005	0.01		44.1	44.1	< 0.005	< 0.005	0.01	44.4

2.4. Operations Emissions Compared Against Thresholds

Un/Mit.	TOG	ROG	NOx	CO	SO ₂	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO ₂	NBCO ₂	CO ₂ T	CH ₄	N ₂ O	R	CO ₂ e
Daily - Summer (Max)																		
Unmit.	3.77	5.11	2.26	21.1	0.07	1.46	2.51	3.97	1.41	0.64	2.04	252	4406	4658	3.51	0.14	9.93	4799
Daily - Winter (Max)																		
Unmit.	3.68	5.02	2.34	19.4	0.06	1.46	2.51	3.97	1.41	0.64	2.04	252	4231	4483	3.52	0.15	1.04	4616
Average Daily (Max)																		
Unmit.	1.59	3.97	1.68	10.4	0.03	0.14	2.42	2.57	0.14	0.61	0.75	38.1	3545	3583	2.5	0.14	4.66	3693
Annual (Max)																		
Unmit.	0.29	0.72	0.31	1.9	0.01	0.03	0.44	0.47	0.03	0.11	0.14	6.3	587	593	0.41	0.02	0.77	611

2.5. Operations Emissions by Sector, Unmitigated

Sector	TOG	ROG	NOx	CO	SO ₂	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO ₂	NBCO ₂	CO ₂ T	CH ₄	N ₂ O	R	CO ₂ e
Daily - Summer (Max)																		
Mobile	1.53	1.42	1.2	11.2	0.03	0.02	2.51	2.53	0.02	0.64	0.66		2898	2898	0.12	0.13	9.13	2948
Area	2.19	3.67	0.71	9.79	0.03	1.41		1.41	1.36	1.36		230	698	928	1.09	< 0.005		956
Energy	0.04	0.02	0.35	0.15	< 0.005	0.03		0.03	0.03		0.03		790	790	0.07	< 0.005		793
Water												3.04	20.1	23.2	0.31	0.01		33.3
Waste												19.2	0	19.2	1.92	0		67.3
Refrig.																	0.8	0.8
Total	3.77	5.11	2.26	21.1	0.07	1.46	2.51	3.97	1.41	0.64	2.04	252	4406	4658	3.51	0.14	9.93	4799
Daily - Winter (Max)																		
Mobile	1.44	1.32	1.28	9.48	0.03	0.02	2.51	2.53	0.02	0.64	0.66		2723	2723	0.12	0.13	0.24	2766
Area	2.19	3.67	0.71	9.79	0.03	1.41		1.41	1.36	1.36		230	698	928	1.09	< 0.005		956
Energy	0.04	0.02	0.35	0.15	< 0.005	0.03		0.03	0.03		0.03		790	790	0.07	< 0.005		793
Water												3.04	20.1	23.2	0.31	0.01		33.3
Waste												19.2	0	19.2	1.92	0		67.3
Refrig.																	0.8	0.8
Total	3.68	5.02	2.34	19.4	0.06	1.46	2.51	3.97	1.41	0.64	2.04	252	4231	4483	3.52	0.15	1.04	4616
Average Daily																		
Mobile	1.4	1.28	1.28	9.59	0.03	0.02	2.42	2.44	0.02	0.61	0.63		2687	2687	0.12	0.13	3.85	2733
Area	0.15	2.66	0.05	0.67	< 0.005	0.1		0.1	0.09		0.09	15.8	47.8	63.6	0.07	< 0.005		65.5
Energy	0.04	0.02	0.35	0.15	< 0.005	0.03		0.03	0.03		0.03		790	790	0.07	< 0.005		793
Water												3.04	20.1	23.2	0.31	0.01		33.3
Waste												19.2	0	19.2	1.92	0		67.3
Refrig.																	0.8	0.8
Total	1.59	3.97	1.68	10.4	0.03	0.14	2.42	2.57	0.14	0.61	0.75	38.1	3545	3583	2.5	0.14	4.66	3693
Annual																		
Mobile	0.26	0.23	0.23	1.75	< 0.005	< 0.005	0.44	0.45	< 0.005	0.11	0.12		445	445	0.02	0.02	0.64	452
Area	0.03	0.49	0.01	0.12	< 0.005	0.02		0.02	0.02		0.02	2.61	7.92	10.5	0.01	< 0.005		10.8
Energy	0.01	< 0.005	0.06	0.03	< 0.005	0.01		0.01	0.01		0.01		131	131	0.01	< 0.005		131
Water												0.5	3.33	3.83	0.05	< 0.005		5.51
Waste												3.19	0	3.19	0.32	0		11.1
Refrig.																	0.13	0.13
Total	0.29	0.72	0.31	1.9	0.01	0.03	0.44	0.47	0.03	0.11	0.14	6.3	587	593	0.41	0.02	0.77	611

3. Construction Emissions Details

3.1. Site Preparation (2025) - Unmitigated

Location	TOG	ROG	NOx	CO	SO ₂	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO ₂	NBCO ₂	CO ₂ T	CH ₄	N ₂ O	R	CO ₂ e
Onsite																		
Daily - Summer (Max)																		
Daily - Winter (Max)																		

Off-Road E	3.94	3.31		31.6	30.2	0.05	1.37		1.37	1.26		1.26		5295	5295	0.21	0.04		5314
Dust From Material Movement								7.69	7.69		3.94	3.94							
Onsite truc	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																			
Off-Road E	0.11	0.09		0.87	0.83 < 0.005		0.04		0.04	0.03		0.03		145	145	0.01 < 0.005			146
Dust From Material Movement								0.21	0.21		0.11	0.11							
Onsite truc	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																			
Off-Road E	0.02	0.02		0.16	0.15 < 0.005		0.01		0.01	0.01		0.01		24	24 < 0.005	< 0.005			24.1
Dust From Material Movement								0.04	0.04		0.02	0.02							
Onsite truc	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																			
Daily, Summer (Max)																			
Daily, Winter (Max)																			
Worker	0.08	0.07		0.08	1.02	0	0	0.23	0.23	0	0.05	0.05		227	227	0.01	0.01	0.02	230
Vendor	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0.43	0.16		12.4	2.95	0.07	0.21	2.81	3.02	0.21	0.79	0.99		10708	10708	0.2	1.68	0.59	11215
Average Daily																			
Worker	< 0.005	< 0.005	< 0.005		0.03	0	0	0.01	0.01	0 < 0.005	< 0.005			6.29	6.29 < 0.005	< 0.005		0.01	6.38
Vendor	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0.01 < 0.005			0.34	0.08 < 0.005		0.01	0.08	0.08	0.01	0.02	0.03		293	293	0.01	0.05	0.27	307
Annual																			
Worker	< 0.005	< 0.005	< 0.005		0.01	0	0 < 0.005	< 0.005		0 < 0.005	< 0.005			1.04	1.04 < 0.005	< 0.005	< 0.005		1.06
Vendor	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	< 0.005	< 0.005		0.06	0.01 < 0.005	< 0.005	0.01	0.01 < 0.005	< 0.005	< 0.005	< 0.005			48.6	48.6 < 0.005	0.01	0.04		50.0

[illegible]

3.9. Paving (2026) - Unmitigated

3.11. Architectural Coating (2026) - Unmitigated

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1 Unmitigated

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Land Use	TOG	ROG	NOx	CO	SO ₂	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO ₂	NBCO ₂	CO ₂ T	CH ₄	N ₂ O	R	CO ₂ e
Daily, Summer (Max)																		
Single Fam	0.04	0.02	0.35	0.15	< 0.005	0.03		0.03	0.03		0.03		445	445	0.04	< 0.005		446
Total	0.04	0.02	0.35	0.15	< 0.005	0.03		0.03	0.03		0.03		445	445	0.04	< 0.005		446
Daily, Winter (Max)																		
Single Fam	0.04	0.02	0.35	0.15	< 0.005	0.03		0.03	0.03		0.03		445	445	0.04	< 0.005		446

Total Annual	0.04	0.02	0.35	0.15 < 0.005	0.03	0.03	0.03	0.03	445	445	0.04 < 0.005	446
Single Fam	0.01 < 0.005		0.06	0.03 < 0.005	0.01	0.01	0.01	0.01	73.6	73.6	0.01 < 0.005	73.8
Total	0.01 < 0.005		0.06	0.03 < 0.005	0.01	0.01	0.01	0.01	73.6	73.6	0.01 < 0.005	73.8

4.4. Water Emissions by Land Use																		
4.4.1. Unmitigated																		
Land Use	TOG	ROG	NOx	CO	SO ₂	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO ₂	NBCO ₂	CO ₂ T	CH ₄	N ₂ O	R	CO ₂ e
Single Family Housing																		
Total												3.04	20.1	23.2	0.31	0.01		33.3
Daily, Winter (Max)																		
Single Family Housing												3.04	20.1	23.2	0.31	0.01		33.3
Total												3.04	20.1	23.2	0.31	0.01		33.3
Annual																		
Single Family Housing												0.5	3.33	3.83	0.05	< 0.005		5.51
Total												0.5	3.33	3.83	0.05	< 0.005		5.51

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Daily, Winter (Max)
Total
Annual
Total

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Species	TOG	ROG	NOx	CO	SO ₂	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO ₂	NBCO ₂	CO ₂ T	CH ₄	N ₂ O	R	CO ₂ e
Daily, Summer (Max)																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		

Daily, Winter (Max)
Avoided
Subtotal
Sequestered
Subtotal
Removed
Subtotal

Annual
Avoided
Subtotal
Sequestered
Subtotal
Removed
Subtotal

5. Activity Data

5.1. Construction Schedule

Phase	Name	Phase Type	Start Date	End Date	Days Per Week	Work Days	Phase Description
Site Prep	Site Prep	Site Prep	1/30/2025	2/13/2025	5	10	
Grading	Grading	Grading	2/14/2025	3/14/2025	5	20	
Building C	Building C	Building C	3/15/2025	1/31/2026	5	230	
Paving	Paving	Paving	2/1/2026	3/1/2026	5	20	
Architectu	Architectu	Architectu	3/2/2026	3/30/2026	5	20	

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase	Name	Equipment	Fuel Type	Engine Tier	Number	Hours Per Week	Horsepower	Load Factor
Site Prep	Site Prep	Rubber Tire	Diesel	Average	3	8	367	0.4
Site Prep	Site Prep	Tractors/Li	Diesel	Average	4	8	84	0.37
Grading	Grading	Excavators	Diesel	Average	1	8	36	0.38
Grading	Grading	Graders	Diesel	Average	1	8	148	0.41
Grading	Grading	Rubber Tire	Diesel	Average	1	8	367	0.4
Grading	Grading	Tractors/Li	Diesel	Average	3	8	84	0.37
Building C	Building C	Cranes	Diesel	Average	1	7	367	0.29
Building C	Building C	Forklifts	Diesel	Average	3	8	82	0.2
Building C	Building C	Generator	Diesel	Average	1	8	14	0.74
Building C	Building C	Tractors/Li	Diesel	Average	3	7	84	0.37
Building C	Building C	Welders	Diesel	Average	1	8	46	0.45
Paving	Paving	Pavers	Diesel	Average	2	8	81	0.42
Paving	Paving	Paving Equ	Diesel	Average	2	8	89	0.36
Paving	Paving	Rollers	Diesel	Average	2	8	36	0.38
Architectu	Architectu	Air Compressor	Diesel	Average	1	6	37	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase	Name	Trip Type	One-Way Trip	Miles per Trip	Vehicle Mix
Site Preparation					
Site Prep	Site Prep	Worker	17.5	18.5	LDA, LDT1, LDT2
Site Prep	Site Prep	Vendor		10.2	HHDT, MHDT
Site Prep	Site Prep	Hauling	155	20	HHDT
Site Prep	Site Prep	Onsite truck			HHDT
Grading					
Grading	Grading	Worker	15	18.5	LDA, LDT1, LDT2
Grading	Grading	Vendor		10.2	HHDT, MHDT
Grading	Grading	Hauling	0	20	HHDT
Grading	Grading	Onsite truck			HHDT
Building Construction					
Building C	Building C	Worker	14	18.5	LDA, LDT1, LDT2
Building C	Building C	Vendor	4.17	10.2	HHDT, MHDT
Building C	Building C	Hauling	0	20	HHDT
Building C	Building C	Onsite truck			HHDT
Paving					
Paving	Paving	Worker	15	18.5	LDA, LDT1, LDT2
Paving	Paving	Vendor		10.2	HHDT, MHDT
Paving	Paving	Hauling	0	20	HHDT
Paving	Paving	Onsite truck			HHDT
Architectural Coating					
Architectu	Architectu	Worker	2.81	18.5	LDA, LDT1, LDT2
Architectu	Architectu	Vendor		10.2	HHDT, MHDT
Architectu	Architectu	Hauling	0	20	HHDT
Architectu	Architectu	Onsite truck			HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategy PM10 Reduction PM2.5 Reduction

5.5. Architectural Coatings

Phase	Name	Residential E	Residential Non-Residential	Parking Area Coated (sq ft)
Architectu	Architectu	226800	75600	0

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase	Name	Material Exposed	Acres Graded	Acres Paved	(acres)
Site Prep	Site Prep	12419	15	0	
Grading	Grading		20	0	
Paving	Paving	0	0	0	0.43

5.6.2. Construction Earthmoving Control Strategies

Control Strategy	Frequency	PM10 Reduction	PM2.5 Reduction
Water Exposure	2	61	61

5.7. Construction Paving

Land Use	Area Paved	% Asphalt
Single Fam	0.43	0

5.8. Construction Electricity Consumption and Emissions Factors

Year	kWh per Yr	CO2	CH4	N2O
2025	0	349	0.03	< 0.005
2026	0	346	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use	Trips/Week	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Week	VMT/Saturday	VMT/Sunday	VMT/Year
Single Fam	368	372	333	132772	3504	3541	3173	1263543

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type Unmitigated (number)

Single Family Housing

Wood Firepl	0
Gas Firepl	33
Propane FI	0
Electric Fir	0
No Fireplac	4
Conventio	0
Catalytic V	2
Non-Catal	2
Pellet Woo	0

5.10.2. Architectural Coatings

Residential	Residential Non-Residential	Parking Area Coated (sq ft)
226800	75600	0

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0
Summer D	day/yr	250

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBtu/yr)
Single Fam	364231	346	0.033	0.004	1387008

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water	Outdoor Water (gal/year)
Single Fam	1586277	1961311

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use Waste (ton Cogeneration (kWh/year))

Single Fam	35.7
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5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use	Type of Equipment	Refrigerant	GWP	Quantity (lb)	Operation: Service Level	Times Serviced
Single Fam	Average	Residential R-410A	2088	< 0.005	2.5	10
Single Fam	Household	R-134a	1430	0.12	0.6	1

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment	Fuel Type	Engine Tier	Number per Day	Hours Per	Horsepower	Load Factor
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5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment	Fuel Type	Number per	Hours per Day	Hours per	Horsepower	Load Factor
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5.16.2. Process Boilers

Equipment	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat	Annual Heat Input (MMBtu/yr)
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5.17. User Defined

Equipment Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation	Initial Acres	Final Acres
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5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass C	Initial Acres	Final Acres
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5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (Btu/year)
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6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt mid-century 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to grow.

Climate Hazard Result for F Unit

Temperature	27.6	annual days of extreme heat
Extreme Precipitation	2.85	annual days with precipitation above 20 mm
Sea Level Rise		meters of inundation depth
Wildfire	8.86	annual hectares burned

Temperature and Extreme Heat data are for the grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate stations).

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a half day.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth.

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population, and land use.

6.2. Initial Climate Risk Scores

Climate Hazard Exposure Sensitivity Score Adaptive Capacity Vulnerability Score

Temperature	3	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A

Drought	N/A	N/A	N/A	N/A
Snowpack	N/A	N/A	N/A	N/A
Air Quality	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate H: Exposure S: Sensitivity S: Adaptive Capac: Vulnerability Score

Temperatu	3	1	1	3
Extreme Pr	N/A	N/A	N/A	N/A
Sea Level F	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack	N/A	N/A	N/A	N/A
Air Quality	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator Result for Project Census Tract

Exposure Indicators

AQ-Ozone	84.6
AQ-PM	46.3
AQ-DPM	37.7
Drinking W	10.2
Lead Risk I	14.6
Pesticides	58.3
Toxic Relex	15.5
Traffic	70.1

Effect Indicators

CleanUp S	0
Groundwa	0
Haz Waste	26.7
Impaired V	0
Solid Wast	0

Sensitive Population

Asthma	47.9
Cardio-vas	79.6
Low Birth V	27.6

Socioeconomic Factor Indicators

Education	40.5
Housing	35.8
Linguistic	10.4
Poverty	22.5
Unemploy	64.5

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator Result for Project Census Tract

Economic

Above Povi	74.27178
Employed	49.30065
Median HI	70.78147
Education	
Bachelor's	37.08456
High schoc	100
Preschool	18.29847
Transportation	
Auto Acces	98.98627
Active com	7.763377

Social

2-parent h	91.21006
Voting	56.11446

Neighborhood

Alcohol av	90.49147
Park acces	2.194277
Retail dens	24.98396
Supermark	10.72758
Tree canop	4.324394
Housing	
Homeown	88.31002
Housing h	92.59592
Low-inc ho	35.91685
Low-inc rei	97.20262
Uncrowded	51.79007

Health Outcomes

Insured ad	48.91569
Arthritis	53
Asthma ER	64
High Blood	71
Cancer (ex	47
Asthma	40
Coronary t	72
Chronic Oi	51
Diagnosed	78
Life Expect	22
Cognitively	60
Physically	77
Heart Attac	7.4
Mental Hei	45
Chronic Ki	80
Obesity	39
Pedestrian	20
Physical H	57
Stroke	76
Health Risk Behaviors	
Binge Drin	10
Current Sn	35
No Leisure	57

Climate Change Exposures

Wildfire Ri	1.9
-------------	-----

SLR Inundate	0
Children	10
Elderly	77
English Spoken	91
Foreign-born	23
Outdoor Workers	39
Climate Change Adaptive Capacity	
Impervious	92
Traffic Density	71
Traffic Accidents	23
Other Indices	
Hardship	46
Other Decision Support	
2016 Voting	66

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
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CalEnviroScreen	29
Healthy Places	58

Project Location Number

Project Location Number

- a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
- b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

Measure Title Co-Benefits Achieved

7.5. Evaluation Scorecard

Category	Number of Total Points	Max Possible Points	Weighted Score
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7.6. Health & Equity Custom Measures

Measure Title Sponsor

8. User Changes to Default Data
- | | |
|--------|---------------|
| Screen | Justification |
|--------|---------------|
- Land Use: 39 SFHs on 8.79 acres with 112000 total building SF and 101207 landscaping SF on 401231 gross SF
- Construction: no demo
- Operations: 368 daily trips
- Operations: no wood-burning fireplaces in SCAQMD

Total Report Tables (ave lbs/day)									
Year	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2e	PM10E	PM2.5E
2025	3.54	44.1	34.1	0.12	12.3	6.25	363	0.33	0.3
2026	35.2	10.1	13.8	0.02	0.6	0.4	44.4	0.38	0.35

Operational Report Tables (ave lbs/day)									
Sector	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2e	PM10E	PM2.5E
Mobile	1.42	1.28	11.2	0.03	2.53	0.66	452	0	0
Area	3.67	0.71	9.79	0.03	1.41	1.36	10.8	0	0
Energy	0.02	0.35	0.15	0	0.03	0.03	131	0	0
Water	0	0	0	0	0	0	5.51	0	0
Waste	0	0	0	0	0	0	11.1	0	0
Refrig.	0	0	0	0	0	0	0.13	0	0
Total	5.11	2.34	21.14	0.06	3.97	2.05	610.54	0	0
							20.36667		

LST Report Table (equipment exhaust, dust)				
Nox	CO	PM10	PM2.5	
Site Prep Offroad	0.87	0.83	0.04	0.03
Site Prep dust	0	0	0.21	0.11
Grading Offroad	0.89	0.98	0.04	0.03
Grading Dust	0	0	0.15	0.11
BC 25 offroad	5.97	7.45	0.25	0.23
BC 25 Dust	0	0	0	0
2025 Total	7.73	9.26	0.69	0.51
BC 26 offroad	0.6	0.79	0.02	0.02
BC 26 dust	0	0	0	0
Paving Offroad	0.39	0.54	0.02	0.02
Paving Dust	0	0	0	0
AC Offroad	0.05	0.06	0	0
AC Dust	0	0	0	0
2026 Total	1.04	1.39	0.04	0.04

LST Construction Totals				
	Nox	CO	PM10	PM2.5
2025 SP	0.87	0.83	0.25	0.14
2025 G	0.89	0.98	0.19	0.14
2025 BC	5.97	7.45	0.25	0.23
2026 BC	0.6	0.79	0.02	0.02
2026 P	0.39	0.54	0.02	0.02
2026 AC	0.05	0.06	0	0

LST Operational Totals				
Sector	Nox	CO	PM10	PM2.5
Area	0.81	19.8	1.41	1.36
Energy	0.35	0.15	0.03	0.03
Total	1.16	19.95	1.44	1.39

Trip Calcs									
Land Use T Trips/Weel Trips/Saturc Trips/Sund Trips/Year VMT/Week VMT/Satun VMT/Sundi VMT/Year									
Single Fam	368	368	368	134320	3502	3502	3502	1278276	
Daily Trips 368									
Daily VMT: 3502.126									

Fuel Calcs		
Gasoline (v Deisel (off road equipment + haul)		
2025	20.57	342.5
2026	3.94	40.54

Construction Energy Consumption

Year	Gasoline (workers)					Year	Total					
	CO2 (MT)	CO2 (km)	fuel	BTU	million BTU		CO2 (MT)	CO2 (km)	fuel	BTU	million BTU	
2025	20.57	20570		2,343	281640986	2025	363	363,070	35,888	4,890,159,712	4,890	
2026	3.94	3940		449	53945818.42	2026	44	44,480	4,419	599,432,969	599	
	25	24,510		2,792	335,586,804	Total	408	407,550	40,308	5,489,592,681	5,490	
Year	Diesel (offroad eq, hauling, vendors)					Year	Total					
	CO2 (MT)	CO2 (km)	fuel	BTU	million BTU		CO2 (MT)	CO2 (km)	fuel	BTU	million BTU	
2025	343	342500		33,546	4608518726	2025	363	363,070	35,888	4,890,159,712	4,890	
2026	41	40540		3,971	545487150.8	2026	44	44,480	4,419	599,432,969	599	
	383	383,040		37,516		Total	408	407,550	40,308	5,489,592,681	5,490	
MT to km	1000											
CO2 to Gal gasoline	8.78	Climate Registry 2022				motor gas						
gasoline gal/btu	120,214	EIA 2023				distillate						
CO2 to gas diesel	10.21	Climate Registry 2022				btu per barrel	5,049,000					EIA
diesel gas/btu	137,381	EIA 2023				gallons per barrel	42					EIA
						btu per gallon	120,214					conversion

<https://theclimateregistry.org/wp-content/uploads/2022/11/2022-Default-Emission-Factors-Final.pdf>
EIA 2023. Table A3: Approximate Heat Content of Petroleum Consumption and Fuel Ethanol. Avaialble: https://www.eia.gov/totalenergy/data/monthly/pdf/sec12_4.pdf

Operational Energy Calcs (Full Buildout)

Unmitigated fuel consumption

Sector	CO2 (MT/year)	CO2 (km)	fuel	BTU	million BTU
Mobile	452	452000	51480.6378	6188708103	6188.7
Area	11	10800	1230.06834	147871786.5	147.9
Energy	131	131000	14920.2733	1793630003	1793.6
Water	6	5510	627.562642	75441994.79	75.4
Waste	11	11100	1264.2369	151979336.2	152.0
Refrig.	0	130	14.8063781	1779938.171	1.8
Total	611	610540	69537.5854	8359411162	8359.4

MT to km	1000			
CO2 to Gal gasoline	8.78	Climate Registry 2022	motor gas	distillate
gasoline gal/btu	120,214	EIA 2023	btu per barrel	5,049,000
CO2 to gas diesel	10.21	Climate Registry 2022	gallons per barr	42
diesel gas/btu	137,381	EIA 2023	btu per gallon	120,214
				137,381 conversion

CA Energy Consumption

Sector	Trillion BTU	Percentage
Residential	1473.2	20.02%
Commercial	1396.7	18.98%
Industrial	1704.4	23.16%
Transporation	2785.1	37.84%
Total	7359.4	100.00%

Source: https://www.eia.gov/state/seds/sep_sum/html/pdf/sum_btu_1.pdf

NOTES:

gasoline kg/gal = 8.78 kg/G

diesel kg/G = 10.21 kg/G

gasoline gal/btu = 113,927 BTU per gallon

diesel btu/G = 129,488 btu per gallon

electricity btu/kWh = 3416 btu per kwh